AON

Climate Change and Financial Risk

The impacts of rapidly evolving regulation across APAC

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The impacts of rapidly evolving regulation

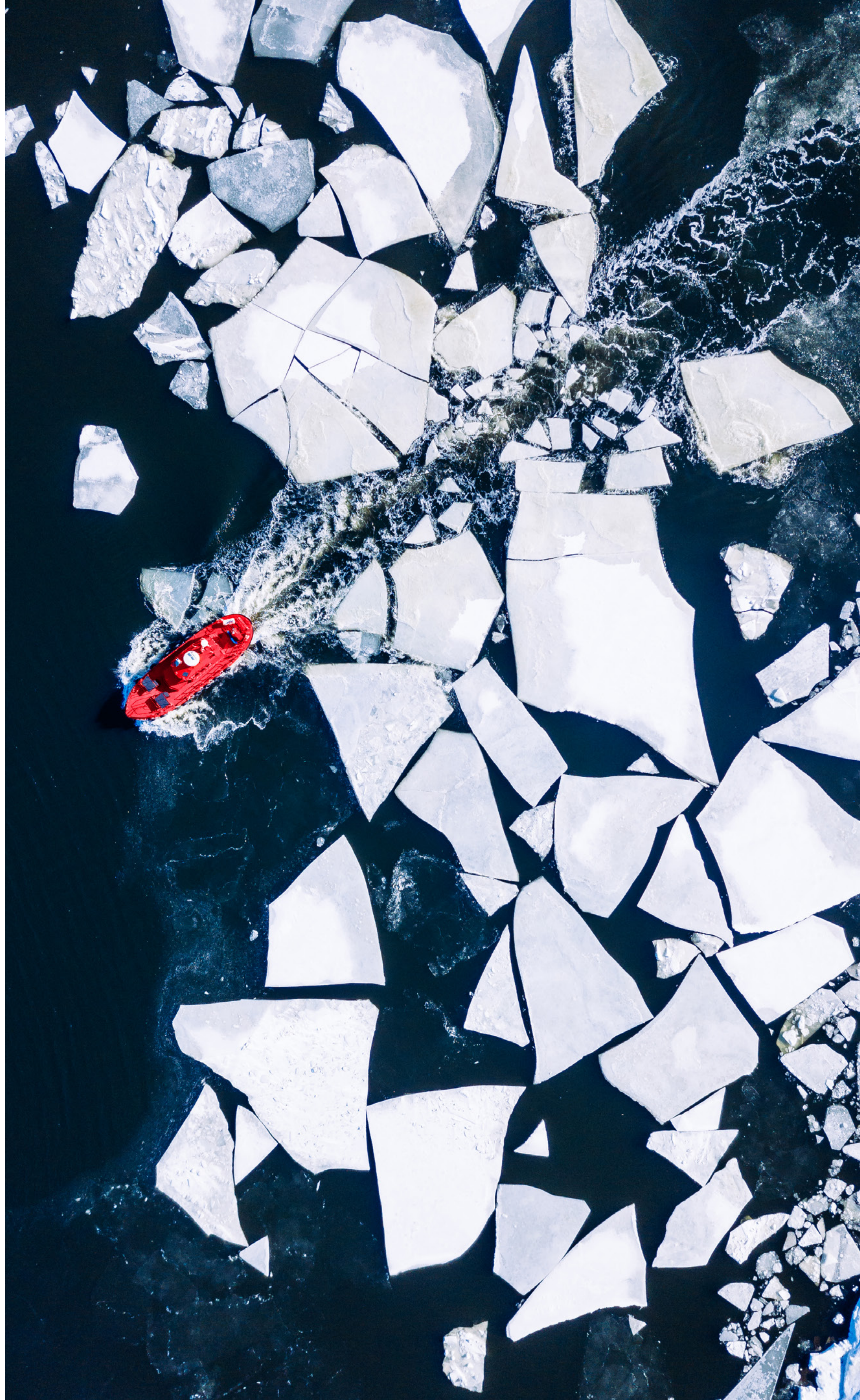
Addressing climate-related financial risks can help protect company performance and contribute to a more sustainable and resilient future for corporates, investors, and financial institutions. Regulation has the potential to influence, and even accelerate, the development of products and markets to manage these risks.

