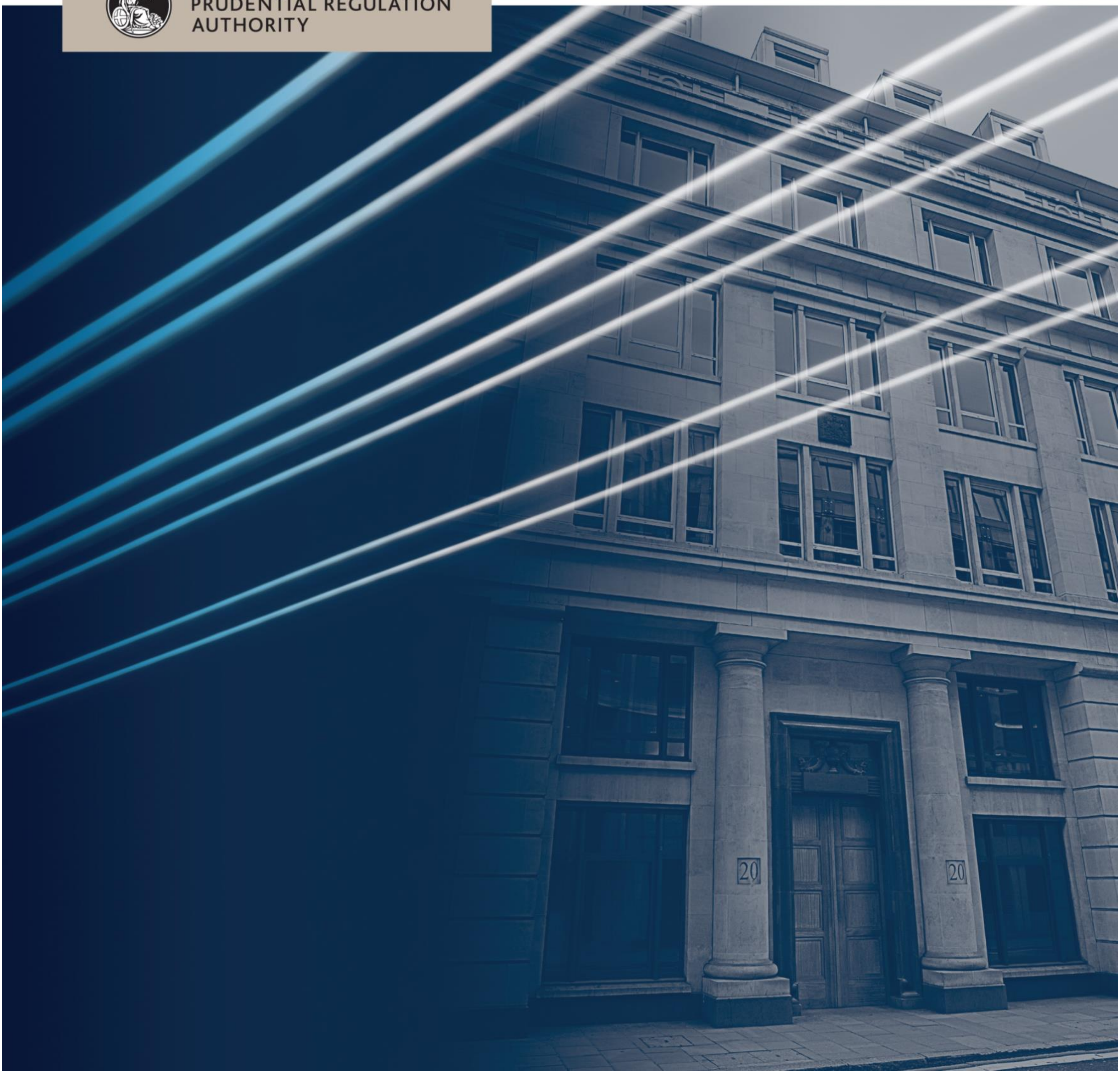
Supervisory Statement | SS3/19

Enhancing banks' and insurers' approaches to managing the financial risks from climate change

April 2019

BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY



BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

Supervisory Statement | SS3/19

Enhancing banks' and insurers' approaches to managing the financial risks from climate change

April 2019

Prudential Regulation Authority | 20 Moorgate | London EC2R 6DA

Contents

1 Introduction

1.1 This supervisory statement (SS) is relevant to all UK insurance and reinsurance firms and groups, ie those within the scope of Solvency II including the Society of Lloyd's and managing agents ('Solvency II firms') and non-Solvency II firms, (collectively referred to as 'insurers'), banks, building societies, and Prudential Regulation Authority (PRA) designated investment firms (collectively referred to as 'banks'). 'Firms' will be used to refer to both insurers and banks.

