OPTIONS FOR CLIMATE SERVICES MARKET ENHANCEMENT AND RELATED INNOVATIONS FOR THE FINANCE SECTOR
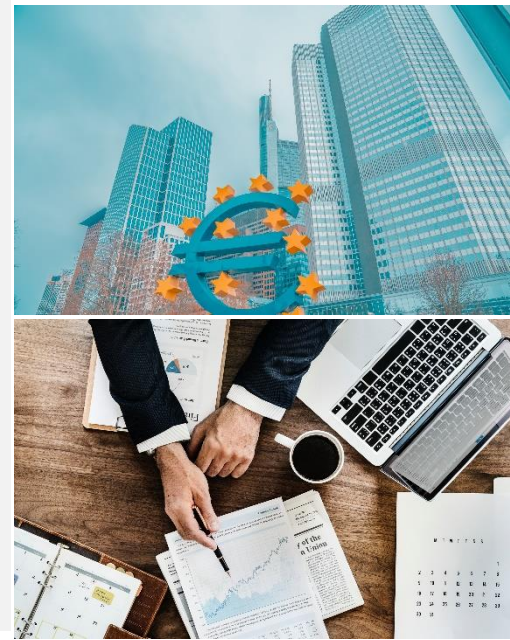
DELIVERABLE 2.3 – POLICY BRIEF

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FINANCE: CRUCIAL CLIMATE SERVICE USERS

The financial services sector underpins most economic activity. The understanding of climate risk in this sector as a risk which could undermine global financial stability is rapidly unfolding. The sector may be expected to step up the use of climate services (CS) so as to better understand and manage climate risks. The benefits from the broad uptake of CS in the finance sector are likely to permeate to wider society due to interaction with the customer base, warranting public policy promoting the uptake of CS in this sector.

ENGAGING WITH THE SECTOR

The EU-MACS project investigated the barriers and enablers to the use of CS in the financial services sector (as well as tourism and urban planning). Interviews and surveys with a range of stakeholders from the European financial services sector were conducted, including those from banking, insurance, investment, banking, financial regulators, and others. CS providers such as advisory firms, national meteorological offices, and finance actors themselves were also engaged in this project. Engagement with diverse groups in the sector

revealed the fact that though some segments of the finance sector have been using CS already for decades, by and large finance actors and climate services providers operate in separate worlds which are just now starting to come in contact. These worlds each have their own jargon, technical experts and important subdivisions / segments. The complexities of each of these worlds can make it difficult for them to interact. The EU-MACS project bridges some of the gaps between users and providers of climate services which operate in different worlds, and contributes recommendations to encourage further CS uptake in the finance sector.

KEY FINDINGS

SIGNIFICANT BACKGROUND DRIVERS ARE IN PLACE

Important changes in the regulatory landscape facing the finance sector regarding environmental and climate risks are underway, which have paved the way for increased uptake of CS in this sector. Financial regulators, central banks and governments around the world are increasingly interested in understanding climate risk as a risk

to global financial stability. While this revolution is indeed global, European actors are leading the way. France has established the first mandatory climate risk disclosure legislation (Article 173) and financial regulators in European Member States (e.g. UK, Netherlands, Finland) are actively investigating, discussing, and publishing guidance around the supervision of climate risk in their jurisdictions. Further, the European Commission itself has developed an 'Action Plan on Financing Sustainable Growth' which includes efforts to align existing reporting frameworks with emerging climate risk disclosure initiatives. One such initiative is the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). This voluntary framework sets out a set of recommendations for financial institutions and corporates *to follow, assess and disclose climate risks, including physical climate risks*. Climate risk disclosure frameworks, mandated or otherwise, directly require the use of CS and are therefore stimulating demand for CS in Europe and beyond.

Beyond the direct encouragement of CS use, the rise of climate risk governance has conducted vital awareness raising. Across the finance sector, there has been a tendency to only consider the risks of one's operations on the climate (e.g. its contribution to greenhouse gas emissions). **There is now growing understanding around the risks of climate change to businesses via climate impacts, and therefore in portfolios and in assets.** The demand for data and information to manage these climate impacts can only grow with this awareness.

GROWING DEMAND AND HEALTHY SUPPLY

CS demand is still unfolding in most segments of the financial services sector, and is formed by the unique contexts financial institutions operate in. Understanding current demand and supply allows users to understand what their peers may be using, and indicates to providers areas of demand which they may wish to align with.