Working in partnership with the Institute for Sustainable Futures (ISF) at the University of Technology, Sydney (UTS), Aon has been exploring how regulation may influence innovation of new products and services to help organisations meet their climate change financial risk management obligations.

In this article we present some of the key findings from the ISF report Aligning climate-related products with financial system regulation, published in 2022. We also share a snapshot of the latest regulatory developments in Australia, Japan, Hong Kong, and Singapore.

The focus on these four Asia Pacific (APAC) hubs completes a three-part series on climate regulation in APAC, following Aon's recent overview of climate disclosure activities across the region[1] and our deep-dive into what good climate disclosures look like.[2]

> Throughout economic history, product innovation and regulation have often intertwined. As the raft of climate-related financial regulation flows through the global financial system we can expect to see an escalation of new innovation that has the potential to support the transition to a low carbon economy.
>
> **Gordon Noble**
> Research Director
> UTS Institute for Sustainable Futures



Increasing urgency to address climate change financial risk

As the impacts of climate change become more apparent and urgent, organisations face increasing risks related to the physical impacts of climate change, changing consumer and investor preferences, and shifting regulatory frameworks. These risks can lead to decreased revenue, higher costs, reduced asset values, and can ultimately impact a company's long-term financial stability.

> "The climate related regulation of financial markets is evolving at a rapid pace, with voluntary disclosures giving way to more standardisation and transparency across the APAC region. This is a necessary step for markets to properly price climate-related financial risks and rewards, with similar initiatives also gathering pace in the US, UK and Europe. The sooner this occurs, the more confidence the private sector can have in planning for the climate transition. And more confidence means better business outcomes.
>
> **Tom Mortlock**
> Senior Catastrophe Research Analyst
> Aon

A snapshot of regulatory developments in four APAC countries

From an assessment of the activities of financial regulators in Australia, Japan, Hong Kong, and Singapore, four clear and consistent foundations of climate-related financial risk regulation are emerging:

- Standards
- Risk management
- Data
- Skills and competency

From our review, we believe that these foundations will provide the basis for market-wide climate-related product development over the coming decades.

Which comes first: regulation or innovation?

Product development has often preceded the introduction of regulation, which has, in turn, created a market for these new products. Two historical examples show how demand grew in response to regulators taking steps to address issues in ways that directly supported the product.

Case Studies

Case study 1: Catalytic converters

Product development in the 1950s[3] sought to address vehicle tailpipe emissions, after the state of California in the US began to experience smog so thick that visibility was reduced to a few blocks. In the 1950s, research identified automobile exhaust as the source of the smog, leading to the development of catalytic converters for gasoline engines in the same decade.[4]

It was the establishment of the California Air Resources Board and the Federal Air Quality Act of 1967 which gave California the ability to set its own air quality rules, creating demand for catalytic converters as a result. By the 1970s, Californian law required catalytic converters to be fitted as standard to control vehicle emissions.[5]

Case study 2: Credit ratings

John Moody developed a rating system for investor use in 1909. Demand from the investor community accelerated mainly due to an explosion in issuance of municipal bonds and higher default rates during the Great Depression. This led to proposals for a system for weighting the value of a bank's entire portfolio based on credit ratings.[6]

