

August, 2023

An Open Letter to Asian Banks on Escalating Physical Climate Risk

Dear Colleagues,

We are writing on behalf of the Asia Investor Group on Climate Change (AIGCC) Physical Risks and Resilience Working Group and China Water Risk (CWR). The AIGCC Working Group is a private forum of regional investors which aims to collaborate and share knowledge on adaptation finance.

We applaud the progress that leading banks have taken on their climate strategies and would welcome an opportunity to discuss, with the sector, stress testing for sea level rise risks.

We have observed that across the sector, stress testing for physical climate risks is often less of a focus than stress testing for transition risk, however it is necessary for financial resilience. Sea level rise is especially important because the risk is accelerating more quickly than expected. In February 2023, U.N. Secretary-General, stressed the urgency to respond to “Sea-level Rise: Implications for International Peace & Security”, where ‘sea-level rise is not only a threat itself. It is a threat multiplier’. The U.K. National Oceanographic Centre predicts the global cost of rising sea levels will be \$14 trillion annually by 2100. Our region is also particularly vulnerable with over 230 million people in APAC at risk by 2050¹.

Furthermore, it is difficult to address with traditional risk management approaches. The IPCC has highlighted this risk more clearly than ever. It says 2m of sea level rise by 2100 and 5m by 2150 “cannot be ruled out”². These levels should be reflected in climate stress tests, and we recommend that banks consider the following three dimensions:

1. Timeline: Stress testing should use an appropriate level of sea level rise which requires using the right timeline. The NGFS member scenarios typically use a time-horizon of 30 years or less³ and we find that banks often publish similar analysis. However, sea level rise is expected to accelerate by 2060, with abrupt increases possible due to tipping points related to ice sheet dynamics.

¹ Nature. Nature Communications No.4844 October 29, 2019 Accessed May 23, 2023
<https://www.nature.com/articles/s41467-019-12808-z>

<https://www.climatecentral.org/press-release-flooded-future>

² In late 2021, the IPCC included an additional “low confidence” but “cannot be ruled out” sea level rise scenario in its Summary for Policymakers due to its high impact and importance for long term “low-regret” adaptation planning – this warns that: “Global mean sea level rise above the likely range – approaching 2m by 2100 and 5m by 2150 under a very high GHG emissions scenario (SSP5-8.5) (low confidence) – cannot be ruled out due to deep uncertainty in ice-sheet processes.”

³ Network for Greening the Financial System. Scenarios in Action October, 2021 Accessed May 23, 2023
<https://www.ngfs.net/sites/default/files/medias/documents/scenarios-in-action-a-progress-report-on-global-supervisory-and-central-bank-climate-scenario-exercises.pdf>

The result is that sea level rise risks are often not captured in current stress tests. Additionally, due to the low elevation and relatively flat geography of APAC's coastal cities, most of the damage can occur with 1-2m of sea level rise. This risk is slightly beyond the 30-year horizon, so extending your current stress testing horizon by 50-80 years, to allow for the downstream impact of the tipping points being reached to be taken into account. In addition, the stress test could also reflect that insurance may be dropped earlier in anticipation of this risk, and freehold assets that are likely to be lost will need to be valued similarly to leasehold assets.

- 1) Low regret or cannot be ruled out scenarios: Stress testing should include a "low regret" or "cannot be ruled out" scenario which uses an estimate of sea level rise that goes beyond the IPCC worst case scenario. The IPCC provides a range for sea level rise estimates by 2100 from 1.04-2.33m. This may lead to 1.04m of sea level rise being used in stress testing, however this could underestimate the risk. The details behind these consensus numbers also show that the subset of estimates from ice sheet experts provide a worst case of closer to 3-3.3m. This can also be considered with the IPCC warning that 5m is possible by 2150, with further additional rise locked in, and observed changes happening earlier than expected. We recommend using the "cannot be ruled out" suggestion for policy makers of at least 2m to evaluate a low regret scenario.
- 2) Government Action: Stress tests should include the adaptation actions that governments are taking or are not taking. The risk management approaches typically applied may not be as effective in reducing sea level rise risk as they may be for other financial risks. The concentration of APAC assets in vulnerable coastal areas means that sector or geographic diversification may offer limited protection. Government planning for sea level rise is highly varied. We recommend that stress tests reflect these plans, but also that the results are used in conversations with governments around the adaptation projects needed to protect bank assets and revenues.

These risks can impact millions of people and billions of dollars of property assets, critical infrastructure, and economic activities. The challenges related to sea level rise tend to be systemic and are best addressed through cooperation and collaboration.

We see a need for banks to review and quantify higher loan books' exposures, particularly in vulnerable sectors to coastal threats such as real estate, trade, manufacturing and industry that will be materially affected by sea level rise. As investors, we are also evaluating this risk in our portfolios and engaging with governments on their National Adaptation Plans. We invite banks to join those discussions on public policy.

To support this process, the AIGCC membership has collaborated on guidance including the [Investor Expectations on National Adaptation Plans in Asia](#) (as presented at COP27), and [Riding the wave of physical risks – a compendium of tools and service providers for investors in Asia](#). In addition, CWR's Nov 2022 report on [Futureproofing APAC Banks & Savings](#) offered three recommendations for APAC banks to improve stress testing for sea level rise risks.

As banks are long-term providers of capital we hope these recommendations are constructive and support the sectors' work towards sustainable growth.

We expect that disclosure requirements around the topic are rising due to developments around the ISSB, TCFD, and related regulations.

We invite banking leaders to engage on this matter, and join the collective discussion about how to protect the interests of their clients, communities, investors and broader societies.

Thank you for your time and consideration on this matter.

Respectfully,

The AIGCC Physical Risks and Resilience Working Group and China Water Risk