



Aurexia

ASIA PACIFIC REGULATORY WATCH

**Singapore-Asia Taxonomy
for Sustainable Finance**

**Transition Planning Guidelines
for Asset Managers in Singapore**

**Regtech Corner
QuantCube Technology**

Foreword

We are delighted to publish the latest issue of Aurexia's Asia Pacific Regulatory Watch, our quarterly publication on regulatory developments and their impact on banks, asset and wealth managers, insurers and the wider financial services industry in the region.

In this RegWatch APAC issue, we are discussing the following topics:

Singapore-Asia Taxonomy for Sustainable Finance (final paper)

On the 3rd December 2023, MAS published the finalized first version of the Singapore-Asia Taxonomy, the world's first multi-sector transition taxonomy. This version focuses on the first of five environmental objectives, climate change mitigation.

MAS Transition Planning Guidelines for Asset Managers (consultation)

In October 2023, the MAS released a Consultation Paper outlining proposed guidelines for transition planning for asset managers. It proposes requirements and supervisory expectations for fund and REIT managers' efforts to align with both Singapore's and global net zero targets.

Regtech Corner – QuantCube Technology

For this issue's Regtech Corner, we have interviewed Thanh-Long Huynh, CEO & Co-Founder of QuantCube, a French Fintech company that provides financial institutions with actionable insights through its Macroeconomic Intelligence platform.

We wish our valued clients, readers, and team members happy holidays, safe travels and a healthy, happy and prosperous new year!



Sithi SIRIMANOTHAM
Partner & Group COO



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Director (Singapore)

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Final Singapore-Asia Taxonomy for Sustainable Finance published



After approximately four years of development, MAS released the final Singapore-Asia Taxonomy for Sustainable Finance on the 3 December 2023. The work on the Taxonomy started in November 2019 with the inauguration of the Green Finance Industry Taskforce (GFIT), convened by the MAS. A first consultation took place in January 2021 and was followed by three subsequent consultations, including MAS' proposed criteria on coal phase-out.

Refer to our [RegWatch from July 2023](#) for a comparison of taxonomy initiatives in Singapore, Hong Kong and the EU

Objectives and classification

The “world’s first multi-sector transition taxonomy” (MAS press release) is the only among the major taxonomies around the world with a dedicated transition focus.

Other taxonomies, such as the EU taxonomy, define criteria for “green” activities, implying that activities not matching those criteria are automatically deemed “non-eligible” or “non-green”. Singapore’s taxonomy creates a more nuanced picture by introducing a traffic light system that considers transitioning activities under the “amber” category.

Following previously published drafts and consultations, the Singapore taxonomy encompasses 5 environmental objectives:

1. Climate change mitigation
2. Climate change adaptation
3. Protect biodiversity
4. Promote resource resilience and circular economy
5. Pollution prevention and control

The current version sets out the details on activities and related screening criteria for the first objective, while those for the remaining four objectives will be released in a future version.


Technical screening criteria


The technical screening criteria define the metrics and thresholds for a “green” and “amber” classification for activities in each sector. While the scope of sectors has not changed compared to the most recent consultative paper, the final taxonomy version comprises 10 sets of technical screening criteria for 8 sectors – covering energy, transport, buildings, industry, information and communication technology, waste and water, agriculture, forestry and land use as well as carbon capture and storage.


In addition to these criteria, the taxonomy paper contains a recommendation for the adoption of “do no significant harm” assessments to make sure that an otherwise “green” or “amber” activities will not cause harm to any of the other environmental objective of the Taxonomy.




