

Challenges and opportunities for financial services



Contents

04

Climate change as a financial risk

10

Green conduct

12

Implications and conclusion

Quick read: Key trends and observations

As the financial impacts of climate change become clearer, financial services regulators and supervisors are focusing more attention on the breadth and depth of appropriate responses. In many ways, there is a clear **direction of travel**, underpinned by a number of **policy trends**. However, differences and questions remain.

This paper explores some of the key global regulatory themes of climate-related risk from both a prudential (Section I) and conduct (Section II) perspective, referencing broader sustainability (environmental, social and governance or ESG)¹ focus where relevant. We identify six key implications for financial institutions, with clear challenges, as well as opportunities (Section III). As this is a fast-moving agenda, with a flurry of activity expected in the lead into the 26th United Nations Climate Change conference (COP 26), we will be revisiting this theme again later in 2021.



Regulatory expectations and requirements - direction of travel

- Across the board, there is a drive for more and better disclosures regarding climate risk exposures, risk management and ESG products – with an increasing shift to mandatory requirements.
- Prudential authorities, as they move from conviction to action in relation to climate-related financial risks (Section I), are:
 - Setting supervisory expectations regarding the governance, risk management and disclosure of climate-related and environmental (and in some cases broader ESG) risk, with expectations now "hardening" in a number of jurisdictions (such as in the UK and European Union (EU) and a move in this direction in Hong Kong and Singapore).
 - 2. Undertaking the first "bottom-up" climate-risk stress tests, albeit these remain "exploratory" for now.
 - 3. Reviewing capital as a mitigating measure, in particular by incorporating climate (and broader ESG)

- risk into the supervisory review and evaluation process (Pillar 2); also changes to Pillar I requirements remain under assessment.
- Financial authorities share concerns around "green" conduct, but differ in their approaches (Section II). Within that, policymakers and regulators are:
 - Defining what "green" is; the EU taxonomy is a reference point, but it remains unclear to what extent it will be an inspiration for taxonomies in other jurisdictions or even serve as a basis for a global standard.
 - 2. Sharpening focus on sustainability-related disclosures and marketing to customers (versus actual practices), whether through new requirements or supervision.
 - Clarifying whether, and to what extent, climate-related or other ESG factors (and preferences) should be taken into account when investing on behalf of, advising, or offering products to clients; some differences prevail.

Underpinned by:

Global regulatory response - policy trends

- Overall, there is huge momentum in driving a regulatory response, driven in part by ever-increasing conviction regarding climate change and sustainability risks, political commitment, public policy action, and investor focus.
- Global coordination on a voluntary basis will continue to play an important role (notably, through the Network for Greening the Financial System (NGFS)).
- International standard-setting bodies are ramping up or stepping into the frame. Basel Committee on Banking Supervision (BCBS), International Organization of Securities Commissions (IOSCO), International Association of Insurance Supervisors (IAIS), and International Accounting Standards Board (IASB), for example, have established committees and/or task forces with agendas in place and initiatives underway.
- Fragmentation and differences in approach will be an ongoing feature, globally and within Europe.

- Collaboration with industry, academia and specialists will continue to inform policy, as methodologies and data remain at an early stage, but are developing rapidly.
- Supervisors and regulators seek to maintain flexibility to account for ongoing developments, while setting guidance and requirements.
- What is voluntary or non-binding today may be mandatory tomorrow. This evolution is evident, for example, with the Task Force for Climate- Related Disclosures (TCFD) framework.
- Attention is on Environment first, climate in particular, with Social factors moving into sharper focus as well as renewed or evolving consideration of Governance, driven, in part, by reflections on the COVID-19 pandemic.
- ► Europe continues to be the leader, together with parts of Asia-Pacific. Political commitment in other parts of the world (notably the US, given the new administration taking office) may change the pace and landscape.

¹We use ESG and sustainability interchangeably throughout this paper, while acknowledging that definitions vary. Sometimes environmental and social (E and S) are considered as part of sustainability, whereas governance (G) is a standalone topic.

Climate change as a financial risk

Moving from conviction to action

Central banks and financial regulators now widely acknowledge that climate change is a source of financial stability risk – via physical and transition risks (see Climate change as a financial risk and the TCFD) – with financial institutions already reporting significant losses as a result. Pricing of climate-related risk is still a nascent field and, with its unique and longer-term characteristics, is a challenge across the board for corporates, financial institutions and financial markets. Financial authorities recognize that, overall, assets continue to be mispriced;² and that there is a need for new data, methodologies and disclosures to better understand, size and manage these risks.

Prudential authorities, for their part, are increasingly focused on the necessity for financial institutions to expedite changes in governance, risk management and disclosure to ensure climate-related risks are properly accounted for and built into decision-making processes, including into capital assessment and allocation. We discuss below how some authorities are taking action by (1) setting expectations; (2) undertaking climate stress tests; and (3) assessing capital requirements as a mitigating measure.

Climate change as a financial risk and the TCFD

Since the publication of the TCFD* report in 2017, the common understanding of climate-related financial risk relies on splitting the risk into two main categories or transmission channels:³

- Physical risks: the possibility that the economic costs and financial losses from the increasing severity and frequency of extreme climate- change- related weather events (acute hazards), as well as other more gradual changes in climate (chronic shifts), might erode the value of financial assets, and/or increase liabilities.
- ► Transition risks: relate to the process of adjustment toward a low- carbon economy, including shifts in policies designed to mitigate and adapt to climate change (e.g., to regulatory frameworks, incentive structures, carbon pricing), technological progress or changes in market sentiment and preferences, which would affect the value of financial assets and liabilities.

These can result in **liability risks**, which arise when parties are held liable for losses related to environmental damage; these are particularly relevant for insurers.

*Task Force for Climate Related Disclosures: Catalyzed by the G20 and Paris COP Agreement, the private sector led the development of a framework for climate financial reporting. The TCFD has since become the go-to reference for climate-risk related disclosure.

In this report we have purposely focused on financial services regulation and supervision, but it is important to note that other bodies in the ecosystem, such as those concerned with financial reporting and functioning of capital markets more generally, are also engaged with the need to properly account for, and report on, climate-related risk, as well as broader sustainability risks. These include initiatives by the IASB, International Financial Reporting Standards (IFRS) Foundation, and IOSCO, some in combination with existing market-led standard setters.⁴ We also note a trend toward jurisdictions mandating disclosure in accordance with TCFD, with the New Zealand and UK governments the first to act in this regard.

² For a perspective on climate risk pricing in financial markets, see, for example, Hauser, A. (2020), From hot air to cold hard facts: how financial markets are finally getting to grips on how to price climate risk and return – and what needs to happen next, speech at the Markets Investment Association, London, 16 October 2020.

