

## **Extended Abstract - An exploration of climate alignment in freight related investment decisions**

### **Objective**

The scale of investment required to meet the Paris Agreement temperature of well below 2°C and 1.5°C targets will require an extra annual investment of US\$300bn and US\$460bn per year, respectively (McCollum et al. 2018). In maritime sector alone, this investment is estimated to be approximately, US\$60bn per annum in order to be line with 1.5°C (Krantz et al. 2020). However, a number of barriers common to investments in low carbon assets (Rehmatulla & Smith 2015; Ameli 2019) and specific to climate alignment, make the process of aligning assets and investment portfolios to be challenging. We investigate in this paper those barriers by focusing on freight sectors, in order to understand the existing methodologies and their uptake by freight transportation financiers. The research questions are as follow:

- (1) Who are the key financiers/investors in freight transport?
- (2) What climate alignment methodologies are being developed or in use currently (not only in freight)?
- (3) How are financiers/investors in freight transport currently screening their investments for climate alignment?
- (4) What are the challenges and barriers faced in their implementation and how can these be overcome?

### **Data/Methodology**

A number social research methods, using a mixed methods approach (Tedlie & Tashakkori 2009), have been used to triangulate the findings. The research methods used are a literature review, a desktop research mapping and semi-structured interviews. The methods will follow a sequential explanatory design (Creswell 2006).

The study starts with a comprehensive review of the existing approaches to climate aligned investment. The review covers the predominantly ‘grey’ (industry) and academic literature, although there is a significant lack of academic literature on this subject, which further strengthens our motivation on the original and novel contribution to knowledge that this study will be making on this subject. The output of this literature review is a database of existing initiatives.

We then completed desktop research into the financiers’ and asset owners’ websites to identify the chain of ownership and financing of rail and road operators. This desktop research, along with the findings from the literature review above, allowed us to build a list of key asset owners and financiers which have been found to be actively participating in the financing of transport assets, and on which further research on their use of climate-alignment tools was conducted.

We then conducted a second round of desk research to determine which of the climate alignment tools and initiatives have been used by the financiers identified. This mapping is based on the list of members or signatory financial institutions on the website of those

tools/frameworks, where available. Otherwise, the use of each tool/framework was searched directly on the financiers/investors website.

Interview data served a dual purpose, firstly corroborating documentary and quantitative data gathered in step 1 and 2 and secondly, to provide a rich source of qualitative data for understanding more deeply the approaches used by the participants, their motivations and challenges/barriers encountered. Nine semi-structured interviews with 16 stakeholders were conducted from various backgrounds in order to obtain a variety of perspective on the issue. We interviewed four financiers (an asset manager, a public-private credit export bank, one private bank and a government body), three with tool providers and NGOs (2 think tanks on climate alignment, one in the bond market) and two asset owners associations (ports, and one road freight association).

## Results/Findings

We have classified the initiatives covered in four categories, as showed in table 1.1.

Classification	Initiative/tool	Founder	Target users
High-level commitments and guidance	Collective Commitment to Climate Action	UNEP FI	Banks
	Green Bond Principles	ICMA	Asset owners, managers
	Green Loan Principles	Loan Market Association	Banks
	Net Zero Banking Alliance	UNEP FI	Banks
	Net-Zero Asset Owner Alliance	UNEP FI	Asset owners
	Principles for Responsible Banking	UNEP FI	Banks
	Principles for Responsible Investment	UNEP FI	Asset owners, managers
	Task Force on Climate-related Financial Disclosures	Financial Stability Board	Asset owners, managers, banks, insurance
Assessing: carbon accounting and alignment tools	Paris Agreement Capital Transition Assessment for investors	2DII	Asset owners, managers (listed equity and bonds)
	Paris Agreement Capital Transition Assessment for banks	2DII	Banks
	Paris Aligned Investment Initiative	IIGCC	Asset owners, managers, insurance
	Partnership for Climate Accounting Financials	Investor-led initiative	Asset owners, managers, banks, insurance
	Poseidon principles	Investor-led initiative	Banks
	Science Based Targets for Financial Institutions	Carbon Disclosure Project, UN Global Compact, World Resources Institute, WWF	Asset owners, managers, banks, insurance