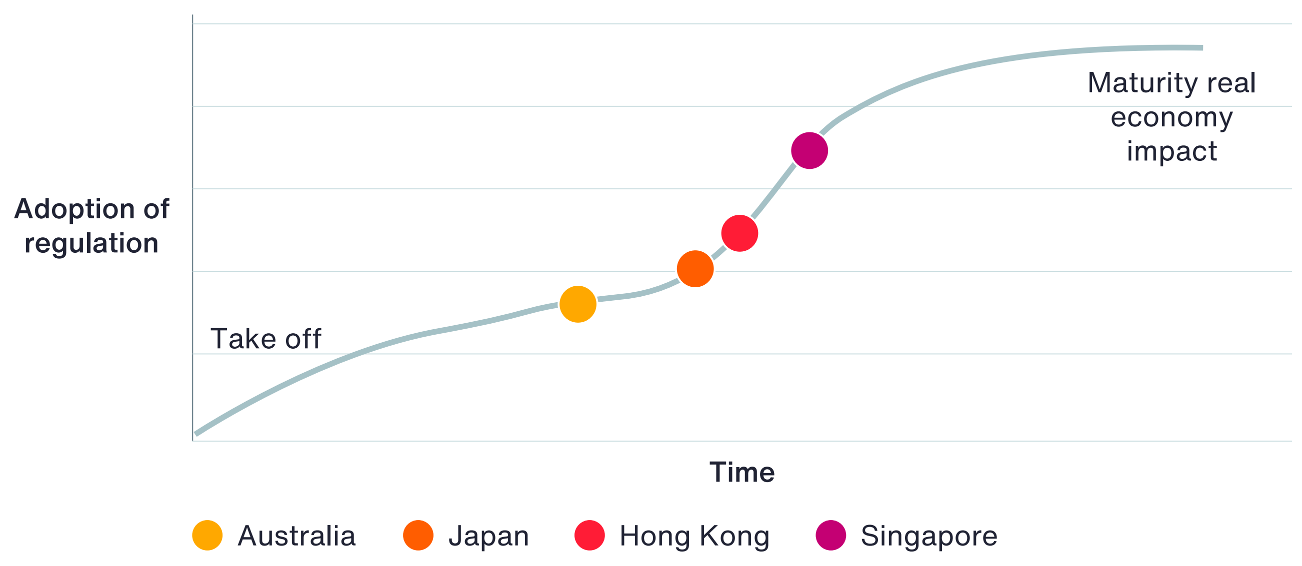
As a result, high ratings became a condition for state-chartered banks to be members of the Federal Reserve System. By 1931 the role of credit rating agencies was bolstered when the US Treasury Department and Comptroller of the Currency together adopted credit ratings as a measure of the quality of banks' bond accounts.[7] US academic Frank Partnoy has argued that credit ratings agencies survived and prospered, not because they offered reliable, high-quality information, but because they delivered 'regulatory licenses', that provide the right to be in compliance with regulation.[8]