Classification of activities

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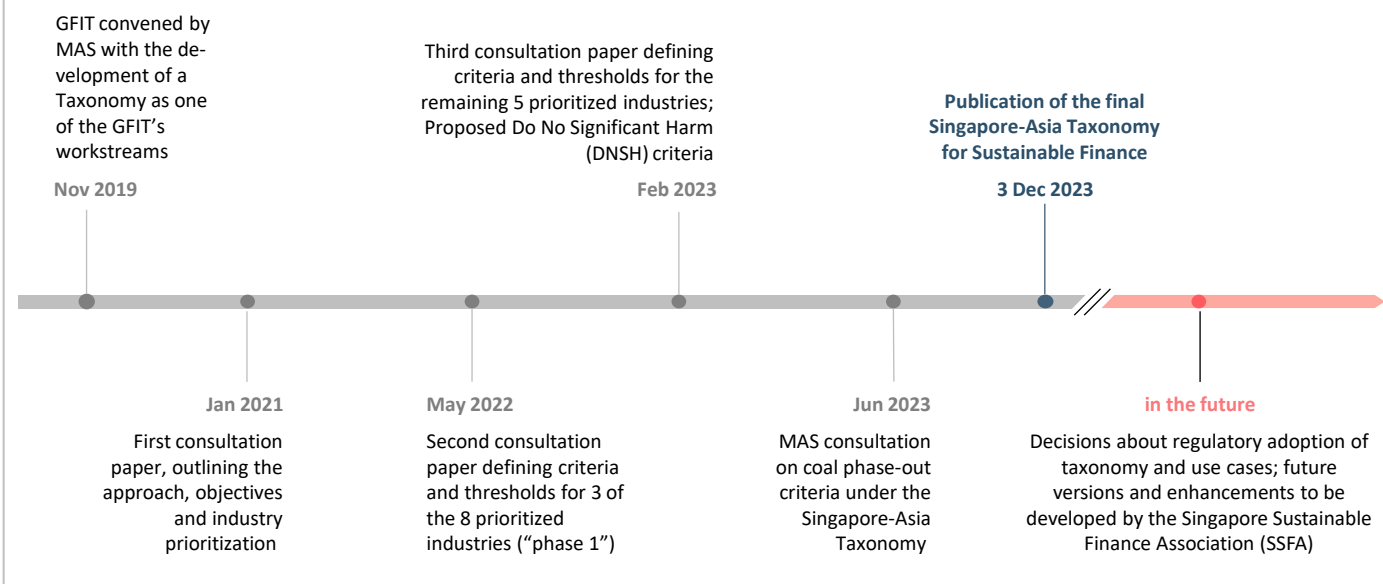
“Red” activities are not compatible with a net-zero trajectory and should either be phased out or subjected to emission reductions to align with the transition pathway.
- 

“Amber” activities do not meet the criteria for being “green” but support a transition within a specified timeframe or facilitate significant emission reductions in the short term; and
- 

“Green” activities contribute substantially to climate change mitigation – their emissions are either near zero or aligned with the 1.5°C pathway;
- 

Hybrid approach to an early and managed coal phase-out (*Appendix P of the taxonomy paper*)

Development timeline of the Singapore Taxonomy



Application

While the aim of the Taxonomy is to eventually be applicable on a local as well as a regional level, the document points out that the current version is solely based on activities and criteria for Singapore. However, this coincides with a focus on regional and international interoperability of the Taxonomy which helps improve the compatibility of taxonomy regulations and criteria in the region and globally (to some extent).

MAS is also involved in the development of the regional ASEAN Taxonomy for Sustainable Finance as well as other multinational and global Sustainable Finance initiatives.

The document emphasizes that the Taxonomy is currently neither mandatory nor embedded or referenced in any regulation. However, the paper illustrates its potential application in the context of green and transition bond classifications and hints at future work on:

- the taxonomy's mandatory or voluntary application,
- its use as a reference in disclosure requirements,
- its use as a reference in debt financing (loans and bonds), and
- related reporting and compliance requirements.

Target users

The authors also identified a set of target users of the taxonomy:

It includes financial institutions as the primary users in the area of securities, private debt and equity as well as investment products.

The paper also lists companies, industry regulators, academic institutions and policymakers as secondary users of the taxonomy.



Conclusion

The finalization of the Singapore-Asia Taxonomy and its screening criteria for the environmental objective of climate change mitigation is a milestone for Sustainable Finance in Singapore. It is also pioneering the comprehensive inclusion of transition activities in a Green Taxonomy.