1.2 Climate change, and society's response to it, present financial risks which are relevant to the PRA's objectives. While the financial risks from climate change may crystallise in full over longer time horizons, they are also becoming apparent now.

1.3 The PRA's reviews of current practice in the banking[1] and insurance[2] sectors have highlighted that, while firms are enhancing their approaches to managing the financial risks from climate change, few firms are taking a strategic approach that considers how actions today affect future financial risks.

1.4 Chapter 2 describes the two risk factors through which financial risks from climate change arise and the distinctive elements which, when considered together, present unique challenges and require a strategic approach.

1.5 Chapter 3 sets out the PRA's expectations concerning this strategic approach, including how firms:

(a) embed the consideration of the financial risks from climate change in their governance arrangements;

(b) incorporate the financial risks from climate change into existing financial risk management practice;

(c) use (long term) scenario analysis to inform strategy setting and risk assessment and identification; and

(d) develop an approach to disclosure on the financial risks from climate change.

1.6 This SS should be read in conjunction with the materials included in Table 1.

1 'Transition in thinking: The impact of climate change on the UK banking sector', September 2018: www.bankofengland.co.uk/prudential-regulation/publication/2018/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.

2 'The impact of climate change on the UK insurance sector', September 2015: www.bankofengland.co.uk/prudential-regulation/publication/2015/the-impact-of-climate-change-on-the-uk-insurance-sector.

Table 1: Materials to be read alongside SS3/19 'Enhancing banks' and insurers' approaches to managing the financial risks from climate change'

Banks	Insurers
The PRA's approach to banking supervision[3]	The PRA's approach to insurance supervision
Fundamental Rules 5 and 6 of the PRA Rulebook[4]	Fundamental Rules 5 and 6 of the PRA Rulebook
Governance and risk management	
General Organisational Requirements, Internal Capital Adequacy Assessment, Risk Control, Allocation of Responsibilities, Market Risk 2.1 and Group Risk Systems 2.1 of the PRA Rulebook	The Conditions Governing Business, Investments, Insurance – Allocation of Responsibilities, Insurance – Conduct Standards and Insurance – Senior Insurance Management Functions Parts of the PRA Rulebook for Solvency II firms
SS5/16 'Corporate Governance: Board responsibilities'[5]	Articles 258-262 and 269 of the Solvency II EU Delegated Regulation[6]
SS21/15 'Internal governance'[7]	SS4/18 'Financial management and planning by insurers'[8]
	SS5/16 'Corporate Governance: Board responsibilities'
Scenario analysis	
Internal Capital Adequacy Assessment Part of the PRA Rulebook	Conditions Governing Business part of the PRA Rulebook
SS31/15 'The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP)'[9]	SS19/16 'Solvency II: ORSA'[10]
Disclosure	
Article 431 and 435 of the Capital Requirements Regulation[11]	Article 295 of the Solvency II EU Delegated Regulation[12]
European Banking Authority (EBA) Guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013[13]	

2 Financial risks from climate change

2.1 Financial risks from climate change arise through two primary channels, or 'risk factors': physical and transition. These manifest, for example, as increasing underwriting, reserving, credit, or market risk for firms.

2.2 The PRA's report on the impact of climate change on the UK insurance sector identified a third risk factor - liability risks - arising from parties who have suffered loss or damage from physical or transition risk factors seeking to recover losses from those they hold responsible. The legal risks from climate-related liabilities can be of particular importance to insurance firms given these risks can be transferred through liability protection, such as directors' and