Sustainable Finance Regulation Curve

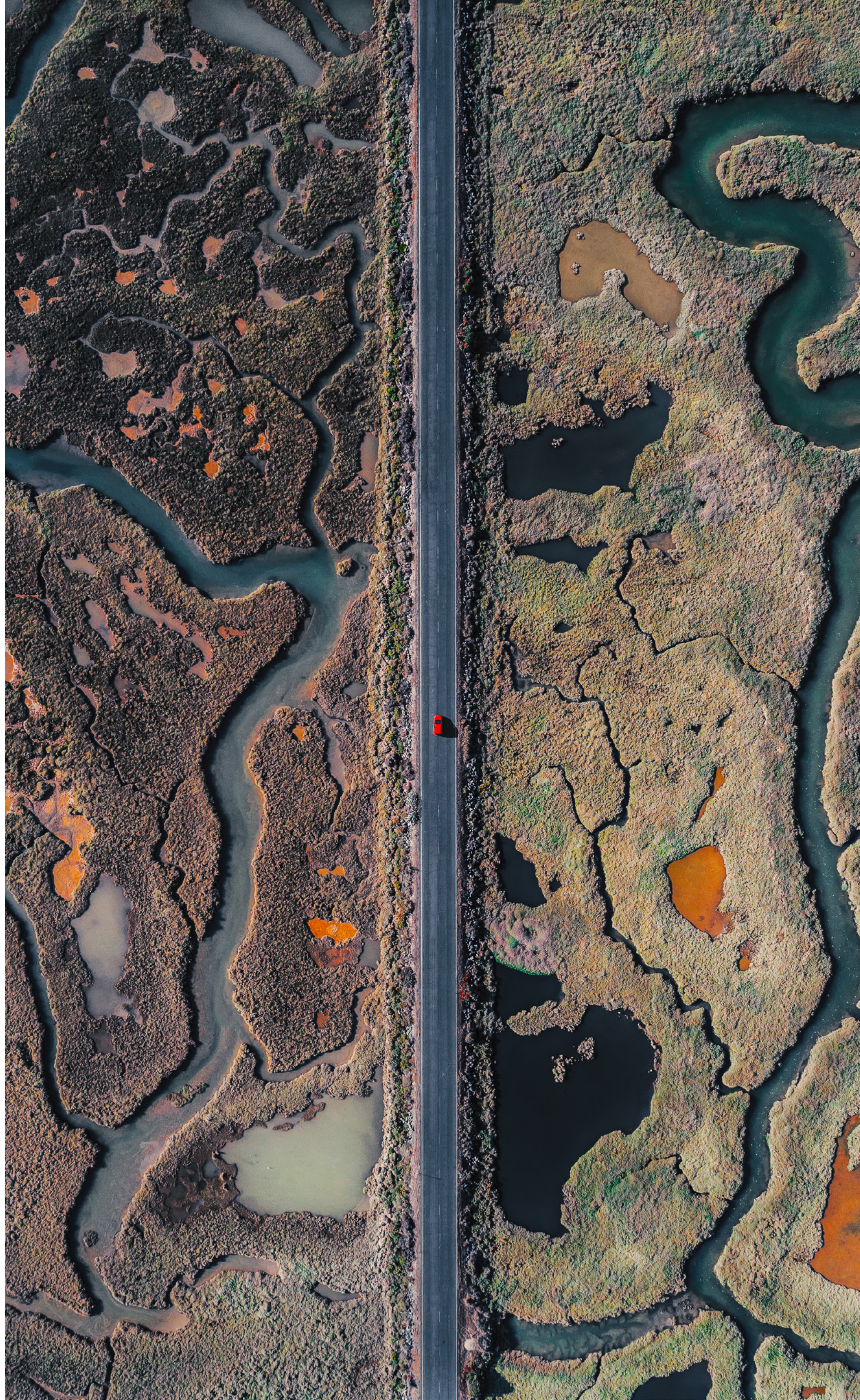
ISF and Aon have developed a *Sustainable Finance Regulation Innovation Curve* to illustrate where different jurisdictions in APAC are on the journey of responding to climate-related financial risks. Innovation adoption curves were first proposed by Everett Rogers in his 1962 book *Diffusion of Innovations*.[9] The concept of a S-curve is that innovation goes through slow early beginnings as technology or processes are developed. Innovations then go through a stage of rapid acceleration as the innovation is accepted before maturity is reached and the curve flattens. The *Sustainable Finance Regulation Innovation Curve* applies this S-curve to the acceptance of the regulation of climate-related financial risks.

As a country seen as a regional leader in addressing sustainable finance, Singapore has been careful to align with the direction of international regulation. It can be seen as a precursor of developments likely to have an impact on the wider ASEAN regional market for climate-related products.

Sustainable Finance Regulation Innovation Curve



The following sections outline the key regulatory developments expected to influence development of climate products in Australia, Japan, Hong Kong, and Singapore.



Financial system climate-related regulation: Australia

Australia is integrating climate-related financial regulation through the Council of Financial Regulators (CFR).

The Council of Financial Regulators (CFR) is a coordinating body that brings together the Australian Government Treasury with Australia's three financial system regulators:

- Australian Prudential Regulation Authority (APRA)
- Australian Securities and Investments Commission (ASIC)
- Reserve Bank of Australia (RBA)

APRA is leading CFR's focus on risk management. Prudential Practice Guide CPG 229 provides APRA-regulated entities with guidance on managing the financial risks and opportunities that may arise from a changing climate. ASIC is encouraging greater transparency and accountability from companies in their financial reporting and disclosure. The CFR has endorsed the Taskforce on Climate-Related Financial Disclosures (TCFD) framework for effective disclosures. The below provides a summary of key recent highlights.