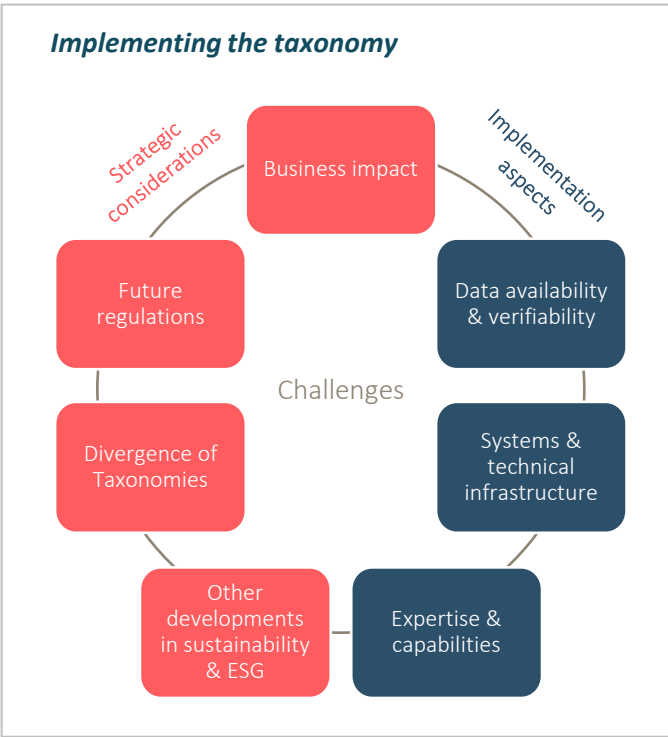
While its regulatory adoption and its future referencing in other regulations are not finalized and subject to further work by the Singapore Sustainable Finance Association (SSFA), a future voluntary or mandatory application for the classification of financial instruments as well as for disclosure and reporting purposes seem likely.

In the EU, such use cases have been implemented since the Green Taxonomy was first adopted in 2020. They include, for instance, corporate disclosure (CSDR), financial product disclosure (SFDR), banking regulation (Pillar 3 requirements), green bonds (EU green bond standards) and other regulations, directives and industry standards.

Refer to our RegWatch from July 2023 for a comparison of taxonomy initiatives in Singapore, Hong Kong and the EU and an in-depth discussion of implementation aspects for globally active institutions.

Expected impact on banks and asset managers

Banks and asset managers in the region should familiarize themselves with the Singapore-Asia Taxonomy criteria, develop and understanding of the strategic and operational impact of a potential application of the Taxonomy, and identify potential challenges and synergies from applying taxonomies that are divergent across different jurisdictions (refer to our RegWatch from July 2023).



Transition planning guidelines for asset managers – consultation paper



In October 2023, the Monetary Authority of Singapore (MAS) published a Consultation Paper on Proposed Guidelines on Transition Planning for Asset Managers. The paper specifies MAS' expectations for fund and REIT managers' planning towards alignment with the country's and global net zero targets. Transition planning for banks and insurers is subject to a parallel consultation on similar guidelines.

The consultation period ends on the 18th of December. For its implementation, MAS proposes a transition period of 12 month from the time the finalized guidelines are published. Subsidiaries of groups headquartered outside Singapore may choose to follow their group policies on transition planning; however, they will need to ensure compliance with the expectations of the local transition planning guidelines.

Asset managers' role in the net zero transition

The guidelines' objective is to encourage and guide asset managers to manage the transition of their portfolio, address physical and transition risks and enhance their operating model in line with evolving methodologies, data availability and approaches for climate and nature-related risk. The guidelines emphasize engagement and stewardship in relation to investee companies.

This objective follows the Singapore Green Plan which aims to achieve net zero emissions by 2050, and it echoes the spirit of other MAS guidelines, statements and publications, such as the environmental risk

management guidelines. For its own portfolio, the MAS announced earlier this year the reallocation of 2% of the portfolio value, amounting to over S\$8 billion, to a climate transition program. This implied shifting investment towards low-carbon leaders in their respective industries, rather than exiting carbon-intensive sectors entirely.

Initiatives for the involvement of the financial industry in supporting the broader economy's transition towards net zero have also been taken on a global level as well as in other jurisdictions.

International industry groups such as the Net Zero Asset Management Alliance or signatories of the Principles for Responsible Investing (PRI), for instance, have been calling on asset managers to consider climate change, leveraging on the Task Force on Climate-Related Financial Disclosure (TCFD) recommendations.

In Europe, regulatory, prudential and supervisory requirements urge asset managers and the wider financial industry to consider climate risk and facilitate the economy's transition. This is reflected in regulations such as the Green Taxonomy and the Sustainable Finance Disclosure Regulation, among others.

In France, the decree under the article 29 of the French environmental and climate law requires asset managers to disclose qualitative and quantitative elements on the entity and portfolio targets toward net zero and the inclusion of biodiversity.