Insurers and Development Finance Institutions (DFI) are more mature in their CS use than other segments. The insurance segment primarily uses upstream climate data and information and services which are integrated into other consultancy services, such as catastrophe modelling. DFIs exhibit strong demand for advisory services, though these tend to be on the project or investment level as opposed to the portfolio or loan book level. There is also notable demand for analysis around selection and prioritisation of investments based on their resilience benefits. As some leading DFIs are now starting to provide CS themselves, for their own and external use, there is also demand for expertise to develop these further.

In commercial banking, a wide range of service demand is present. Nevertheless, the majority appears to be for expert analysis at the portfolio. Banks are particularly driven by interest in disclosure frameworks, such as the TCFD recommendations. Most of them appear to be in the early stages of their CS use. While there are some examples of direct use of maps and apps, such as flood maps and climate data portals, there is a strong demand for the translation of that data into information which can be integrated in stress testing and risk assessments. Demand is even more nascent in other segments. Rating agencies have potential to increase CS use as they try to better incorporate climate risk into ratings. There is not yet consensus in the investment space on whether upstream CS or more translated, downstream CS are preferable. While there are some early moving asset owners and managers, demand in this segment is lagging behind commercial banks and others.

In many of the segments, there is a desire to move together in these early stages. **Collaborative efforts which seek to improve understanding of climate risks, through sector associations and networks have been popular over the last few**

years and could be going forward in the short term.

There is now a steady supply of CS, both in general and increasingly targeted at the financial services sector in particular. There is a healthy supply of climate and climate-related data provided via data portals and websites. Similarly, there is a growing body of climate change impact studies provided as either academic or grey literature. Both these types of CS are not always able to be used quickly and easily by financial actors, as translation of their outcomes into meaningful information for financial institutions is still needed.

Advanced CS users within the finance sector including DFIs and reinsurance firms work in partnerships and amongst themselves to produce CS which can be used by other segments in the wide finance sector. Web-based platforms which allow sharing of a range of information, including climate-related data to case studies are common and best practice guidance documents are frequently emerging, around the importance of climate risk analysis. Further, some financial institutions are providing open access or online learning courses around the use of climate data and information.

Conventional advisory services around climate impacts are in steady supply, though the market is fragmented with diverse providers. Apart from dedicated CS providers, conventional financial and accountancy service firms are starting to offer and incorporate climate analysis relating to physical climate risks into their offerings. Climate advisory services are increasingly moving beyond conventional provision of expertise via consulting business models, to involve bespoke development, of tools, models, methods and subscription services.

NOTABLE BARRIERS

Despite the presence of important background drivers, and growing demand and supply, engagement with finance stakeholders revealed notable barriers to the further uptake of CS, facing both users and providers.

Factors which slow demand are wide ranging. **Lack of awareness around the nuances of climate impacts and data is a key barrier**, even within financial institutions. *Climate risks are still often presumed to mean solely carbon risks (transition risks)*. Financial institutions may employ teams which are more and others which are less aware of physical climate risks, and neither of impact propagation of climate change on assets and portfolios. There are common misconceptions that climate change is only a long-term issue, and that climate impacts are mostly associated with extreme weather, rather than incremental changes in climate variables. There is still a perception, amongst investors in particular, that physical climate risk is not material, though few firms have conducted analysis to confirm this. Importantly, financial institutions may have limited bandwidth to take on additional risk analysis, such as climate risk, especially when they do not yet see a strong demand for this from the top of the investment chain and feel removed from the physical location of the underlying facilities and companies they invest in. **The ever-present short-term outlook in most segments of the sector presents perhaps the most notable structural barrier to the consideration of climate risks and use of climate data.** The lack of collated data on asset location and features hinders further demand for CS. Finally, several other background changes facing the wider sector may be diverting time and resources away from CS, namely Brexit and the rapid development of fintech.

This study noted a range of factors slowing the supply of CS to the sector. Climate data and information is not always packaged as a service or targeted toward the finance sector. Research studies are not typically created for the purposes of financial risk assessment. Rather, these studies are created by research organisations or academics seeking to further the understanding of climate impacts in a given geography or sector. Important data gaps remain, such as climate

model outputs for the short – medium term, particularly inter-annual and decadal projections, which hinders further product development.