Risk management

In June 2022 ASIC released an information sheet on 'greenwashing.'[10] An area of focus for ASIC is on headline claims that are potentially misleading and contain vague terminology. ASIC states 'if your communications and disclosures contain a headline claim about sustainability-related matters, the headline claim should not itself be misleading and exceptions and qualifications should not be used to rectify an otherwise misleading impression'.[11] ASIC's information sheet has potential implications for superannuation funds that make public commitments to transitioning portfolios to net zero emissions.

On 4 August 2022 APRA released findings of a climate risk self-assessment survey conducted across the banking, insurance, and superannuation industries.[12] The responses to the survey from 64 medium to large institutions suggest APRA-regulated entities are generally aligning well to APRA's guidance, especially in the areas of governance and disclosure. Climate risk however, remains an emerging discipline compared to other traditional risk areas, with only a small portion of survey respondents indicating that they have fully embedded climate risk across their risk management framework.[13]

Data

While there is a myriad of private-sector climate data initiatives, CSIRO is developing a Climate Intelligence Platform in collaboration with Microsoft and Australian SMEs. The platform aims to support creation of a climate intelligence marketplace. CSIRO is initially focusing on the financial services sector. It is anticipated that the platform will enable businesses to access resources to conduct end-to-end climate risk and vulnerability assessments.[14] Aon is involved in developing a pilot for this initiative.

Financial system climate-related regulation: Japan

Japan is systematically integrating sustainable finance considerations into finance system regulation and supervisory activities.

Japan's Grand Design and Action Plan is seeking to establish an overall national framework, with Japan's Financial Services Agency implementing key regulations and initiatives that impact on financial climate product and markets.

Climate change is a key focus of the plan, with a commitment to invest 150 trillion yen over the next ten years towards green transformation (GX) through public-private sector collaboration. The Japanese Government will produce a comprehensive 10-year roadmap for GX investment. The roadmap will include regulations, market design, government support, financial frameworks, and infrastructure development, and will include five new policy initiatives to provide certainty for investment and to maximise market trading.[15]

Risk management

In July 2022 Japan's Financial Services Agency (FSA) published its *Supervisory Guidance on Climate-related Risk Management and Client Engagement*.[16] The guidance, which is not binding, supports FSA dialogue with regulated entities. Like other jurisdictions, Japan's financial system regulators are also setting their expectations on greenwashing with the release of a statement on *Supervisory expectations for asset management firms providing ESG funds*.[17]

Data

In December 2022, Japan's Financial Services Agency (FSA) finalised a new code of conduct for ESG ratings and data providers.[18] The code outlines expectations for ESG evaluation and data providers operating in Japan. The Code's six principles cover:

- The quality of ESG ratings and data provided and the basic procedures that should be established for this purpose. (Principle 1)
- The professional human resources available to ensure the quality of the ratings and data provision services provided. (Principle 2)
- Establishing effective policies so that they can independently make decisions and appropriately address conflicts of interest. (Principle 3)

Principle 2 takes necessary measures to ensure personnel engaged in environmental, social, governance (ESG) evaluation and data would have professional knowledge and carry out their duties in good faith.

Financial system climate-related regulation: Hong Kong

Hong Kong is being integrated into China's financial regulatory system through the Guangdong-Hong Kong-Macao Greater Bay Area (GBA).

China is integrating sustainable finance into its financial regulatory system through the China Banking and Insurance Regulatory Commission (CBIRC). Hong Kong's financial system regulator, the Hong Kong Monetary Authority (HKMA), is integrating sustainable finance into its regulatory activities, impacting the development of climate-related products.

Green and Sustainable Finance Cross-Agency Steering Group (CASG), led by HKMA and the Securities and Futures Commission (SFC), was established in 2020, and is currently focused on climate-related disclosures and sustainability reporting, carbon market opportunities and the launch of Centre for Green and Sustainable Finance.

Standards

HKMA released a two-year plan to embed climate risks in banking supervision. The SFC and Hong Kong Exchange and Clearing Limited (HKEX) are actively evaluating plans to implement ISSB standards for Hong Kong listed companies. The HKEX has also issued an ESG Reporting Guide introducing new mandatory disclosure requirements with disclosure obligations for social KPIs and a 'comply or explain' provision effective from July 2020 for all listed companies.