³ For further discussion on these risk categories or transmission channels, see for example, NGFS publications.

⁴There are various market-led ESG reporting standards, including, for example, GRI, IIRC, and SASB.

1. Supervisors are setting expectations

Since the NGFS (see The Network for Greening the Financial System) published its recommendations in April 2019, we have seen an acceleration of supervisors issuing guidance and setting expectations under existing prudential rules around the governance and prudent management of climate-related risks. Scope varies with respect to whether they address banks only or are cross-sector; and whether they incorporate other sustainability or ESG risks in addition to climate risk. Within that there is no common definition of ESG factors or risks, as well as differences in views of how to prioritize and treat the three pillars of ESG, including, whether in an integrated way or separately. That said, the immediate focus for most supervisors is on "E" and climate in particular.

The Prudential Regulation Authority (PRA) in the UK was among the earliest to set out how it expects banks and insurers to strategically manage financial risks from climate change, iv and has since clarified that firms need to have fully embedded their strategic approaches by the end of 2021. Other supervisory authorities that have set, or are in the process of setting, expectations include: in Europe the ECB, vi EBA, 5 BaFin in Germany, vii FMA in Austria, viii and ACPR in France; ix as well as MAS, X HKMA, Xi and the Hong Kong SFC^{xii} in Asia. Another group of supervisors, such as APRA in Australia, have indicated that they intend to publish guidance in the near future.xiii This list is by no means exhaustive. US authorities have generally been slower to acknowledge climate change in regulatory dialogue, let alone issue guidance (although there have been specific state-led sectoral initiatives⁶). That said, recent pronouncements, notably from the Federal Reserve and the New York State Department of Financial Services, and the Commodity Futures Trading Commission's (CFTC's) 53 recommendations, xiv indicate the focus is sharpening.7 We expect momentum to continue to build, with the new administration taking office.

In line with existing frameworks, supervisory guidance typically covers governance, strategy, risk management and disclosure, while emphasizing scenario analysis as an essential tool. Climate-related risk is generally seen as a cross-cutting risk that manifests itself in existing

The Network for Greening the Financial System (NGFS)

In the absence of a global policy framework, the NGFS, founded in 2017 on a voluntary basis by a group of central banks and supervisors, has come closest to be the most prominent and active internationally-coordinated effort in providing coherent, methodological and systematic, albeit non-binding, guidance for both supervisors and financial institutions regarding their risk management practices, as well as how they approach sustainable investment. At the time of writing, the NGFS consists of 83 members and 13 observers, with membership spanning all continents and almost all major regulators. The US Federal Reserve Board formally joined the NGFS as a member in December 2020.

prudential categories of underwriting, credit, market, operational and liquidity risk. Operational risk in this context includes not only the impact on business continuity, but also the extent to which an institutions activities or exposures could increase reputational and/or liability risks. The expectation is for firms to fully integrate and embed climate risk considerations into processes over time, in a way that takes account of the unique nature of climate change and its impact on financial risk.

Some of the key issues supervisors are raising, or emphasizing, as part of their feedback on current practices are included in the next page (see Supervisors emphasise areas of improvement). Overall, authorities note significant gaps in capabilities, data and tools, but recognize the immense challenges financial institutions are confronted with, particularly around quantification and scenario analysis. Furthermore, there is a general recognition that there is a greater degree of adoption or progress among the larger and more international institutions, as evidenced by the extent and quality of public reporting capabilities. Supervisors have also been keen to share observed practices, as well as encourage firms to adopt, in a proportionate manner,

⁵ EBA expectations continue to be set out as part of actions under the EBA Action Plan on Sustainable Finance (December 2019), including a Discussion paper on management and supervision of ESG risks for credit institutions and investment firms (November 2020); furthermore it has already incorporated climate change and ESG factors into other EBA guidance, notably Guidelines on loan origination and monitoring (applicable June 2021).

⁶ For example, California's Insurance Commissioner's climate risk scenario analysis of insurers' investment portfolios (see CFTC report, 2020, *Managing Climate Risk in the U.S. Financial System*).

⁷ The **Federal Reserve**, in its most recent *Financial Stability Report* (November 2020), addresses climate change as a **near-term** financial stability risk, references ongoing research and states that "Federal Reserve supervisors expect banks to have systems in place that appropriately identify, measure, control, and monitor all of their material risks, which for many banks are likely to extend to climate risks;" the **NY State Department of Financial Services**, a member of the NGFS since late 2019, has issued letters to regulated firms (*Insurance Circular Letter No. 15; CEO letter to NY State Financial Institutions*) incorporating high level expectations, stating that firms should "start" integrating climate change into governance, risk processes, and business strategies, with further guidance and supervisory focus planned in 2021; **the U.S. CFTC's Climate Risk Market Risk subcommittee** issued a report *Managing Climate Risk in the U.S. Financial System*, which includes 53 recommendations to mitigate the climate risks to the financial markets (September, 2020).

envisaged or leading practices either within guidance⁸ or through separately sponsored initiatives.⁹ Most of the expectations now serve as **a basis for supervisory dialogue**,

but are expected to evolve and harden as methodologies and practices mature, and as supervisors progress with integrating expectations into their supervisory processes.

Supervisors emphasize areas of improvement,* including:

Governance and strategy

- Board-level attention is considered critical, but this must be equipped with the right knowledge and information.
- Explicit allocation of responsibility to a senior executive, a board member or board committee is expected.¹⁰
- The differentiation between climate change as a financial risk, a reputational risk, and a Corporate Social Responsibility (CSR) issue needs to be clear and understood.
- Climate (and broader ESG) factors need to be specifically incorporated into the overall internal governance framework, including establishing a risk culture and the setting of risk appetite.
- ► There should be (greater) clarity around a strategic response to climate-related financial risk informed by scenario analysis/stress tests (as well as to other ESG risks). A longer-term view than the typical business planning horizon (i.e., three to five years) is expected, while short- and medium-term risks, in particular stemming from the transition, also need to be considered.
- Business model(s) need to be assessed, evaluated and reshaped to reflect the impact of climate change and broader ESG factors. The EBA references, as an example, setting a strategic ambition or target based on the Paris Agreement and then strategically aligning portfolios toward that target.
- Institutions need to (re)align remuneration policies with long- term risk management and objectives in the context of climate risk (and other ESG) considerations.