PERSISTENT UNMET NEEDS AND DATA GAPS

A number of the information and data gaps identified by stakeholders in different segments are cross-cutting, with wider relevance for the finance sector more broadly. A selection of are summarized as follows:

- Improved spatial resolution and quality of data, particularly extreme events and in developing country contexts;
- More clarity on the potential attribution of extreme events to climate change, and teleconnections between different hazards and impacts;
- More explanation on the uncertainty associated with different climate datasets, as well as guidance on how users should interpret and use such data;
- Further development of adaptation indicators to enable decision-makers to better evaluate different options, including cost, and facilitate tracking of adaptation progress;
- Inclusion of other drivers / factors within climate risk assessments and resilience planning, such as the macroeconomic impacts of climate change and the responses of governments and insurance to the evolving risks;
- Educational tools, capacity building programs and knowledge sharing platforms, covering topics such as available information portals, interpreting climate data, including levels of uncertainty, and combining climate and non-climate data;
- Development of guidelines, standards and regulation, as required, for integrating climate resilience into project design and sector operations / procedures;

RECOMMENDATIONS

The sector is now waking up to the reality of climate risk as a financial risk rather than an ethical concern. Self-imposed risk reporting obligations are starting to emerge. Yet, both national and EU level climate risk reporting in the finance sector is preferably guided, monitored and supported by financial authorities (e.g. central banks and associated financial market authorities, etc.). Considering the significant benefit potentials when the CS markets mature, public support to the climate services market should not be ruled out, at least not during the build-up phase.

Policy makers should consider options to enable a well-developed publicly financed climate data and modelling infrastructure. This could include initial support for sector specific platforms. Policy attention could evolve to focus on keeping data facilities which store climate data up-to-date and high quality.

Seasonal CS can be used to anticipate and thereby reduce or hedge against damages. Hence, for verified seasonal CS the expected net benefits of the use of CS can be estimated. For this reason, many seasonal CS products lend themselves well for provision on a commercial basis. If impacts and their prevention relate to societal or human peril, seasonal CS products could be public. All in all this means seasonal products, not the least for the finance sector, could (should) be privately provided in most cases. Tasked with the oversight of societal protection and with ensuring good basic conditions for an efficient and reliable society, the state has some interest in ensuring that the finance sector sufficiently recognises the benefits of using seasonal CS. **In this respect public institutions should consider raising general awareness regarding seasonal CS, emphasise private sector responsibilities for societal resilience (inter alia as part of the Sendai Framework and EU critical infrastructure guidelines) and support open pilots.**

In case of adaptation-related CS, commercial interests are mixed with public good interests. Availability of good quality upstream data is important to allow for development of downstream services. For some downstream services affordability and quality needs to be ensured by public actors. All in all, this implies that for this type of CS, **Member States and the EU could assume a larger role especially regarding resourcing and regulation that promote continuity in the upstream (and to some extent midstream) CS, which are usually open.**

Public policy actors could also consider quality assurance and standardisation practices. For example, the EU initiative to develop policies for Sustainable Finance in conjunction with EU Climate Adaptation policy may offer a suitable basis for this.

In all segments of the sector, there is an interest in receiving CS through existing information channels, be that existing risk assessment processes or hazard models, or platforms and technology already in use. **CS providers should consider aligning with platforms and processes where possible, though development of new tools and applications should not be ruled out.**

Providers should also consider lingering information gaps in the development of new products and services.

Financial institutions, which are well established users of CS should consider collaborating with providers to share their learning and success stories in these early days of the CS market. **It is important for potential users to see demonstrated benefits** and would demonstrate leadership. Established channels such as sector associations and networks could be used for dissemination.

CS users who are at the early stages of regular CS use could benefit from addressing any internal silos and assessing the extent to which climate risks have been brought to high level decision makers in their organization. **Assessing existing internal capacity to utilise CS, will be a crucial next step for users early on their CS journey.**

Both users and providers need to pay close attention to the unfolding advances in the climate science and regulatory landscape, as climate risks and their regulation are now firmly planted on center stage.

Full report:	Hamaker-Taylor et al. (2018) Results of explorations of the CS market for the financial sector. EU-MACS Deliverable 2.1
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