HKEX is planning the next-step collaboration with various carbon exchanges and stakeholders across the carbon market ecosystem, which also echoes the regional climate focus in GBA – a 'United Carbon Market'.[19] The GBA Green Finance Alliance (GBA – GFA), currently chaired by Hong Kong, has established working groups focusing on a broad range of activities to integrate sustainable finance across the region, including:

- Applying common ground taxonomy and product alignment to GBA
- Decarbonising buildings in the GBA
- GBA deep decarbonisation roadmap
- Transition finance opportunity
- GBA green financing in supply chain
- GBA climate fund research
- GBA green finance standard mutual recognition

Data, skill and competency

The Centre for Green and Sustainable Finance (GSF) was launched by CASG to serve as an integrated platform for GSF-related data repository and market players' capacity-building.

The GSF data repository supports the financial sector in locating data sources for climate risk management and other GSF-related analysis and research. The repository contains various government data sources relevant to the assessment of physical risks in Hong Kong, including historical data on catastrophe damages, district level micro-climate conditions as well as geographic data and a co-ordinates transformation tool.

On the other hand, the GSF initiates multiple working schemes, including GSF Training Information Repository, GSF Internship Opportunities Repository, and Pilot Green and Sustainable Finance Capacity Building Support Scheme, to expand the talent pool and promote the professionality of market practitioners.

Financial system climate-related regulation: Singapore

Singapore's approach to climate-related financial regulation is being driven through the Monetary Authority of Singapore (MAS) which is the central bank and financial regulatory authority for Singapore.

MAS has established a Green Finance Steering Committee (GFSC), which acts as the key decision-making body for all green finance and sustainability initiatives, and coordinates MAS's green finance and sustainability efforts.

Standards

The Singapore Exchange (SGX) has issued new listing rules that require all SGX-listed entities to provide climate reporting on a 'comply-or-explain' basis from 2022. Climate reporting will be mandated in phases. From 1 January 2023, climate reporting is mandatory for issuers in the financial industry, agriculture industry, food and forest products industry and energy industry. From 1 January 2024 reporting is mandatory for the materials and buildings industries and the transport industry.[20]

Data

To support disclosure, MAS and SGX have jointly launched a digital disclosure portal, ESGenome, for companies to report ESG data in a structured and efficient manner.[21]

MAS's focus on developing an ESG disclosure portal is one element of a strategy focused on data under the banner Project Greenprint[22] that also includes the establishment of a Data Orchestrator, ESG Registry and Greenprint Marketplace.

Skills and competency

In February 2022, MAS and the Institute of Banking and Finance Singapore (IBF) launched the Sustainable Finance Technical Skills and Competencies (TSCs) under the Skills Framework for Financial Services. This initiative aims to provide for the robust, common level of sustainable finance proficiency, knowledge and abilities needed for individuals to perform various roles in sustainable finance. The SF TSCs cover a range of thematic and functional knowledge topics:[23]

Preparing for climate risks and opportunities

Climate change is driving the largest capital reallocation in history. As we navigate the path to a more comprehensive climate-related regulatory environment in APAC, this inevitably creates new forms of scrutiny, elevated challenges, as well as uncharted opportunities for companies to adapt and innovate.

As your organisation looks to address the risks and impacts of climate change holistically, Aon is here to support your journey towards a resilient and sustainable future.

Talk to our climate specialists.

> "
> The fundamental value of (re)insurance has long been to enable financial stability and support growth at times of change. It is therefore also vital for the insurance industry to keep up with innovation on measuring, advising, and addressing the risks and opportunities along the transition journey.
>
> **Rebecca Lin**
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> Analytics Operations, Asia Pacific
> Aon Reinsurance Solutions

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About

Aon plc (NYSE: AON) exists to shape decisions for the better — to protect and enrich the lives of people around the world. Our colleagues provide our clients in over 120 countries and sovereignties with advice and solutions that give them the clarity and confidence to make better decisions to protect and grow their business.

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