Risk management and disclosure

- Firms need to embed climate-related and environmental risks into the existing risk management framework, as drivers of established risk categories.¹¹
- Supervisors are increasingly pushing for quantification of exposures and development of risk metrics that indicate potential future losses. Third-party sources, proxies and assumptions are expected to be used while data and tools catch-up.
- Several supervisors have explicitly stated that they expect firms to integrate climate change risk into the capital assessment process (i.e., Internal Capital Adequacy Assessment Process (ICAAP); or Own Risk and Solvency Assessment (ORSA)), including quantification of material risks by means of scenario analysis and stress testing. At this point, supervisors are not yet being prescriptive in terms of choice and design of the scenarios, apart from broad qualitative parameters, such as the need for a range of scenarios, longer time horizons, and the need to consider both physical and transition risk.
- ► Climate change risk should be factored in at the **counterparty level** starting with customer onboarding or **exposure origination**. Some authorities, notably MAS, have explicitly called out the expectation that firms **engage with** customers with higher climate or environmental risk exposures to improve their risk profile and support their transition.* Others, such as the HKMA* and SFC,* have also flagged this but as a suggested measure without making it mandatory.
- ► Supervisors continue to identify sparse and heterogenous disclosures, despite some improvements. There is recognition that internal capabilities (e.g., in terms of risk management) are limiting capacity or appetite for detailed disclosures and that these need to develop materially. That said, requirements are being laid down in some jurisdictions, notably Pillar III ESG disclosures in the EU via the EBA (once finalized, these will be applicable in June 2022).

* Note: This list is **not exhaustive** and **will not apply equally in every jurisdiction**. Rather, it draws out some of the key themes from jurisdictions that have been progressive in setting expectations, as outlined earlier in this section.

⁸ For example ECB (2020), DnB (2020), PRA (2020) and HKMA (2020). Also EBA (2020), in its Discussion paper on management and supervision of ESG risks for credit institutions and investment firms, includes an overview of various metrics and methods for the assessment of ESG in the market, as well as an evaluation of these in the context of loan origination and portfolio alignment.

⁹ Notably the Climate Financial Risk Forum in the UK and the Sustainable Finance Forum in the Netherlands.

 $^{^{10}}$ In the UK, this must be allocated to a senior manager under the UK Senior Managers and Certification Regime (SMCR).

¹¹ The Climate Change Risk Forum Guide 2020 notes that good practice is to treat climate change risk as a transverse or cross-cutting risk rather than a standalone risk. Where it is treated as a standalone risk type, it should be mapped to prudential risk categories.



2. Bottom-up climate risk stress tests are underway and here to stay

Increasingly, financial authorities are conducting scenariobased climate-related risk analysis to gauge the magnitude of risks climate change poses to the financial system and the economy. So far, these exercises have primarily taken the form of top-down assessments leveraging supervisory statistics and datasets, but these vary largely in terms of the type of risks in focus (only physical risk, transition risk or both combined), as well as the level of granularity these risks are assessed against.¹²

Two exercises, namely the current Banque de France ACPR climate pilot exercise *viii* (results expected in the first half of 2021) and Bank of England 2021 Biennial Exploratory Scenario on the financial risks from climate change (CBES) *IX,XX (delayed until June 2021 due to COVID-19), call for particular attention. These are being closely watched by other regulatory authorities, financial institutions and investors as early examples of supervisors conducting detailed bottom-up micro assessments of banks and insurers (climate risk stress tests). Compared to "conventional" stress tests, these exercises include a longer

time horizon (30 years), broader geographic coverage of exposures, and a sectoral/counter-party level modeling approach. For now, they remain exploratory, and both the ACPR and Bank of England emphasize that they will not be used to assess the solvency of institutions nor as a basis to impose capital or other regulatory requirements. The objective instead is to understand the current vulnerabilities of financial firms to climate-related risks, examine how firms expect to adjust their business models, and the collective impact of these responses on the broader economy. Another key purpose is to raise greater awareness and act as a catalyst to the development of capabilities and methodologies, specifically around scenario analysis, and to drive the integration of climate risks into firms' governance and risk practices.

Other supervisors are undertaking, or have announced plans to carry out, bottom-up assessments. In Europe, the EBA, xxi which has a mandate to develop a dedicated climate stress test, has started with a more limited "sensitivity analysis" in 2020. ECB supervisory stress tests in 2022 will focus on climate risk xxii (details to be announced in 2021), and EIOPA is in the midst of a series of discussions with stakeholders having recently concluded consultation on its second paper

¹² See detailed discussion in NGFS (2020), Guide for Supervisors – Integrating climate-related and environmental risks into prudential supervision and Guide to climate scenario analysis for central banks and supervisors.

¹³ Sectoral level in the case of ACPR pilot; BoE 2021 BES will require further granular counter-party level vulnerability assessment.

on methodological principles for stress tests.xxiii In Asia-Pacific, APRAxxiv and HKMAxxv plan to carry out exercises in 2021and 2022. Others (e.g., MASxxvi) intend to embed climate-related risks in thematic scenarios when running future standard stress tests. It remains to be seen to what extent the experiences and outcomes of the ACPR pilot and CBES can be leveraged, and indeed how divergent the subsequent (ultimate) climate risk stress tests will emerge in their approaches and methodologies. What can be expected though, is that climate stress tests will be a process where both supervisors and firms learn in steps about the most suitable methodologies and data to use. There will also be a natural push-through to the wider economy as firms demand better data and climate-risk assessment from their own customers.

3. Mitigating climate-related risk with capital requirements

Supervisory process and capital add-ons (Pillar 2)

As supervisors clarify expectations, this naturally raises the question of how likely or how soon firms should anticipate additional capital requirements as a result of the supervisory review process or additional capital guidance as result of supervisory stress testing. Most supervisors consider themselves still at a too early stage, 14 but are of the opinion that the current Pillar 2 framework already has flexibility to address climate-related risks and, as we have seen, emphasize the need for firms to start quantifying material exposures as part of their own ICAAP or ORSA.

Beyond capital assessment, climate-related risks are also starting to be considered by supervisors in the other assessment blocs (business model, governance and risk management, risks to liquidity and funding) and therefore could, in theory, already result in an overall Supervisory Review (and Evaluation) Process (SREP/SRP) assessment which justifies a capital add-on. In the EU, notably, the EBA has now set out its proposed approach to ESG in supervision addressing each of the blocs.¹⁵ The ECB has stated that it will reflect climate risk in SREP in 2022,¹⁶ and the European

Insurance and Occupational Pensions Authority (EIOPA) is consulting on the supervision of the use of climate change scenarios in the ORSA process.