¹Transition plan for asset managers is defined by the MAS in the proposed guidelines as 'the internal strategic planning and risk management processes undertaken to prepare for both risks and potential changes in business models associated with the transition.'



Hong Kong's Securities and Future Commission (SFC) also released requirements for fund managers on climate-related risks which became effective in August and November 2022 (refer to our [Q2 2022 Regulatory Watch APAC](#)).

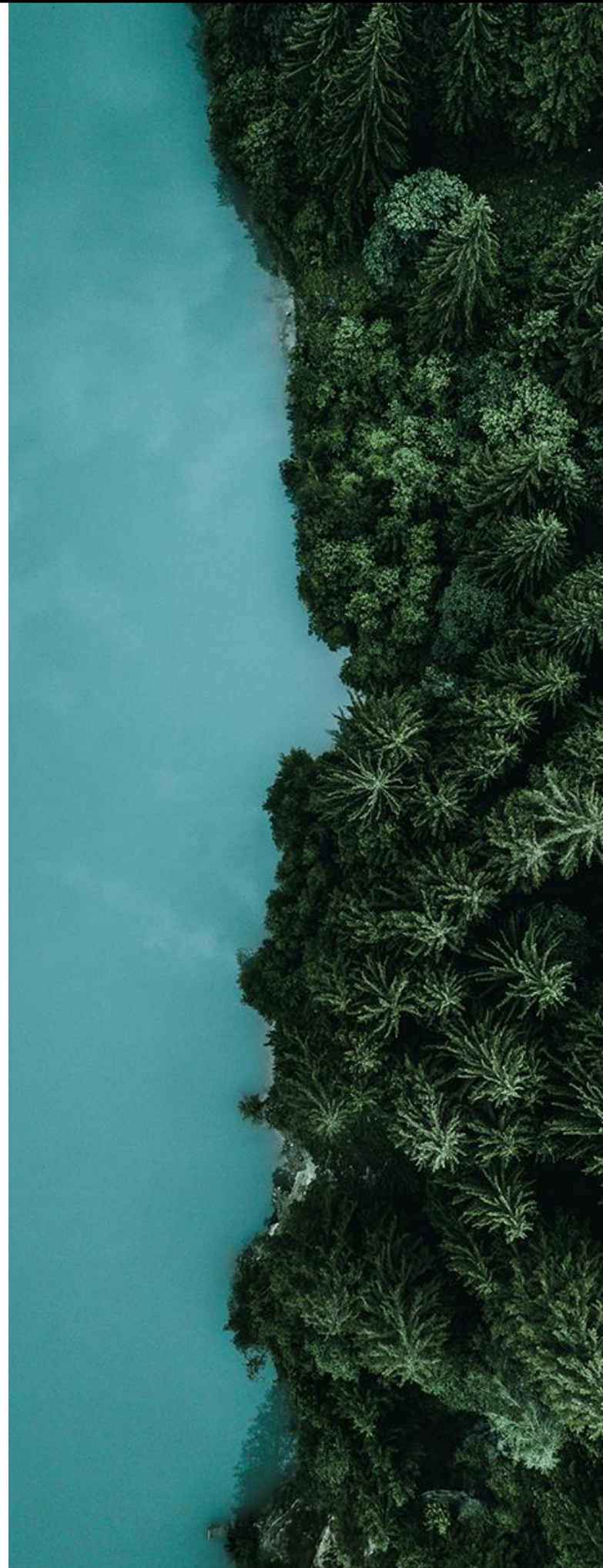
Most financial institutions, including asset management companies, inherit significant shares of their total carbon footprint from their investment portfolios, typically categorized as scope 3 emissions under Category 15 of the [GHG protocol standards](#). They tend to exceed the emissions from asset managers' own operations significantly.

Asset managers and their investment portfolios are therefore exposed to investee companies' environmental risks and their transition strategies. Whether they aim at risk mitigation or transition goals, asset managers can play an important role in shaping the behaviour of investee companies and in steering capital into green and transition-related activities. This should be reflected in their transition planning and risk management processes.

