Dear Ms. Gardineer,

Thank you for the opportunity to provide comment on the Office of the Comptroller of the Currency (OCC) Draft Principles for Climate-Related Financial Risk Management for Large Banks.¹ For context, CarbonPlan is a research non-profit focused on the transparency and scientific integrity of climate solutions. Our team has expertise in climate science, climate change policy, and financial regulation.

Large banks must comprehensively and proactively take steps to manage climate-related financial risk because climate change is already impacting the financial system. These impacts will only increase in the years ahead. We commend the OCC draft principles for integrating climate-risk considerations across bank strategy, governance, and risk management activities. The proposed approach appropriately reflects the organizational effort required to assess and address climate-related risks, which are emergent, complex, and likely to amplify other systemic risks.

We believe the draft principles take important steps toward building a safer and more resilient financial system. As described below, however, it will also be necessary to anticipate and resolve additional challenges during implementation. One particular concern that requires ongoing attention is how integrating climate-risk in lending and access to credit might affect social and economic equity. Physical climate risks are likely to be correlated with specific geographies and communities, which raises the potential for objective risk management activities to result in potentially disparate social impacts.

The correlation between climate risks and geographic location surfaces a core tension in climate-related financial risk regulation. As risk is priced — whether spurred by market forces or regulation — it may become more expensive for firms to do business in certain places. These costs will ultimately be borne by consumers and communities through reduced financial services, higher prices for loans, or eventual cycles of disinvestment. Achieving socially equitable outcomes may therefore demand policy strategies designed to facilitate more comprehensive adaptation. We do not attempt to resolve this tension in our letter, but instead identify how this concern may emerge throughout the draft principles.

To further ground these points in the questions the OCC is considering, below we respond to questions 1, 3, 9, and 10.

**Question 1**: Are there additional categories of banks (i.e., based on asset size, location, business model) to which these principles should apply?

The initial focus on banks with over $100 billion in total consolidated assets avoids placing an undue burden on smaller firms that might have less capacity to manage climate-related financial risks, at least for now. Big banks are also already regulated based on the threat that their size may pose to financial stability, so it is appropriate to develop a process that furthers firms’ and regulators’ understanding of how risk could build up in larger banks that includes, but is not limited to, systemically important financial institutions.

Although a focus on very large banks makes sense as a starting point, any regulatory effort that focuses exclusively on the biggest institutions could unintentionally push excess risk onto smaller, more regional entities. This is concerning because climate-related financial risks — particularly physical risks from floods, wildfires, and hurricanes — are highly dependent on the geographic location of assets and firms. NGO research on climate risk in the banking sector has also identified that, due to their tendency towards geographic concentration, community banks are potentially more exposed to physical risk.

After the large banks subject to the OCC's initial efforts begin to implement climate-related risk management practices, they could begin to shift capital away from or otherwise raise prices within regions they deem to be at relatively high risk of physical climate impacts. Any resulting capital flight or reduction in financial services by large banks included in the OCC's efforts could further increase risks among community lenders. Academic research indicates that

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banks with local knowledge may already be offloading climate-risk onto public entities — pointing to risk transfers that are already taking place.\(^4\)

Given the possibility that OCC guidance could have the unintentional effect of increasing climate risks among banks that fall below the $100 billion asset threshold, we suggest that the guidance developed in this initial exploration facilitate a broader engagement with additional actors. This should include community and regional banks, who would not automatically be included in the OCC’s proposed framework.

Early engagement of community and regional banks can also help identify patterns in geographic climate impacts and potential financial divestment. In certain cases, the magnitude of physical risks expected by highly geographically exposed banks may be large enough to require more direct policy interventions than the OCC can provide, but early engagement can, at minimum, help anticipate these challenges.

**Question 3:** What challenges do banks face in incorporating these principles into their risk management systems? How should the OCC further engage with banks to understand those challenges?

The OCC’s focus on comprehensive integration of climate risk across bank activities is necessary and welcome. However, incorporating these principles into existing risk management systems — particularly governance and strategy — will need to be responsive to today’s bank leadership context. Today’s bank boards and management teams tend to not reflect the climate expertise required to develop robust, science-based climate-risk management processes.

We appreciate that climate-related financial risk is a novel area that does not enjoy decades of traditional management research and practice. Nevertheless, given the dearth of management expertise, any forthcoming guidance that identifies specific roles and responsibilities across bank leadership will need to enable strategic decision-making using climate science and climate data. To facilitate better outcomes, we suggest the OCC partner with climate science experts to develop frameworks for using climate risk information in corporate governance.

**Question 9:** How do banks currently consider the impacts of climate-related financial risk mitigation strategies and financial products on households and communities, specifically LMI and other disadvantaged communities?

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Many banks are currently using climate modeling analysis to assess their physical risks. This requires identifying what assets are exposed to hazards like wildfires and floods, analyzing projected impacts under various scenarios, and translating projected impacts into expected loss or financial damages.  

