



HONG KONG MONETARY AUTHORITY
香港金融管理局

Our Ref.: B1/15C

4 December 2020

The Chief Executive
All Licensed Banks

Dear Sir / Madam,

Climate risk stress test

I am writing to invite your institution to participate in a pilot exercise on climate risk stress test (“CRST”) to be undertaken in 2021.

Since our circular on “Range of practices for management of climate risks” was issued in July 2020 indicating the HKMA’s intention to launch this pilot exercise, we have received feedback on the detailed setup of the CRST from banks interested in participating in the exercise. The HKMA has developed a set of guidelines for the CRST having regard to the industry’s feedback and would like to share with you the salient features of this upcoming exercise.

- *Objectives* – The main objectives of the exercise are to assess the climate resilience of the banking sector as a whole and to facilitate the capability building of participating banks for measuring climate risks. The HKMA expects participating banks to obtain from the exercise useful insights into various aspects of climate risk management, such as understanding the range of risks associated with climate change, identifying data gaps for risk identification and establishing a robust framework for managing climate risks. The exercise should also help participating banks embed climate risks in their business planning and develop strategies to mitigate climate risks.
- *Scenarios and scope of the exercise* – The pilot exercise covers two major types of climate risks, namely physical risk and transition risk. Participating banks will need to assess these risks separately under different scenarios in order to allow for a better understanding and assessment of the impact of each of these risks.

The scenario for physical risk assessment focuses on the projected climate situation of Hong Kong in the 21st century, such as increases in temperature, rises in sea levels and more intense cyclones. The transition risk scenarios are to capture two different pathways to a low carbon emission economy, namely a disorderly transition with abrupt changes in climate policies of authorities, and an orderly transition with early and progressive actions to achieve the climate goals set out in the Paris Agreement.

In designing these scenarios, the HKMA has taken into account banks' exposures and the widely accepted scenarios, such as the representative scenarios developed by the Network of Central Banks and Supervisors for Greening the Financial System and the Representative Concentration Pathways adopted by the Intergovernmental Panel on Climate Change.

Under these scenarios, participating banks are required to evaluate the financial impact on them both in the short term and long term. The assessment should focus on exposures directly affected by changes in climate patterns and transition pathways, such as assets vulnerable to climate hazards and exposures to clients in high carbon emission industries. The results of individual institutions taken together would provide insights into the climate resilience of the banking sector as a whole.

- *Assessment approaches and model risks* – Given the distinctive nature of climate risks, traditional stress testing techniques may not be suitable for use in CRST. Thus, the HKMA encourages participating banks to explore new methodologies for the pilot exercise. For the same reason, participating banks should be well aware of the model risks associated with the key assumptions and limitations of newly developed models, and understand the potential implications on the stress test results.
- *Flexibility* – Noting that the use of stress test to measure climate risks is a relatively new development and the level of sophistication in conducting CRST varies across banks, the HKMA will extend flexibility to participating banks on, for instance, reporting granularities and exercise coverage.

The HKMA has distributed the guidelines for the CRST, together with a set of reporting templates, to banks which have previously expressed interest in participating in the pilot exercise. Other banks are also welcome to approach their usual supervisory contact if they want to take part in this exercise, and the HKMA will share the guidelines with them upon receipt of their indication.

Should you have any questions about the pilot exercise, please send them to crst@hkma.iclnet.hk.

Yours faithfully,

Raymond Chan
Executive Director (Banking Supervision)