Overview of MAS' expectations

While the proposed guidelines are subject to the ongoing consultation and subsequent finalization, several key themes can be identified that are consistent with other publications and statements in the context of climate and nature risk as well as environmental risk management:

- ❖ Integration of climate risk management, transition planning and a broader approach to environmental risk in asset managers' governance, strategy, portfolio management and engagement.
- ❖ Stepped-up engagement and enhanced stewardship activity on investee companies' transition, rather than divesting or reducing the funding needed for an enterprise's transition.
- ❖ Moving from a climate-focused physical and transition risk management to considering loss of nature capital and biodiversity risks as well as environmental risks that may reach beyond typical short-, medium- and long-term investment time horizons.



KEY REQUIREMENTS

Overarching aspects

- Multi-year view on sustainability in investment portfolios and business model
- A broader nature-risk view, complementing the climate risk focus
- Subjected to a risk-proportionate supervision
- Supporting investee companies with their transition as a priority to divesting and withdrawing funds required for their transition

Governance and strategy

- Active involvement of senior management and board in the transition strategy and planning
- Set up of a governance and processes for climate risk-related decisions and communication
- Senior management to ensure that the approach to climate risk and transition is regularly reviewed and updated to reflect new developments and methodologies
- Internal communications and right “tone from the top”

Portfolio management

- Short- to long-term targets and monitoring of climate risk and emissions of a portfolio with an approach to managing residual risks
- Sector-specific and risk-sensitive approach to managing climate risk of investee companies
- Forward-looking risk assessment, including scenario analysis
- Defining and documenting transition-related targets and metrics
- Climate and nature data strategy and management, prioritizing the collection of climate risk and other environmental risk data directly from investee companies directly, combined with a structured approach to determining and managing proxy data where necessary

Engagement and stewardship

- Engagement with investee companies and support with their transition strategy and implementation as well as their climate and nature risk management
- Engagement and stewardship plan with appropriate engagement approaches
- Tools may include direct engagement, proxy voting with climate risk included in corresponding internal policies and guidelines, shareholder resolutions, as well as participation in industry initiatives and collective engagement
- Processes for a risk-sensitive prioritization of investee companies for engagement activities and monitoring of investee companies lacking sufficient transition and risk management
- Escalation framework if engagement fails, including, for instance, voting behavior and divestment as a last resort

Disclosure

- Disclosure on an asset manager’s climate objective and response to and management of climate risk in portfolios, including sector-specific approaches
- For asset manager’s consideration: Product-level disclosure on a product’s climate-related characteristics
- References to international reporting standards and frameworks, naming explicitly the International Sustainability Standards Board ([ISSB](#)) as well as respective Sustainable Finance Taxonomies in Singapore, ASEAN and the EU

- ❖ Enhanced disclosure on asset managers' approaches to managing transition and climate risk in line with globally accepted frameworks, as well as a corresponding product-level disclosure at asset managers' discretion.

General recommendations for asset managers

Asset managers, among other financial institutions, are key to fostering sustainability in financial and real economy activities. They monitor and assess market trends to grow clients' portfolios in value and, today more than ever, to participate in a sustainable economy by investing in low-emission and socially responsible companies.

To guide them in their sustainability journey, MAS, in its first section, advises asset managers to align with the *'evolving nature and understanding of climate change'* and develop a multi-year view for their portfolios and business models.

This may include a regular assessment and adaptation of strategic decisions such as short- and long-term decarbonisation targets.

Climate risk and carbon neutrality should however not be the only focus of asset managers as nature and climate are closely connected.

Nature-related risks, which encompasses loss of nature capital and biodiversity, should also be considered in asset managers' transition planning.

MAS encourages asset managers to prioritize supporting investee companies with their net zero transition over divestment.

They should encourage investee companies to establish a transition plan to reduce negative environmental impact and manage climate and nature-related risks in their business models.

The guidelines recommend asset managers adapt the portfolio transition plan as well as transition measures at portfolio or holding-level to the nature and the size of their risk exposure.

Governance and strategy

A solid transition plan cannot be developed and executed without a well-defined governance and a structured strategy. In line with the guidelines on environmental risk management for asset managers (ENRM) released in 2020, MAS calls for a strong involvement of senior management and board of directors in the transition planning process and strategic decision-making. MAS lays out guiding steps for senior management to ensure alignment of governance and strategy with climate and nature-related transition objectives:

- ❖ Set up governance processes for climate risk-related decisions (targets, risk management framework, approach, etc.) and communication (escalation across different units, alignment between internal plan and external communication) with consideration of potential dependencies and residual risks.
- ❖ Establish a right 'tone from the top' and identify key stakeholders and/or committees in charge of addressing climate-related risks in decision making, investment selection, portfolio construction and risk management.
- ❖ Review internal management system and operations (e.g. strengthening the operational teams, performance measurement, remuneration and incentive structures), including monitoring, reviewing and updating them on a regular basis to reflect new developments and evolving methodologies.