Dedicated prudential treatment – changes to minimum capital requirements (Pillar 1)

Whether, and to what extent, the current framework for minimum capital requirements (Pillar 1) needs to be modified to take account of climate-related financial risks is an area still very much under debate and development. The distinctive characteristics of climate risk present multiple challenges for its potential integration into Pillar 1. First and foremost, long-term vulnerabilities cannot be fully captured when capital adequacy is calibrated primarily within a one-year time horizon.xxvii Lack of empirical evidence, granular data and modeling capabilities also hinder the quantitative assessment of the underlying risk, as financial authorities review the need and possibility of adjusting capital treatment of exposures associated with particularly high (or low) climate risk while ensuring that the prudential framework remains risk-based.

So far, only a few jurisdictions have announced that they are weighing in on integrating climate-related considerations into the Pillar 1 framework.xxviii Among them, opinions divide evidently as to whether a risk-weighted adjustment through a supporting factor (see Support the green or penalize the brown) should be applied to incentivize balance sheet decarbonization and, therefore, foster green investment and promote energy transition. The **EU** is considering such an approach,17 while China may be the first country to implement capital reduction measures (by lowering risk weights for green assets), citing positive empirical analysis of green loans' performance since 2013 when the green loan definition and statistic system were established.xxix Critics of a supporting factor point to the danger of financial supervision losing sight of its main goal in maintaining financial stability or mixing prudential regulations with climate policies, and propose instead raising a capital charge for carbon-intensive assets. Bank of England, for example, has clearly articulated that it would not grant capital advantage to green lending, but

¹⁴ As noted, for example, in NGFS (2020), Guide for Supervisors – Integrating climate-related and environmental risks into prudential supervision, and BCBS (2020), Climate-related financial risks: a survey on current initiatives.

¹⁵ EBA will report in 2021 on incorporating ESG into risk management and supervision. In its related discussion paper, it introduces a new area of analysis in the supervisory assessment, specifically evaluating whether institutions sufficiently test longer-term business model resilience against the time horizon of "relevant public policies or broader transition trends" (expected to exceed even the 10-year horizon already applied in some jurisdictions).

¹⁶ This follows a self-assessment by banks in 2021 versus expectations set out in the ECB Guide on climate-related and environmental risks - Supervisory expectations relating to risk management and disclosure (which will be benchmarked).

¹⁷ With Art. 501a CRR the EU has, arguably, already implemented a "hidden" GSF in its supporting factor for infrastructure projects.

considers it a priority to address integrating climate-related financial risks explicitly into firms' capital requirements.**x

Even in normal circumstances, it would still require several years of data collection and modeling exercises before conclusive evidence can be presented for an evidence-based regulatory proposal. The particular challenge here, in addition, is the lack of internationally accepted terminology of how green and brown should be defined. Globally, the high-level Task Force on Climate-related Financial Risks (TCFR) at the BCBS will, among other things, review the extent to which climate risks are reflected in the existing Basel framework, but it is unclear when a verdict can be expected. In Europe, the EBA has a legislative mandate to assess by the end

of June 2025 whether a more risk-sensitive prudential treatment of exposures associated with environmental and/ or social objectives would be justified, XXXIII although there has been growing signs of the possibility that political pressure may bring this timing forward. We also see developments in the insurance sector with EIOPA consulting on specific aspects related to Pillar I, in this case focused on incorporating a more forward-looking point of view in the capital calibration of natural catastrophe risk. Ultimately, it falls to the European Commission, as the EU legislator, to develop a coherent regulatory package to incorporate prudential rules for climate change risks in the framework of a revised CRD/CRR or Solvency II legislative regime.

Support the green or penalize the brown

Central to the debate is the introduction of a Green Supporting Factor (GSF) or a Brown Penalizing Factor (BPF):

- ► A GSF effectively results in a capital relief for financial instruments that positively impact climate transition to accelerate capital flow toward sustainable investments, but falls short on evidence that green assets are indeed less risky.xxxi
- ► A BPF is considered to align closer with the primary objective of capital requirements by assigning higher risk weights to carbon-intensive and -dependent assets, and yet lacks the forward-looking approach that encourages institutions to green the brown. The effectiveness of a BPF in reducing volume of lending to brown activities also remains largely questionable.

Proposals taking elements from both GSF and BPF also abound, including a combined GSF and BPF, a potential Environment-Risk Weighted Asset (ERWA) and a Green Weighting Factor (GWF). **XXIIII* However, in the absence of empirical data, they are all confronted with similar methodological and operational challenges.



¹⁸ Stiroh, Kevin J., co-chair of the TFCR, clarified in a speech on 14 October 2020 that the TFCR "does not currently have a view on potential prudential treatments or supervisory expectations related to the mitigation of climate-related financial risks; "and that it is following a "gradual and sequential approach from a banking supervisory perspective, with a current focus on understanding climate risk transmission channels, as well as methodologies for measuring and assessing these risks." It intends to "complete these fundamental research initiatives by mid-2021" and, "building on this analytical workwill consider the extent to which climate-related financial risks are incorporated in the existing Basel framework, and identify effective supervisory practices to mitigate such risks." The Basel Committee is an observer on the NGFS.

Green conduct

Common concerns, different approaches

The market for green and broader sustainability-related financial products continues to grow rapidly, with many of these products now being sold into the mass market. With that, there has been a proliferation in green or ESG product terminology, investment approaches, market-led standards and local labels. As a result, even statistics on the size and growth of different ESG product markets are hard to pin down. A key regulatory concern is the lack of appropriate information or advice to enable the consumer or end investor to really understand the "greenness" of the product or approach and to make an informed decision. There is also a heightened risk of mis-selling, misleading disclosure or "greenwashing." Policymakers and regulators are focused, in particular, on the prevalence of these risks in the asset management and investment advisory segments, including pensions; where we also see questions regarding how and to what extent fiduciaries integrate ESG considerations into investment decisions and advice.

The regulatory response, so far, has primarily been at a national (or regional in the case of the EU) level, and is likely to continue to evolve on that basis for the time being, alongside growing efforts by IOSCOXXXIV and others to align where possible at an international or global level. As a result, we observe a rather varied landscape, partly reflecting differing public policy agendas, but also different approaches to regulation and supervision more generally. Overall, we expect increasing focus on:

1. Defining what is green – expect more shades than one

The most significant development in this regard is the **EU**Taxonomy – intended to be a "living" list of green economic activities. With this, the EU seeks to delineate and provide clarity on what qualifies as environmentally sustainable based on *environmental* performance. Importantly the taxonomy is also, to an extent, a "brown to green" list, incorporating certain transitional and enabling activities, with a possible extension of the scope to social objectives, ¹⁹ as well as brown and low impact activities. It is the basis for a series of new EU disclosure requirements for corporates,

financial market participants and financial products offered in the EU, as well as for planned EU product standards and labels (including the proposed Green Bond Standard xxxv). Together these initiatives are expected to mitigate risks of greenwashing and support the public policy goal of reorienting capital toward "greening" the EU economy. Many see the EU Taxonomy as an important first-mover framework; with some industry players already starting to use or reference the taxonomy in their own analysis and decision-making. Criteria are strict, with a low level of "taxonomy-alignment" expected to be achieved and reported, at least initially, but with clear incentives for increased alignment over time (due to public disclosure). Notably, the taxonomy explicitly excludes from eligibility power generation activities from solid fossil fuels.