As discussed in our answer to Question 1, banks might determine that risk mitigation requires raising prices on exposed assets — for example, making certain home mortgages or commercial loans more expensive. They might also decide to write off some regions of the country altogether.

We are concerned that climate risk pricing or other loss-protecting mitigation strategies could unintentionally result in adverse social and economic outcomes for consumers and communities. For instance, communities in wildfire-exposed areas of California are already experiencing dropped policies, high premiums, and an increased reliance on less robust state programs as non-bank financial service providers (e.g. insurance companies) currently try to mitigate climate risk.

There is no reason to believe such crises will remain contained to the insurance sector. Indeed, economic research and business reporting is already warning of “blue-lining” — a process where climate-risk assessments lead to reduced credit access in exposed communities. Often this prospect threatens communities that already experience a legacy of lending discrimination that has contributed to existing social inequities. Further climate-related risk designations could have the knock-on effect of limiting financing for investments that reduce residential climate risks, such as improving resilience through building upgrades — and could therefore contribute, ironically, to increasing climate risks in already-exposed geographies. Analogous cycles of disinvestment have also been described by analysts in the municipal bond market, a key source of community infrastructure financing.

Addressing the fact that financial risk mitigation strategies could adversely impact LMI households and communities will be challenging, and might counsel policy frameworks that shift or impose new costs to better address both climate-related financial risk mitigation and social equity goals. It is also important to note, however, that proactive guidance from the OCC

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6 Dan Walters, California wildfires ignite an insurance crisis, CalMatters (Sept. 12, 2021).
8 Chris Goolgasian et al., Muni market climate risk: Hidden perils, untapped opportunities, Wellington Management (Nov. 2019).
could help reduce litigation over fair lending rules — a concern noted in the draft principles’ discussion of legal risks.

**Question 10:** What, if any, specific climate-related data, metrics, tools, and models from borrowers and other counterparties do banks need to identify, measure, monitor, and control their own climate-related financial risks? How do banks currently obtain this information? What gaps and other concerns are there with respect to these data, metrics, tools, or models?

As mentioned in our response to Question 3, bank boards and management teams often lack practical expertise in climate science or climate-related financial risk. As banks seek to quickly build capacity in this area they must rely on outside experts, including consultants and proprietary data providers for climate services.9

Banks urgently need to make decisions using climate data, but as of today, there are no transparent standards for climate data and model use, and no way to be sure that the guidance being received by banks is robust, accurate, or impartial. We appreciate that some critical information, like asset-level exposure data, likely represents sensitive business intelligence that banks and counterparties do not want to make public. On the other hand, there is no reason why the climate science scenarios and impact data or models that service providers use should remain private.

The status quo leads to two related problems that the OCC should consider as it develops further guidance.

First, one potential consequence of a purely private climate-services market is that it might lead to less rigorous or biased analysis. Because private firms providing climate-service consulting use methods that are generally proprietary, it is not possible to understand whether they accurately describe physical and social scientific uncertainty, or whether their services might lead to unintentional false precision or bias in clients’ resulting risk-management practices. Fundamentally, a lack of transparency about what is happening “under the hood” makes it very difficult to verify the information being received by banks as they make business-altering strategic decisions.

Second, because there are no standards for the use of climate models in economic or financial risk assessment, there is no mechanism by which to incorporate new inputs from the scientific community. Various existing review processes — including those run by official government agencies — make available new data and modeling approaches that are drawn from the broader scientific literature. Because private firms’ analysis operates outside of these

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processes, it is often unclear to the public which versions of models and datasets are being used. Furthermore, building private models on top of this public research — which is rapidly iterating — does not allow for the validation of climate-specific inputs. Without a formal oversight process, it is left up to the discretion of private firms to incorporate mechanisms for scientific feedback and reproducibility. In the absence of standards or oversight procedures, there is also no way for banks today to quickly confirm whether a provider is following industry best practices.

To address these issues, the OCC could partner with climate scientists to provide public resources — for instance, non-proprietary infrastructure and supply chain data, or frameworks and heuristics for decision-making under climate-induced uncertainty. Luckily, there are already public datasets available, such as from the Network for Greening the Financial System. More work should be done to identify how to improve public tools so that they are transparent, relevant, and accessible to banks and regulators. The OCC should also consider partnerships with climate experts in other environmental and financial regulatory agencies in order to coordinate and standardize forthcoming guidance. Finally, because regulators across the federal government are focused on climate-related financial risk, broader cross-agency processes may be the most efficient way to share knowledge and identify best practices.

Thank you for the opportunity to provide comments on the draft principals. We commend the OCC for its work on climate-related financial risk and look forward to continued engagement on this topic.

Best regards,

Sadie Frank
Program Manager
sadie@carbonplan.org

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Network for Greening the Financial System, Data & Resources.