Portfolio management

In this section, MAS provides asset managers with expectations to assess, mitigate, and monitor climate-related risks, and identify related data, metrics and targets. Developing a sound approach for portfolio management relies mainly on:

- ❖ Defining short- to long-term targets for decarbonisation using science-based pathways. Targets should be set in consideration of materiality, sectors, and jurisdictional level. Additional metrics and methodologies should also be considered to manage potential residual risks.
- ❖ Developing risk capabilities to assess the impact of environmental risks (climate, loss of nature, biodiversity) on business strategies and portfolio risk profile. MAS expects asset managers to develop forward looking risk assessment tools such as climate scenarios analysis and stress tests to understand and quantify risks under different scenarios.
- ❖ Assessing investee companies according to their characteristics such as sectors or exposure to physical and transition risks. Climate-related risks targets identified on a portfolio level should include appropriate sector decarbonisation trajectories and risk-sensitive approaches to sector specificities. MAS encourages asset managers to develop climate risk modelling frameworks, leveraging on external reference scenarios, and distinguishing between different asset classes, sectors, and investment strategies.
- ❖ Documenting transition-related targets and metrics and including explanations on the approach taken, the data and proxies selected, and the mitigation actions taken. Documentation should be used by asset managers to keep stakeholders informed of any change or development and keep customer aware of the importance of climate change and climate risk management.

- ❖ Enhancing data collection, climate and nature data strategy and management. Asset managers should focus on data collection directly from investee companies. However, MAS acknowledges that the main challenge for nature and climate data is its limited availability and accuracy. The regulator expects emerging technologies to help improve ESG metrics and data. For now, it recommends balancing direct collection of data with the use of proxies where necessary. Asset managers should ensure periodical monitoring of data collection methodologies and implement a proper internal audit trail.

Engagement and stewardship

Engagement refers to the active dialogue between asset managers and investee companies. Stewardship includes engagement and voting and is based on the processes, monitoring and portfolio oversight activities. Engagement and stewardship can be key drivers for investee companies' transition to carbon neutrality. MAS sets out the following engagement and stewardship expectations for asset managers to address environment risks in their portfolios:

- ❖ Active engagement with investee companies. Asset managers should assist investee companies with their transition strategy to a low carbon future and its implementation. This will help them mitigate their exposure to climate-related risks and thus enhance the resilience of the investment portfolios.
- ❖ Structured processes and appropriate approaches aiming to prioritize companies with highest risk exposure and corresponding engagement and stewardship needs. Asset managers should identify the most vulnerable sectors or companies for engagement on their transition. MAS provides guidance for assessing an investee company's plan to mitigate climate-related risks, including time horizon, trajectories and business model viability.

- ❖ Dedicated toolkit development to facilitate asset management staff's engagement with investee companies. These tools may include direct/bilateral engagement, proxy voting, shareholders resolutions, participation in industry initiatives and collective engagement. To use these toolkits in the best way possible, staff should also be appropriately trained and equipped to engage with investee companies.
- ❖ Definition of an escalation framework and mitigation actions in case the engagement outcomes did not reach the original objectives. Asset managers should set a timeframe during which portfolio targets and engagement outcomes should become aligned. The escalation process may include several stages and tools of engagement and stewardship and encompass consequences, such as divestment as a last resort.

Disclosure

All the relevant internal information and work carried out regarding governance, material climate-related risk assessments, data collection methodologies, metrics, and targets reflected in the asset managers' transition plan – both on a portfolio and company level – should be disclosed in a clear, concise and transparent way to asset managers' customers, stakeholders and supervisory bodies. A report user should be able to understand how the disclosing asset manager envisages its transition, responds to nature-related risks and intends to mitigate them over short mid- and long-term period.