However, it remains unclear to what extent the EU taxonomy will be an inspiration for other taxonomies or even serve as a basis for a global standard. At the time of writing a number of regional and national efforts are underway, suggesting some regional alignment is possible, but differences will necessarily remain. The EU has convened an International Platform on Sustainable Finance (IPSF), which among other things, encourages dialogue and, where appropriate, coordination on the development and harmonization of taxonomies between its members.²⁰ China Mainland, which already has a number of more limited taxonomies in place, is consulting on a new green bond-endorsed projects catalog more closely aligned with international practices.xxxvi The UK has announced that it will implement a UK taxonomy taking the EU taxonomy as its basis, but will review these metrics to ensure they are right for the UK market, xxxvii and further projects are underway to develop green or transition taxonomies, for example in Canadaxxxviii and Malaysia, xxxix some of which have raised concern about applying an EU-centric approach to climate transition in view of divergent economic interests. Others are at early stages; for example, in Hong Kong preliminary work is underway by a cross-sectoral regulator working group, with the aim of adopting a taxonomy in the near term leveraging the work of the IPSF. The recent report by the CFTC^{x1} in the US also recommends development of a taxonomy or taxonomies^{xli} that are specific for, and appropriate to the need, in the US, while calling for international engagement "to ensure coordination across global definitions to the extent possible."

¹⁹ Although the environmental taxonomy already includes screening based on "do no significant harm" and minimum social safeguards.

The IPSF had 16 members at the time of writing, including the EU, Canada, China Mainland, Hong Kong, India, Japan, New Zealand, Singapore and Switzerland. For a full list, see International Platform on Sustainable Finance Members. See IPSF Annual Report (October 2020) for a discussion on IPSF work to date and planned, as well as the taxonomies of IPSF members (including the taxonomies in China Mainland and India, as well as the voluntary transition finance taxonomy underway in Canada led by the private sector and which strives to define transition in a way that recognizes natural resource sectors).

2. Meaningful and accurate disclosures -"say what you do"

Focus on sustainability-related disclosures and marketing versus actual practices is sharpening. Within that, approaches range from the detailed product and entity or manager level sustainability disclosure requirements in the EU (under the new Disclosures Regulation, as well as the Taxonomy Regulation); xlii to minimum criteria or thresholds stipulated for products "promoted" as sustainable (as required by the AMF in Francexliii and by the SFC in Hong Kong²¹); to a focus on inspections and examinations (such as scrutiny of investment advisers by the SEC's Office of Inspections and Examinations (OCIE) in the US²²). The UK is currently reviewing its approach to ESG disclosure; it is unclear how closely it will align with the EU.²³

As regulatory compliance and supervisory expectations demand a new level of transparency around non-financial information, sometimes also within documents that carry legal risks, there is increasing concern about the potential liability risk the industry could be exposed to. This is especially as much of the data may need to be estimated and/or obtained from third-party data providers who often use non-standardized methodologies and are not themselves regulated as, for example, credit rating agencies are.

3. Embedding sustainability and duties to clients - a work in progress

Regulators are increasingly clarifying, via new rules and guidelines, what is expected of firms in terms of the integration or otherwise of climate and sustainability considerations when investing on behalf of or advising clients. In the context of differing public policy agendas, differing views on the need for intervention in relation to "externalities," and the long and lively debate about whether achieving beneficial environmental impact, alongside financial return, requires a genuine willingness to sacrifice financial gain, xiiv it is perhaps not surprising to find some jurisdictional variations and potential conflicts in requirements.

On the one hand, in the UK, EU and Canada, for example, pension fund trustees consider environmental and societal elements as part of their fiduciary duties.xlv The EU is

amending existing financial services regulations to advance ever deeper integration of ESG considerations into the investment management and advisory processes; for example, a recommendation to amend the prudent person principles of Solvency II to directly incorporate such stewardship principles or the product governance regime under MiFID II and IDD. This extends to taking end-investor sustainability preferences into account in suitability assessment processes (with a distinction between sustainability as an investment objective (financial) and sustainability preferences (non-financial)).

On the other hand, we see potentially more constricting requirements entering some parts of US regulations. In particular, the US Department of Labor (DOL)xIvi has announced a new rule to restrict private pension plans from "subordinating the interests" of their beneficiaries to "nonpecuniary goals" such as ESG, and conduct their investments "based solely on financial considerations." Major asset managers had challenged the proposed rule, contending that ESG objectives align squarely with long-term, value-driven investment. Also, in the US we note recent focus by Office of the Comptroller of the Currency (OCC) on the potential for conflict between efforts by banks to respond to climate objectives or to comply with the Paris Agreement and "fair access" to banking services.²⁴ The emphasis is on the need for risk assessment of individual customers, rather than decisions on the basis of "broad categorical exclusions."

All in all, such differences in scope, interpretations and application of climate and sustainability considerations present real challenges for firms operating internationally. Jurisdictional requirements need to be carefully considered across the investment chain and financial product life cycle.



²¹ The SFC also maintains a public list of entities of regulated funds that meet its ESG criteria as set out in Circular to management companies of SFC-authorized unit trusts and mutual funds - Green or ESG funds.

²² The SEC Office of Compliance Inspections and Examinations (OCIE) issued detailed ESG-focused (external and internal) document request lists as part its 2019 examinations program, and disclosures by investment advisers of ESG products are listed as a priority in the 2020 Examinations Priority Report. We also note that greenwashing concerns form the partial basis for a current SEC Request for Comment about the naming of funds and investment companies.

²³ For example, the EU Disclosures Regulation will not be auto-onshored at the end of the Brexit transition period. Also, the FCA is considering introducing guiding principles with respect to ESG product design and disclosure, as set out by Rathi, N. (2020) in Green Horizon Summit: Rising to the Climate Challenge, speech at an online conference hosted by the City of London, 9 November 2020.

²⁴ As outlined in an OCC Notice of proposed rulemaking, issued for comment on or before 4 January 2021. The proposed rule may or may not be finalized in its current form, depending on timing, noting that the new administration will take office on 20 January 2021.