3 The PRA approach documents for banking and insurance are available at: http://www.bankofengland.co.uk/news?NewsTypes=65d34b0d42784c6bb1dd302c1ed63653&Taxonomies=973f7bc68fd74abca30287f8a0a15fa3&Direction=Latest.
4 http://www.prarulebook.co.uk/.
5 March 2016: https://www.bankofengland.co.uk/prudential-regulation/publication/2016/corporate-governance-board-responsibilities-ss.
6 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0035&from=EN.
7 April 2017: https://www.bankofengland.co.uk/prudential-regulation/publication/2015/internal-governance-ss.
8 May 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2018/financial-management-and-planning-by-insurers-ss.
9 April 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internal-capital-adequacy-assessment-process-and-supervisory-review-ss.
10 November 2016: http://www.bankofengland.co.uk/prudential-regulation/publication/2016/solvency2-orsa.
11 http://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/-/interactive-single-rulebook/toc/504.
12 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2015:012:TOC.
13 EBA/GL/2016/11: https://www.eba.europa.eu/documents/10180/1918833/Guidelines+on+disclosure+requirements+under+Part+Eight+of+Regulation+575+2013+%28EBA-GL-2016-11%29_EN.pdf/8daeb580-5f64-418e-bf10-6786cb57424d.

officers' and professional indemnity insurance. Given these legal risks arise from physical or transition risk factors and the distinctive elements discussed in paragraph 2.5, they are referred to within the more detailed discussion of the two risk factors below.

Physical risks

2.3 Physical risks from climate change arise from a number of factors, and relate to specific weather events (such as heatwaves, floods, wildfires and storms) and longer-term shifts in the climate (such as changes in precipitation, extreme weather variability, sea level rise, and rising mean temperatures). Some examples of physical risks crystallising include:

- increasing frequency, severity or volatility of extreme weather events impacting property and casualty insurance; and

- increasing frequency and severity of flooding leading to physical damage to the value of financial assets or collateral held by banks, such as household and commercial property. This can lead to increased credit risks, particularly for banks, or to underwriting risks for liability insurers if it results in legal claims to recover financial losses from this physical damage.

Transition risks

2.4 Transition risks can arise from the process of adjustment towards a low-carbon economy. A range of factors influence this adjustment, including: climate-related developments in policy and regulation, the emergence of disruptive technology or business models, shifting sentiment and societal preferences, or evolving evidence, frameworks and legal interpretations. Some examples include:

- tightening energy efficiency standards for domestic and commercial buildings impacting the risk in banks' buy-to-let lending portfolios;

- rapid technological change, such as the development of electric vehicles or renewable energy technology, affecting the value of financial assets in the automotive and energy sector; and

- companies in the wider economy that fail to mitigate, adapt, or disclose the financial risks from climate change being exposed to climate-related litigation, which could impact their market value or lead to higher claims for insurers that provide liability cover to those companies.

Distinctive elements of the financial risks from climate change

2.5 The financial risks from climate change have a number of distinctive elements which, when considered together, present unique challenges and require a strategic approach to financial risk management. These elements include:

- Far-reaching in breadth and magnitude: The financial risks from physical and transition risk factors are relevant to multiple lines of business, sectors, and geographies. Their full impact on the financial system may therefore be larger than for other types of risks, and is potentially non-linear, correlated and irreversible.

- Uncertain and extended time horizons: the time horizons over which financial risks may be realised are uncertain, and their full impact may crystallise outside of many current business planning horizons. Using past data may not be a good predictor of future risks.

- Foreseeable nature: while the exact outcome is uncertain, there is a high degree of certainty that financial risks from some combination of physical and transition risk factors will occur.

- Dependency on short-term actions: the magnitude of future impact will, at least in part, be determined by the actions taken today. This includes actions by governments, firms, and a range of other actors.

2.6 The magnitude of the financial risks from climate-related factors will depend on future scenarios that will, at least in part, be determined by actions taken today. A 'too little, too late' scenario, where significant action is taken, but too late to achieve climate goals, could result in the most severe financial risks crystallising in the banking and insurance sectors. Financial risks from climate change will be minimised if there is an orderly market transition to a low-carbon world, but the window for an orderly transition is finite and closing.

3 A strategic approach to managing the financial risks from climate change

3.1 The PRA expects a firm's response to the financial risks from climate change to be proportionate to the nature, scale, and complexity of its business. As a firm's expertise develops, the PRA expects the firm's approach to managing the financial risks from climate change to mature over time. The PRA intends to embed the measurement and monitoring of these expectations into its existing supervisory framework.

Governance

3.2 The PRA expects a firm's board to understand and assess the financial risks from climate change that affect the firm, and to be able to address and oversee these risks within the firm's overall business strategy and risk appetite. The approach should demonstrate an understanding of the distinctive elements of the financial risks from climate change and a sufficiently long-term view of the financial risks that can arise beyond standard business planning horizons.