In the last section, MAS seeks more transparency from asset managers through the disclosure of relevant information from their transition planning. The main key takeaways and operational impacts are:

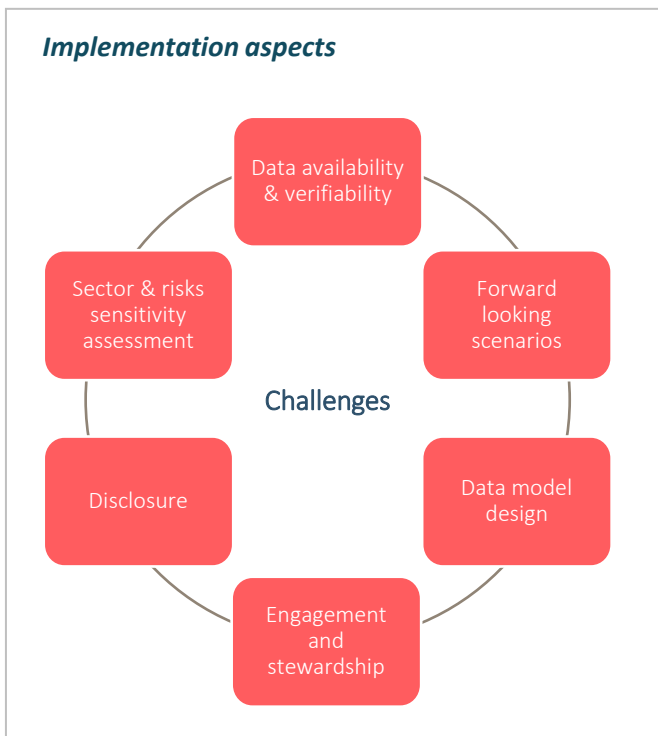
- ❖ Entity level disclosures. Asset Managers should clearly communicate their climate objectives, engagement strategies, their climate-related risk management strategies including sector-specific approaches, mitigation measures, and how the investing activities relate to their publicly committed climate objectives.
- ❖ Product level disclosure (at asset managers' discretion). Appropriate levels of climate-related considerations (strategy, approach, risks, etc.) and mitigation actions should be disclosed at product level.

While similar product-level disclosure has been mandated in other jurisdictions, such as the EU, MAS acknowledges the challenges of collecting and computing investee company-, sector-, and portfolio-related data and metrics, and suggests a best-effort approach for addressing the expected data availability challenges which avoids incurring undue cost.

The MAS guidelines specify in detail the format and communication channels where relevant information should be disclosed. However, it is made references to international standards and frameworks such as the International Sustainability Standards Board (ISSB) as well as respective Sustainable Finance Taxonomies in Singapore, ASEAN and the EU. This section also comes as a supplement to the [MAS circular on Disclosure and Reporting guidelines for retail ESG Funds](#) published in July 2022 and discussed in our [Q4 2022 Regulatory Watch](#).



Implementation challenges and recommended responses



In the consultation paper, MAS proposes a 12-month transition period after the guidelines’ finalization. MAS shares detailed examples of sound practices in the guidelines for asset managers to build their transition plan. However, asset managers will likely face a number of challenges when implementing the supervisory expectations:

- 1. Aim to align investee companies’ transition plans with a portfolio’s climate-related target through engagement and stewardship.**

Recommended actions: Review and strengthen procedures, policies and activities around proxy voting, global collaboration initiatives, direct exchange with investee company and improve escalation and mitigation frameworks and processes.

- 2. Methodological challenges and reliance on assumptions in defining forward-looking scenarios and simulating their impacts on sectors and investee companies.**

Recommended actions: Leveraging on science-based scenarios published by the Network for Greening the Financial System (NGFS) or the Task Force on Climate-related Financial Disclosures (TCFD), for instance, to compute the risk exposure,

identify transmission channels, and perform a comprehensive scenario analysis for each sector and each potential and current portfolio holding.