Implications and conclusion

While there is evident divergence globally in how regulators are responding to climate change and broader ESG issues, whether in terms of pace or approach, there is also momentum and effort to coordinate responses to the extent possible. So far, these have been largely through voluntary initiatives (notably the NGFS), but with increasing engagement from international standard-setting bodies. Overall, there is an undeniable underlying pressure for both firms and regulators to take these issues into account across all jurisdictions. We expect further momentum in 2021, ahead of COP 26.²⁵ Climate and environment are clearly to the fore, but the other elements of sustainability are moving into sharper focus.

The slow(er) pace of supervisory and regulatory development in some jurisdictions by no means suggests that boards and firms can sit back and relax. On the contrary, not only are financial institutions likely subject to extraterritorial implications of regulations from other jurisdictions (such as the EU Disclosures Regulation); but, pressure on financial institutions more generally (including from investors) is likely to build as a result of new and better climate and sustainability-related information that will be available to the market from regulated firms and regulators in early mover jurisdictions, but covering global exposures. Additionally, many jurisdictions are in observer mode, learning from the experience of first movers, and may move relatively rapidly, possibly going further and at a faster pace.

We think, regardless of jurisdiction, the following six actions and considerations are key for financial institutions:

 Work to measure and embed climate-related risks into strategy, governance and risk management now, including the use of forward-looking scenario analysis and stress testing. It is only a matter of time before this becomes a regulatory imperative, if not already. Financial institutions should not wait for (further) formal and detailed supervisory guidance, let alone changes in prudential requirements. There are wide variations in how far advanced financial

- institutions are in this regard. The institutions leading the way will set the baseline for peer comparison from a supervisory (and market) perspective. One defining feature of these firms, as highlighted by supervisors, is the board-level commitment to understand and drive climate-related risk (and sustainability) considerations through strategy and into the fabric of how the organization makes decisions.
- 2. Address the data challenge early on and consider collaboration. This will be critical to complying with regulatory expectations and requirements. Involve the chief data officer early in conversations on climate and sustainability-related matters – whether regulatory or business driven. We observe that frequently this is not the case. Having a coherent and robust data strategy is particularly important given the unique nature of the data required and the fact that there will almost definitely be significant gaps to fulfilling regulatory reporting and disclosure requirements. Estimates, best guesses and reliance on third-party data providers will likely be a feature, and there are various issues to consider in this regard from an internal risk management and a regulatory context. Engage with commercial and other customers about data needs as early as possible. Liability risk will need to be considered, depending on where the data will be disclosed. Recognizing the data challenges, a number of standardsetting bodies, local and international fora (including NGFS and the EU's IPSF) are collaborating to agree on standards and interoperability between different taxonomies; within the industry, some of the leading financial institutions are cooperating in industry level data capture and development initiatives to address gaps in public data.
- 3. Do not underestimate the risk of mis-selling or greenwashing. Regulatory focus on this is growing, whether through inspections or mandatory new requirements, as outlined in the previous section. Regardless of regulatory approach, financial institutions need to provide appropriate tone from the top and risk culture; review remuneration

²⁵ The path to COP 26, due to begin on 11 November 2021, has been laid out in Carney, M. (2020) *Building a private finance system for net zero*, which includes calls for action and desired deliverables for the financial sector (including central banks, supervisors and international standard setters), to meet goals set for reporting, risk management, returns and mobilization.

policies and incentive structures in this context; ensure staff are appropriately trained and reskilled; review product governance, due diligence and advisory and origination processes; and provide accurate, balanced and decisionuseful disclosures. In short, firms need to ensure that, at entity and product level, they "say what you do, and do what you say." This is easier said than done in a world of varying terminologies, and firms need to create internal clarity around this in the first instance, cognizant of regulatory requirements in different jurisdictions. Emerging taxonomies should help, as will various regulatory-led labels and standards – but differences will remain across jurisdictions and firms will need to navigate these as well as plan strategically around them. Our focus is on the regulatory response, but it is worth mentioning the intense public scrutiny, spear headed by various NGOs, investor and consumer groups, which are actively monitoring for instances of mis-selling and greenwashing (whether at firm, portfolio or product level), and will increasingly hold companies, financial institutions and also regulators to public account where they are found to be failing in their respective duties or not operating authentically. The associated reputation risk could be significant.

- 4. With maturity some way off, regulatory dialogue and engagement will be important. Expect teething problems, as well as opportunities. On the one hand, we see clear recognition of a "co-creative" process at play, as financial institutions, regulators and others work to develop the new methodologies needed to understand and size climate and other sustainability risks. With that, industry practice and science-based innovation are, to an extent, informing supervisory expectations and ultimately regulatory requirements. On the other hand, we see an unrelenting regulatory pace, particularly in the EU, with coherence and definitional issues in the suite of new regulations already causing some implementation challenges and confusion. Continued effort and maintaining open regulatory dialogue will be critical throughout the process as expectations and requirements are bedded down. Going a step further, legal or professional advice may be needed in relation to the practical application of certain requirements (including, for example, the new rule for ERISA plan fiduciaries in the US).
- 5. Judiciously monitor developments in jurisdictions that are early movers on the agenda – from both a compliance perspective, as well as from a learning and foresight

- perspective. We have highlighted some of these throughout this paper, which at this point are largely originating in Europe, albeit developments are occurring globally. The UK and French climate stress tests will be informative on many levels; best practice guides from the PRA/FCA-sponsored CFRF in the UK are helpful for all sectors; the EU's suite of new requirements and regulatory developments need to be monitored carefully from a compliance and foresight perspective; the publications by the NGFS are essential in terms of overall regulatory direction of travel and useful methodologies and tools; the AMF in France is interesting on conduct, as are the SEC OCIE inspections on ESG. The list is clearly not exhaustive and global firms, in particular, need to ensure that they have processes in place to adequately keep abreast and assess the implications of new developments, which may impact now or may not be too far away. The political or public policy barometer is worth following, as this may well be a leading indicator of when and how quickly a country may seek to accelerate or pivot the climate-related regulatory agenda.
- 6. Consider broader sustainability factors beyond climate risk, even where these are not yet mandated. COVID-19 has bought greater attention to the other aspects of "E" (environment), as well as "S" (social) and "G" (governance). We already see greater focus on these aspects in new or planned regulatory requirements, such as under the new disclosure requirements in the EU or envisaged as part of the EU's renewed sustainable finance strategy, as well as in recent amendments by the SEC of its business disclosure rules to enhance the focus on human capital disclosure.xivii If climate-change-related risk is anything to judge by, regulators will continue to look to and, in many ways, take the lead from industry while developing sustainability-related requirements. This is evident in EBA's recent discussion paper on ESG, for example. Various global initiatives are underway, including by the World Economic Forum in conjunction with the major accounting bodies, to drive forward the creation of frameworks, standards and metrics with respect to sustainability and long-term value creation, so as to foster transparency and comparability. It is merit in staying close to such developments, as they are likely to inform regulatory thinking, at least in some jurisdictions, if not globally.