3.3 Where appropriate, the PRA will expect to see evidence of how the firm monitors and manages the financial risks from climate change in line with its risk appetite statement. The risk appetite statement should include the risk exposure limits and thresholds for the financial risks that the firm is willing to bear, and should take into account factors such as:

- long-term financial interests of the firm, and how decisions today affect future financial risks;

- results of stress and scenario testing, for shorter and longer time horizons;

- uncertainty around the timing and the channels through which the financial risks from climate change may materialise; and

- sensitivity of the balance sheet to changes in key risk drivers and external conditions.

3.4 The PRA expects firms to have clear roles and responsibilities for the board and its relevant sub-committees in managing the financial risks from climate change. In particular, the board and the highest level of executive management should identify and allocate responsibility for identifying and managing financial risks from climate change to the relevant existing Senior Management Function(s) (SMF(s)) most appropriate within the firm's organisational structure and risk profile, and ensure that these responsibilities are included in the SMF(s)'s Statement of Responsibilities. The PRA expects to see evidence that the board and its relevant sub-committees exercise effective oversight of risk management and controls. Further, the PRA expects the board to ensure that adequate resources and sufficient skills and expertise are devoted to managing the financial risks from climate change.

Risk management

3.5 The PRA expects firms to address the financial risks from climate change through their existing risk management frameworks, in line with their board-approved risk appetite, while recognising that the nature of the risks requires a strategic approach. In a manner proportionate to their business, firms should identify, measure, monitor, manage, and report on their exposure to these risks. Firms should be able to evidence this in their written risk management policies, management information, and board risk reports. This includes, where appropriate, updating existing risk management policies.

Risk identification and measurement

3.6 The PRA expects firms to understand the financial risks from climate change and how they will affect their business model. Firms should use scenario analysis and stress testing to inform the risk identification process and understand the short- and long-term financial risks to their business model from climate change. Firms are also expected to go beyond using only historical data to inform their risk assessment, for example by considering future trends in catastrophe modelling. The PRA expects that such scenarios will develop and mature over time as firms learn from experience and each other.

3.7 As part of the Internal Capital Adequacy Assessment Process (ICAAP) or Own Risk and Solvency Assessment (ORSA), firms should include at a minimum:

- all material exposures relating to the financial risks from climate change; and
- an assessment of how firms have determined the material exposure(s) in the context of their business.

Risk monitoring

3.8 Where appropriate, the PRA expects firms to consider a range of quantitative and qualitative tools and metrics to monitor their exposure to financial risks from climate change. For example, these could be used to monitor exposures to climate-related risk factors which could result from changes in the concentration of firms' investment or lending portfolios, or to the potential impact of physical risk factors on outsourcing arrangements and supply chains. The PRA expects that these metrics and tools will evolve and mature over time as firms gain experience.

3.9 Firms should also use these metrics to monitor progress against their overall business strategy and risk appetite. The metrics should be updated regularly to support decision making by the firm's board and/or relevant sub-committees. Firms should set out circumstances which would trigger a review of its strategy for addressing the financial risks from climate change.

Risk management and mitigation

3.10 Where the potential impacts of the financial risks from climate change are assessed to be material (for example as a result of scenario analysis), the PRA expects firms to evidence how they will mitigate these financial risks and to have a credible plan or policies in place for managing exposures. This could include actions the firm is taking to reduce concentrations of these risks. Plans should be reflective of the distinctive elements of the financial risks from climate change, so may differ from other risks.

3.11 For Solvency II insurers, under the Prudent Person Principle (PPP) an undertaking should only invest in assets for which risks can be identified, measured, monitored, managed, controlled, and reported.[14] A key requirement of the PPP for the purposes of this SS is that, where insurers bear the investment risk, insurers must diversify their assets to avoid excessive accumulation of risk in the investment portfolio. Solvency II insurers should therefore consider whether there is an excessive accumulation of financial risks from climate change (particularly those likely to crystallise via the transition risk factor) in their investment portfolio, and consider mitigants when this is the case.

3.12 To inform their risk assessment and management, firms should seek to understand the potential current and future impacts of the physical and transition risk factors on their clients, counterparties, and organisations in which the firm invests or may invest. To the extent that firms do not have the necessary information, firms are expected to engage with clients and counterparties where this information is considered material to a firm's own risks. Firms could also consider using data from publicly available sources or working together with external experts to collect (asset-level) data.

