Appendix

Metrics for Commercial Real Estate ("CRE") – Alignment in response to FCA CP21/17.

What is proposed

The metrics proposed in FCA CP21/17 follow the TCFD recommendations, which were based on funds investing in equities. They don't have strong alignment with real estate and include metrics that are not standard for real estate reporting. AREF, IPF and other industry trade bodies welcome the opportunity to influence the outcome and provide more aligned and relevant metrics for the reporting of climate related impacts and resilience to stakeholders.

ESG 2 Annex 1 TCFD Product Report Metrics

	TCFD (see page 43 of the TCFD Final Report)	**SFDR (please see annex I of the draft RTS)**
Weighted average carbon intensity (WACI)	Portfolio's exposure to carbon-intensive companies, expressed in tons CO_2e / $M revenue. *Metric recommended by the Task Force.* $\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{current portfolio value}} * \frac{\text{issuer's Scale 1 and Scale 2 GHG emissions}_i}{\text{issuer's \$M revenue}_i}\right)$	$\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{current value of all investments (€M)}} \times \frac{\text{investee company's Scope 1, 2 and 3 carbon emissions}_i}{\text{investee company's €M revenue}_i}\right)$
Total carbon emissions	The absolute greenhouse gas emissions associated with a portfolio, expressed in tons CO_2e. $\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalization}_i} * \text{issuer's Scope 1 and Scope 2 GHG emissions}_i\right)$	$\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{investee company's enterprise value}_i} \times \text{investee company's Scope 1, 2 and 3 carbon emissions}_i\right)$
Carbon footprint	*Description* Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in tons CO_2e / $M invested. *Formula* $\frac{\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalization}_i} * \text{issuer's Scope 1 and Scope 2 GHG emissions}_i\right)}{\text{current portfolio value (\$M)}}$	$\frac{\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{investee company's enterprise value}_i} \times \text{investee company's Scope 1, 2 and 3 carbon emissions}_i\right)}{\text{current value of all investments (€M)}}$
Scope 1, 2 and 3 GHG emissions, disclosed separately	Scope 1 refers to all direct GHG emissions. Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam. Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include: the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (eg, transmission and distribution losses), outsourced activities, and waste disposal (see page 63 of the TCFD Final Report).	The scope 1, 2 and 3 definitions are contained in the low carbon benchmark regulation: (i) Scope 1 carbon emissions, namely emissions generated from sources that are controlled by the company that issues the underlying assets; and (ii) Scope 2 carbon emissions, namely emissions from the consumption of purchased electricity, steam, or other sources of energy generated upstream from the company that issues the underlying assets. (iii) Scope 3 carbon emissions, namely all indirect emissions that are not covered by points (i) and (ii) that occur in the value chain of the reporting company, including both upstream and downstream emissions, in particular for sectors with a high impact on climate change and its mitigation.

How these indicators align with traditional reporting in CRE:

Indicator	Achieves	Alignment with CRE Reporting
WACI	Relative intensity of investment	Equity share approach is not common, nor is the use of revenue or rental income as an intensity metric.
Total Carbon Emissions	Footprint of the share of investment	Equity share approach is not common in CRE, as operational control approach is more relevant.
Carbon Footprint	Intensity of the share of the investment by value	CRE typically considers Floor Area as a denominator
Scope 1-3 breakdown	Actual footprint	This is aligned and should include Scope 3 and sum to the Total Carbon Emissions. Without Scope 3 tenant emissions, the footprint is not an accurate assessment of risk. Real estate funds should be developing Scope 3 reporting of embodied carbon into this metric as well.
Carbon VaR	Value threated by BAU	Should be adopted using CRREM tool
Climate Warming Scenario or Implied Temperature Rise	Comparable indicator of climate risk across asset classes	This is an overlooked metric, but makes sense to be adopted – could be integrated into CRREM.

Considerations for real estate funds regarding the proposed metrics

Greenhouse Gas Accounting Boundary Definitions

The Greenhouse Gas Protocol Boundary definition the TCFD proposes using is an equity control boundary. This is indicated by "value of investment/current portfolio value" modifier on three of the metrics. CRE is better described using the Operational Control Boundary[1] under the GHG Protocol, which includes complete buildings in the footprint rather than the amount of equity invested. This is standard practice for INREV (European Investors in Non-Listed Real Estate) and EPRA (European Public Real Estate) reporting, as well as the definition of reporting under GRESB (Global ESG Benchmark for Real Assets). We would ask the FCA to take this into consideration to ensure consistency in reporting.

Use of Climate Risk Assessment Tools

In many cases, the tools that are used to analyse climate risk for other asset classes do not fully describe risks in CRE. How we describe transition risks and the action taken to manage these risks should be as specific to real estate as possible. CRREM (Carbon Risk Real Estate Monitor) is a tool which has been endorsed by GRESB, the IIGCC (The Institutional Investors Group on Climate Change) and NZAOA (UN-convened Net-Zero Asset Owner Alliance) among others, and adopted widely as the de facto tool for assessing climate risks at this time.