Authors



John Liver Financial Services, Ernst & Young LLP (UK)

EY Financial Services Global Regulatory Network Co-Lead, EY EMEIA Financial Services Compliance and Conduct Leader

jliver1@uk.ey.com



Marc Saidenberg Financial Services,

Ernst & Young LLP (US)

EY Financial Services Global Regulatory Network Co-Lead

marc.saidenberg@ey.com



Eugène Goyne

Financial Services, Ernst & Young **Advisory Services Limited**

EY Asia-Pacific Financial Services Regulatory Lead

eugene.goyne@hk.ey.com



Elaine Brownlee

Financial Services, Ernst & Young (Ireland)

EY EMEIA Financial Services Banking Union and Sustainable Finance

elaine.brownlee@ie.ey.com



Other EY key leaders and contacts

Global

Gillian Lofts

Global Leader Sustainable Finance, UK Wealth and Asset Management Leader glofts@uk.ey.com

Europe, Middle East, India and Africa (EMEIA)

Dr. Max Weber

EMEIA Financial Services Sustainable Finance Risk and Regulatory Lead and Banking and Capital Markets Lead max.weber@de.ey.com

James Maher

EMEIA Financial Services Sustainable Finance Insurance Co-Lead james.maher@ie.ey.com

Kabari Bhattacharya

EMEIA Financial Services Sustainable Finance Insurance Co-Lead and Risk Modelling, Scenario Analysis and Stress Testing Co-Lead

kbhattacharya@uk.ey.com

Dr. Anthony Kirby

EMEIA Financial Services Sustainable Finance Wealth and Asset Management akirby1@uk.ey.com

Shaun Carazzo

EMEIA Financial Services Sustainable Finance TCFD and non-financial reporting Lead scarazzo@uk.ey.com

Americas

Mark Watson

Deputy Leader, Center for Board Matters - Financial Services mark.Watson@ey.com

Brandon Sutcliffe

U.S. Financial Services Office, Sustainable Finance Lead brandon.sutcliffe@ey.com

Ryan Bohn

U.S. Financial Services Office, Sustainable Finance ryan.bohn@ey.com

Asia-Pacific

Matthew Bell

Asia Pacific Climate Change and Sustainability Services Leader (CCaSS) matthew.bell@au.ey.com

Sameer Rege

Business Consulting, Financial Services Risk, Hong Kong sameer.rege@hk.ey.com

Keith Pogson

Asia Pacific Financial Services and Global Banking & Capital Markets Assurance Leader

keith.pogson@hk.ey.com

David Scott

Business Consulting, Financial Services Risk, Hong Kong david.scott@hk.ey.com

EY Global Regulatory Network executive team previous appointments

Kara Cauter

kara.cauter@uk.ey.com

She has over 20 years' experience working in global professional services firms, advising banking clients on the implications of the regulatory agenda and designing approaches to effectively meet those obligations.

Meena Datwani

meena.datwani@hk.ey.com

She has over 35 years experience in government of which the last 23 years were in senior regulatory roles. She was the Executive Director of Enforcement and Anti Money Laundering Supervision at the Hong Kong Monetary Authority (HKMA). Prior to that she was the Executive Director for Banking Conduct and Chief Executive Officer of the Hong Kong Deposit Protection Board. She also served as Deputy General Counsel and before that Senior Counsel. Prior to the HKMA, she was a Senior Government Counsel with the Department of Justice of the Hong Kong Government.

Mario Delgado

mario.delgadoalfaro@es.ey.com

FROB (Spanish Banking Resolution Authority) Head of International Coordination and EBA and FSB representative; Spanish Ministry of Economy: Director of Office of the Secretary of State for the Economy in the Economic Affairs; Head of the Spanish Delegation Win the Paris Club; Deputy Head of relations with the IMF.

Marie-Hélène Fortésa

marie.helene.fortesa@fr.ey.com

Autorité de Contrôle Prudentiel (French Prudential Supervisory Authority); Association Française des Banques (French Banking Association); and French National Institute for Statistics and Economic Studies. She has also held senior roles at a global investment bank.

Eugène Goyne

eugene.goyne@hk.ey.com

He has over 20 years in government and senior regulatory roles. He was previously deputy head of enforcement at the Hong Kong Securities and Futures Commission (SFC). Prior to the SFC, Eugène worked at the Australian Securities and Investments Commission and the Australian Attorney General's Department.

Alejandro Latorre

alejandro.latorre@ev.com

Alejandro (Alex) has over 20 years of experience at the Federal Reserve Bank of New York in monetary policy, capital markets and financial supervision and regulation. He was a senior supervisor involved in the oversight of large and systemically important FBOs in the US. Prior to his role as a senior supervisor, he was involved in many of the Federal Reserve's financial crisis management efforts.

John Liver

jliver1@uk.ey.com

Divisional Compliance Lead at Barclays; Head of Department, Investment Firm Supervision and prior roles in enforcement and supervision of investment management, life insurance and pensions at the UK Financial Services Authority and its' predecessors. He is currently EY/UK Financial Conduct Authority relationship lead.

Shane O'Neill

soneill2@uk.ey.com

He has 20 years experience in banking, capital markets, asset finance and prudential regulation in a variety of CFO, COO, strategy and planning, and regulatory roles. Following the financial crisis, Shane was Head of Banking Supervision at a Eurozone Central Bank for four years, during which he influenced significant restructuring, recapitalization and change in the banking sector and in credit institutions, and executed numerous stress tests and asset quality reviews.

Keith Pogson

keith.pogson@hk.ey.com

Immediate past President of the Hong Kong Institute of Certified Public Accountants; more than 20 years of experience advising governments and regulators across Asia-Pacific on acquisitions, market-entry strategy and due diligence across banking, asset management and securities.

Marc Saidenberg

marc.saidenberg@ey.com

Senior Vice President and Director of Supervisory Policy at Federal Reserve Bank of New York; Basel Committee Member and Liquidity Working Group Co-chair; involved in the development of supervisory expectations for capital planning, liquidity risk management and resolution planning.

Scott Waterhouse

scott.waterhouse@ey.com

He was capital markets lead expert for large banks at the Office of the Comptroller of the Currency (OCC) and Examinerin-Charge of the OCC's London Office. He coordinated the supervision of trading, treasury and capital markets activities including Dodd-Frank implementation and Basel Committee requirements.