Risk reporting and management information

3.13 The PRA expects firms to provide the board and relevant sub-committees with management information on their exposure to the financial risks from climate change, for example, based on scenario analysis and the mitigating actions and associated timeframe the firm proposes to take. The management information should enable the board to discuss, challenge, and take decisions relating to the firm's management of the financial risks from climate change.

Scenario analysis

3.14 Where proportionate, the PRA expects firms to conduct scenario analysis to inform their strategic planning and determine the impact of the financial risks from climate change on their overall risk profile and business strategy. Scenario analysis should also be used to explore the resilience and vulnerabilities of a firm's business model to a range of outcomes. The PRA expects approaches to scenario analysis to evolve and mature over time.

3.15 The PRA expects a firm's scenario analysis to address a range of outcomes relating to different transition paths to a low-carbon economy, and a path where no transition occurs. The scenario analysis should, where appropriate, include a:

---

14 Art. 132(1) – (2) of the Solvency II Directive: http://www.prarulebook.co.uk/rulebook/Content/Chapter/212928/07-08-2018.

- short-term assessment which sets out the firm's exposure to the financial risks from climate change within its existing business planning horizon, including, where appropriate, the quantification of these risks; and

- longer term assessment of the firm's exposure, based on its current business model, of a range of different climate-related scenarios. For example: scenarios based around average global temperature increases consistent with, or in excess of 2˚C; and scenarios where the transition to a low-carbon economy occurs in an orderly manner, or not. The PRA expects the time horizon of this long-term assessment to be in the order of decades. As with other types of scenario analysis, this is not intended to be a precise forecast, but a qualitative exercise used to inform strategic planning and decision making.

3.16 The PRA expects firms to use these scenarios to understand the impact of the financial risks from climate change on their solvency, liquidity and, for insurers, their ability to pay policyholders. Where a firm relies on management actions to mitigate the financial risks from a scenario, it should consider whether these are realistic, credible, consistent with regulatory expectations, and achievable. For example, it should not rely on the existence of a liquid market to sell the assets it has identified as being exposed. Firms should also consider whether any of the actions identified should be taken in advance as precautionary measures, or whether they would be relevant or desirable only if the scenario emerges.

3.17 The PRA considers the ORSA for insurers, and the ICAAP for banks, to be useful frameworks within which to consider the financial risks from climate change. For insurers, Solvency II states that consideration of the long term is essential to insurers being able to assess their ability to continue as a going concern. For banks, the SS on the ICAAP[15] sets out that scenario analysis should be used to explore the sensitivities in longer-term business plans. Scenario analysis is a key tool that the PRA expects firms to employ as part of that assessment.

Disclosure

3.18 Banks and insurers have existing requirements to disclose information on material risks within their Pillar 3 disclosures (as required under Capital Requirements Regulation (575/2013) (CRR) and Solvency II), and on principal risks and uncertainties in their Strategic Report (as required under the UK Companies Act).

3.19 In addition to meeting these existing disclosure requirements, firms should consider whether further disclosures are necessary to enhance transparency on their approach to managing the financial risks from climate change, in line with the expectations set out in this SS. In particular, all firms within the scope of this SS should consider disclosing how climate-related financial risks are integrated into governance and risk management processes, including the process by which a firm has assessed whether these risks are considered material or principal risks.

3.20 The PRA expects firms to develop and maintain an appropriate approach to disclosure, reflective of the distinctive elements of the financial risks from climate change. Firms should look to evolve their disclosures to make these as insightful as possible, and in particular should ensure they reflect the firms' evolving understanding of the financial risks from climate change. Firms should recognise the increasing possibility that disclosure will be mandated in more jurisdictions, and prepare accordingly.

---

15 SS31/15 'The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP)', April 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internal-capital-adequacy-assessment-process-and-supervisory-review-ss.

3.21 The PRA expects firms to engage with wider initiatives on climate-related financial disclosures and to take into account the benefits of disclosures that are comparable across firms. Various initiatives have done work on this area. For example, the 'Taskforce on Climate-related Financial Disclosures' published recommendations in June 2017,[16] and other initiatives have since then provided tools or case studies for organisations making climate-related financial disclosures. The PRA expects firms to consider engaging with the TCFD framework and other initiatives in developing their approach to climate-related financial disclosures.

3.22 In addition, firms would benefit from greater disclosure in the wider economy, and they would be in a strong position to encourage it through their ownership of financial assets.

16 https://www.fsb-tcfd.org/publications/final-recommendations-report/.