The CRREM tool provides a real estate specific assessment of climate risks and a higher quality analysis of Climate Value at Risk and other risk analyses. CRREM has the added important benefit of being open sourced and not requiring specific consultants to manage.

[1] In this context, Operational Control refers to functions of the GHG Protocol accounting standard and is, not referring to how buildings are operated.

Summary of recommendations

The metrics developed for TCFD were designed to report across equity portfolios, and there is some misalignment with the common ESG reporting metrics used by real estate portfolios. In particular:

1. WACI would represent a large change to reporting, without sufficiently describing risks in an improved way.
2. Reporting of equity portfolios using an equity control boundary makes sense, but the more direct approach to reporting under operational control for commercial real estate makes for a more complete picture.

That said, we recognise to remain aligned with overall TCFD objectives and to participate in firm-wide reporting, that real estate fund teams will probably need to prepare these figures and have them ready for reporting to investors alongside other data.

Additional Metrics

We would recommend the following as additional metrics for CRE portfolios to include within TCFD reporting:

1. **Energy Performance Certificate (EPC) breakdown** (or comparable metrics in states not aligned with the EU's Energy Performance in Buildings Directive), in line with the EU's Sustainable Finance Disclosure Regulations (SFDR). This can include the so-called "*Inefficient Buildings*" metric of assets below and EPC of B as a key metric, and disclosing a complete breakdown of EPC ratings across the portfolio as deeper analysis of risk.
2. The **CRREM analysis of Climate Value at Risk** as a snapshot of current risks accompanied with risk mitigation narrative. CRREM is preferable to other variations of the metric available in the market as we understand it is more accurate and more commonly used than other approaches in CRE. The CRREM tool should use the 1.5C pathway (it defaults to the 2C pathway, but we recommend the 1.5C pathway which is in line with the recommendations of the Science Based Targets Initiative), and the pathway used should be clearly stated. We would advise that real estate funds provide, as well as the snapshot, a mitigation plan which is also aligned with the CRREM trajectories. The next page has considerations of how CRREM should be used.

We acknowledge that further development will be needed to the CRREM tool, and recommend that CRREM:

- Continue to develop the Climate Value at Risk metrics
- Incorporate an Implied Temperature Metric into the tool, for an aligned metric across different investment classes
- Consider improvements to the CRREM workflow, to separate climate risk assessment from the risk mitigation analyses – making it clearer what is a risk snapshot and what is a mitigation planning tool. We expand on these considerations in greater detail below.

To provide further context for the FCA of our recommendations, this section of guidance to members has been included.

Considerations for use of CRREM to manage climate resilience

The CRREM tool provides a set of climate change risk analysis tools specifically for the Commercial Real Estate sector. The tool can provide multiple outputs which can support Net Zero alignment and assessment of climate risks. The tool has the benefit of being freely available, and also pre-populated from GRESB reporting.

CRREM provides several useful analyses, which can be applied to assets to recognise future decarbonisation risks and targets, but that a more standardised approach to how the CRREM tool is used will reduce uncertainty. AREF and IPF plan to support the improved alignment across Commercial Real Estate in how CRREM is used by providing guidance to their members.

CRREM as a climate risk tool

For an assessment of an asset or portfolio's exposure to climate risk, particularly at acquisition, or as a snapshot, CRREM provides a very helpful assessment. The tool provides useful charts and insights as it stands, though more research is required to make the upgrade costs noted in the tool more relevant and complete.

CRREM for Net Zero alignment

CRREM is being used to assess Net Zero alignment, but different members will approach the tool in different ways. The WorldGBC define Net Zero as:

"A highly energy efficient building that is fully powered from on-site and/or off-site renewable energy sources and offsets."

The challenge with CRREM is it's use of Scope 2 location-based emissions factors, which are very helpful in recognising the overall climate risk of a specific asset or a portfolio. It does not, however, speak to the "on-site and/or offsite renewable energy"; the important energy procurement decisions which are vital to Net Zero. This would be calculated appropriately using Scope 2 market-based emissions factors. From a carbon emissions perspective, we believe that members should use the Scope 2 market-based emissions factors from their suppliers.

Making this adjustment, green tariffs are appropriately reported, which can make the CRREM tool's main carbon charts misleadingly optimistic. We believe that the majority of the challenge of making existing assets net zero aligned is to do with energy efficiency, and the kWh/m2 pathway which CRREM provides is most helpful – until 2041.

In 2041, the CRREM energy efficiency pathways for UK offices intersect with the UKGBC's top-down Energy Use Intensity target of 70 kWh/m2 (based on Net Lettable Area). From 2041, using the UK offices example, the CRREM energy targets become unrealistic and are driven by the lack of Scope 2 market-based emissions integration.

The use of location-based and market-based methodologies within the tool could be confusing, but could be presented in the light of climate risk vs net zero pathway. This needs to be considered in greater detail.