References

- ¹HM Treasury (UK), 2020, A Roadmap towards mandatory climate-related disclosures
- "Network for Greening the Financial System (NGFS), 2019, First comprehensive report "A call for action"
- "BlackRock FMA on behalf of the European Commission, 2020, Interim study on the development of tools and mechanisms for the integration of environmental, social and governance (ESG) factors into the EU banking prudential framework and into banks' business strategies and investment policies
- iv Bank of England Prudential Regulation Authority (PRA), 2019, Supervisory Statement 3/19 "Enhancing banks' and insurers' approaches to managing the financial risks from climate change
- ^v Bank of England PRA, 2020 Letter to chief executive officers of all PRA-regulated firms, Managing climate-related financial risk - thematic feedback from the PRA's review of firms' SS3/19 plans and clarifications of expectations
- vi European Central Bank (ECB), 2020, Guide on climate-related and environmental risks - supervisory expectations relating to risk management and disclosure
- vii Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). 2019, Guidance Notice on Dealing with Sustainability Risks
- viii Austrian Financial Market Authority (FMA), 2020, FMA Guide for Managing Sustainability Risks
- ix The Autorité de contrôle prudentiel et de résolution (ACPR), 2020, Governance and management of climate related risks by French banking institutions: some good practices
- * Monetary Authority of Singapore (MAS), 2020, Guidelines on environmental risk management (banks); Guidelines on environmental risk management (asset managers); Guidleines on environmental risk management (insurers)
- xi Hong Kong Monetary Authority (HKMA), 2020, White Paper on Green and Sustainable Banking

- xii Securities and Futures Commission (SFC Hong Kong, 2020, Consultation Paper on the Management and Disclosure of Climate-related Risks by Fund Managers
- xiii Australian Prudential Regulation Authority (APRA), 2020, https://www.apra.gov.au/understanding-and-managingfinancial-risks-of-climate-change
- xiv Commodity Futures Trading Commission, 2020, Managing Climate Risk in the U.S. Financial System: Report of the Climate-Related Market Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures **Trading Commission**
- xv Monetary Authority of Singapore (MAS), 2020 See x above
- xvi Hong Kong Monetary Authority (HKMA), 2020 See xi above
- xvii Securities and Futures Commission (SFC Hong Kong), 2020 - See xii above
- xviii Banque de France ACPR, 2020, Scenarios and main assumptions of the ACPR pilot climate exercise
- xix Bank of England PRA, 2020, The Bank of England is restarting the Climate Biennial Exploratory Scenario (CBES)
- xx Bank of England PRA, 2019, The 2021 biennial exploratory scenario on the financial risks from climate change
- xxi European Banking Authority (EBA), 2020, Discussion Paper on management and supervision of ESG risks for credit institutions and investment firms and 2019, EBA Action Plan on Sustainable Finance
- xxii ECB, 2020, press release ECB publishes final guide on climate-related and environmental risks for banks
- xxiii Australian Prudential Regulation Authority, 2020, Understanding and managing the financial risks of climate change
- xxiv European Insurance and Occupational Pensions Authority (EIOPA), 2020, Methodological Principles of Insurance Stress Testina

- xxv Hong Kong Monetary Authority (HKMA), 2020, Dear CEO letter, Climate risk stress test
- xxvi Monetary Authority of Singapore (MAS), 2020 Reply to Parliamentary Question on including climate change-related risk in MAS' annual industry-wide stress test
- xxvii EIOPA 2020, Opinion on Sustainability within Solvency II
- xxviii Basel on Banking Supervision (BCBS), 2020, Climaterelated financial risks: a survey on current initiatives
- xxix Climate Policy Injative 2020, Green Banking in China -Emerging Trends With a spotlight on the Industrial and Commercial Bank of China (ICBC); See also OMFIF - xiv below
- xxx Sweeney, Executive Director Insurance, Bank of England (BoE), 2020, speech Paving the way forward: managing climate risk in the insurance sector
- xxxi Enria, A, Chair of the Supervisory Board of the ECB, 2019, speech Regulation, proportionality and the sustainability of banking speech
- xxxii I4CE Institute for Climate Economics, 2020, Integrating Climate-related Risks into Banks' Capital Requirements
- xxxiii Official Journal of the European Union, 2019, Official Journal of the European Union
- xxxiv IOSCO, 2020, Sustainable Finance and the Role of Securities Regulators and IOSCO and Open response to the open letter from CDP, Climate Disclosure Standards Board (CDSB), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC) and Sustainability Accounting Standards Board (SASB) proposing avenues for Working together to meet the needs of the capital markets
- xxxv The European Commission, 2020, EU Green Bond Standard
- xxxvi Climate Bonds Initiative (CBI), 2020, Green Bond Endorsed Projects Catalogue (2020 Edition) (Draft for Consultation)
- xxxvii Sunak, R., Chancellor of the Exchequer, 2020, Chancellor sets out ambition for future of UK financial services

- xxxviii Standards Councils of Canada, 2019, Sustainable Finance-Defining Green Taxonomy for Canada - Notice of Intent
- xxxix Bank Negara Malaysia, 2019, Climate Change and Principle-based Taxonomy. Discussion Paper; see also ASIFMA Response
- xl Commodity Futures Trading Commission (CFTC), 2020, Managing Climate Risk in the U.S. Financial System: Report of the Climate-Related Market Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures Trading Commission
- xli HKMA, 2020, press release Cross-Agency Steering Group Launches its Strategic Plan to Strengthen Hong Kong's Financial Ecosystem to Support a Greener and More Sustainable Future and Strategic Plan to Strengthen Hong Kong's Financial Ecosystem to Support a Greener and More Sustainable Future
- xlii Official Journal of the European Union, 2019, REGULATION (EU) 2019/2088 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 November 2019 on sustainability related disclosures in the financial services sector
- Autorité des Marchés Financiers (AMF), 2020, Sustainable finance and collective investment management: the AMF publishes an update of its investor information policy
- xliv Hauser A, Executive Director for Markets, Bank of England 2020, speech From hot air to cold hard facts: how financial markets are finally getting to grips on how to price climate risk and return – and what needs to happen next
- xlv OMFIF, Refinitiv, 2020, The role of data in sustainable investment, policy and regulation
- xIvi Department of Labor, 2020, Financial Factors in Selecting Plan Investments - A Rule by the Employee Benefits Security Administration on 11/13/2020
- xivii World Economic Forum in collaboration with Deloitte, EY, KPMG and PwC, 2020, Measuring Stakeholder Capitalism Towards Common Metrics and Consistent Reporting of Sustainable Value Creation

EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

© 2021 EYGM Limited. All Rights Reserved.

EYG no. 000398-21Gbl

BMC Agency GA 1017865

ED None



In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

ey.com