- 3. Development of an environmental data model, including climate risk and nature-related (relatively nascent) data points. This will potentially involve an approach to using data proxies, combined with a BAU process for the recurring data collection and continuous improvement.**

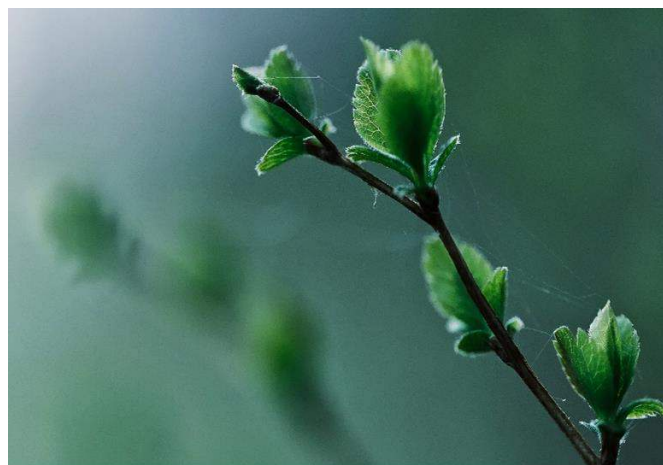
Recommended actions: Design policies and procedures on the collection of data and use of proxy data, leveraging existing data models and third-party databases (e.g. TNFD biodiversity database) and develop an ongoing monitoring and improvement of data coverage over time.

- 4. Environmental risk data availability and accuracy, with limited availability of generally accepted and independently verified methodologies to assess climate and nature-related risks.**

Recommended actions: Develop an iterative approach by engaging with investee companies, revert to third-party data and proxies, where unavoidable, and improving continuously.

- 5. Quantitative and qualitative climate risk-related information to be disclosed for the entity and (voluntarily) products.**

Recommended actions: Leverage existing standards and guidelines as well as international best practices and engage report users for ongoing feedback and improvement.





REGTECH CORNER



For this issue's Regtech corner, Aurexia interviewed Thanh-Long Huynh, CEO & Co-Founder of QuantCube, a Paris-based technology company that uses alternative data and AI to compute real-time economic indicators, thus helping financial institutions identify macroeconomic trends earlier, improve and expedite their forecasting.

Aurexia: What is the overarching vision of QuantCube Technology, and how does it guide your company's mission?

QuantCube: Our vision is to offer increasingly detailed real-time insights, leveraging AI and Big Data analytics. Through our suite of products, we strive to become the standard reference point for real-time macroeconomic, sectoral, and environmental intelligence. Committed to delivering timely, transparent, comprehensive, and actionable economic insights, we aim to assist users in financial institutions, corporations, and public bodies to achieve their financial performance and sustainability goals while effectively managing associated risks. We firmly believe our technology plays a pivotal role in enhancing the safety of the financial sector by providing real-time, unbiased, and accurate information, thereby reducing risk in portfolios and increasing transparency within the financial industry.

Could you share specific challenges or issues within the industry that QuantCube Technology aims to address?

Traditionally, well informed investors have heavily relied on official economic indicators from Central Banks and statistical institutions to inform their investment strategies. However, these indicators are released on a monthly or quarterly basis, with a publication lag, and may not reflect the current economic outlook and crucial turning points. This exposes investors to miss financial opportunities and to experience important drawdowns.

Our real time alternative data-based indicators aim at filling the gap by providing insights into the current state of the economy, allowing institutional investors to capture macro regime changes at the optimum time. In addition, in countries where little macro data is



About Thanh-Long Huynh,
CEO & Co-Founder of QuantCube

Following a career with leading banks and investment firms, Thanh-Long established QuantCube Technology, leveraging his significant expertise and experience in macroeconomic intelligence.

available, our indicators based on alternative data such as news and satellite images offer invaluable insights.

What sets QuantCube Technology apart from competitors in the industry? What is your unique value proposition?

QuantCube's key differentiating points and unique value proposition are:

- Comprehensive data lake: QuantCube analyses more than 15 billion data points gathered from across the globe. Clients benefit from the unique combination of diverse alternative data sources on a single platform.
- Proven and transparent methodology: QuantCube's macroeconomic indicators are highly correlated with official numbers, providing unique insights for the investment community. All models are built using a fundamental approach and based on fully explainable AI.
- Pioneer in alternative data analytics: As well as real-time data, QuantCube's data lake offers more than ten years of rich historical data, mostly collected live and not available elsewhere.
- Track record for consistent alpha: QuantCube implemented financial use cases for ten years with a proven record for its in-house, alternative data-driven investment strategies to deliver solid financial performances and consistent alpha.

How do you see QuantCube Technology evolving over the next 5 to 10 years and contributing to the industry?

We aim at becoming the standard reference in real-time economic intelligence.



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