Classification	Initiative/tool	Founder	Target users
	Transition Pathway Initiative	Church of England National Investing Bodies and the Environment Agency Pension Fund	Asset owners
Assessing: classification and taxonomies	China Green Bond Catalogue	People's Bank of China, China's Central Bank, China Securities & Regulatory Commission and the National Development & Reform Commission	Bond holders (typically asset managers and owners)
	Climate Bond Initiative	Climate Bond Initiative	Bond holders (typically asset managers and owners)
	EU Taxonomy on Sustainable Finance	European Commission	Large companies (asset owners, managers, banks, insurance)
Collective Action	Climate Action 100+	Investor-led initiative	Asset owners, managers
	Climate Change Commitment	Global Alliance for Banking on Value	Banks
	Poseidon principles	Investor-led initiative	Banks

Figure 0-1: List of the climate alignment tools analysed

Findings from the desk research mapping and interviews showed that awareness and use of the tools by financiers vary widely depending on the institution. A few financiers use a wide variety of tools conjointly and are proactive in developing them. Many others are lagging and are found to use no climate alignment tool outside of the high level commitments and guidance. Many of the stakeholders that we interviewed were just starting the process of understanding the alignment of their portfolios and currently, the emphasis is on first understanding their emissions and disclosing rather than on screening investment decisions and checking for future alignment. This explains why we find that the uptake high-level guidance and commitments among freight financiers, in particular the TCFD, the PRI and the PRB, is higher than the uptake of assessment tools, and as yet it is hard to see any concrete impact of this on investment decisions.

The increased interest in climate change in finance has resulted in a large range of initiatives, often targeting different types of financiers/investors, sectors and regions and therefore appear fragmented. Shipping is an exception in this regard, as the Poseidon Principles provide a harmonized and coherent methodology to its signatories and managed to attract enough signatories to cover a large share of the sector's finance. In the other sectors however, this suggests that climate alignment methodologies might not be comparable across financiers, but also that methodologies are used for complementary activities.

Firms at the beginning of the process face institutional/organizational barriers, where change is difficult and a slow process. They also lack a clear view on which is the best climate

alignment tool. On the other hand, the main barrier which more advanced financiers have noted is the lack of comparability of results, resulting from a lack of comparability of the climate alignment methodologies and the lack of comparability of the corporate data provided by external providers. An interviewee also noted that proactive firms might suffer from a first mover disadvantage if reporting is not compulsory.

### **Implications for Research/Policy**

The large uptake of high-level commitment and guidance on climate measurement and reporting by the freight asset financiers highlighted in this research, shows the increased interest of these companies in climate-related issues and their willingness to measure climate mitigation risks. The large number of companies participating to collective actions strengthen this conclusion. However, high-level commitment and guidance documents are too vague to guarantee that the disclosed alignment are comparable across financiers, nor that it is measured in a rigorous manner, and collective commitments such as the Climate Action 100+ do not necessarily include specific climate alignment methodology. There is a need for financiers in the rail and road sectors to adopt and harmonize their approaches of measuring climate alignment, and to move from measuring emissions to concrete impact on investment decisions.

The adoption of taxonomies, in particular the EU taxonomy, might help harmonizing the approaches, as the climate alignment seems more straightforward to estimate using a taxonomy rather than conducting a full environmental assessment. In addition, if the disclosure of investments along this taxonomy becomes compulsory for a significant share of the finance – in this case, the EU – this will also help harmonizing the approaches used by the various financiers in the sector.

Desktop research used to map tools to financiers only highlights what the financiers are communicating on, not how those are used concretely inside the organization. While it might be argued that firms would be keen to communicate on those uses, it can't be excluded that a firm is using a methodology without advertising it. Moreover the mapping does not reveal much on how widely across the investments within the firms those tools are used, and in which use cases (reporting, screening, marketing). Further research investigating deeper, for example through a case study analysis, how decisions are being made in practice and how portfolios are 'actually' being aligned/in the process of being aligned would be helpful.

The main financiers of the road freight sector were difficult to identify, as the sector is fragmented and further work could focus on this sector specifically. It would also be helpful to understand the alignment tools used for public investments and where private and public finance overlap.

***Keywords:*** *climate alignment, freight transportation*