

Title: Climate Change Risk – Governance and Disclosure (TCFD) IA No: Lead department or agency: Department for Work and Pensions Departmental Assessment: Self-Certified Other departments or agencies: N/A	Impact Assessment (Consultation)
	Date: 26-August-2020
	Stage: Consultation
	Source of intervention: Domestic
	Type of measure: Primary legislation
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Summary: Intervention and Options	

Cost of Preferred (or more likely) Option (in 2019 prices)			
Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status
-£40.4m	-£40.4m	£4.7m	Qualifying provision
What is the problem under consideration? Why is government intervention necessary? Climate change is expected to have a significant impact on pension schemes' assets, both due to the physical risk associated with a warmer planet and the transition risk that movement towards a low carbon economy brings in the form of lower valuations of many sectors of the economy. As long-term investors, pension scheme trustees should be especially alive to these risks. At present, evidence suggests the market does not fully price-in climate risk meaning many assets pension schemes hold may be mispriced ¹ . As a result, there is a risk that, without intervention, members of pension schemes may be overexposed to the financially-material risks of climate change, which ultimately impacts their expected outcomes in retirement. Whilst trustees of pension schemes are already required to consider all financially-material risks as part of their fiduciary duty, the Government is seeking to strengthen and clarify the focus on climate change by proposing steps to require increased analysis and consideration of climate change embedded in the decision making process of trustees, as well as requiring the disclosure of climate risk information.			

What are the policy objectives and the intended effects? The policy objective is to ensure effective governance of climate change as a financially material risk and opportunity to pension schemes and their members' savings. Government is proposing to mandate trustees of larger occupational pension schemes to align their climate governance activities and disclosures with the international industry-led recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) ² . This will place trustees' pre-existing fiduciary duty to take into account climate change on a more detailed statutory footing, so trustees embed climate risks and opportunities into their scheme's governance, strategy, risk management, and disclosure. The intended effect is a UK pensions system that has resilience to both transition and physical climate risk, in the same way that interest rate or inflation risk are embedded in decision making processes. The vast majority of members' savings would then be invested in schemes whose trustees have a specific legal duty to actively consider and mitigate against the risks (and potentially opportunities) a transition to a low carbon economy brings – ultimately improving their expected outcomes in retirement.

¹ Chapter 5, 'Climate Change: Physical Risks and Equity Prices', IMF Global Financial Stability Report, April 2020. <https://www.imf.org/en/Publications/GFSR/Issues/2020/04/14/global-financial-stability-report-april-2020#Chapter5>

² <https://www.fsb-tcfd.org/>

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Do Nothing – Trustees of the majority of UK occupational pension schemes do not currently have plans to implement the TCFD recommendations and disclose against it. This would mean that climate change has the potential to put at risk the delivery of members’ benefits. This would also mean that were requirements to exist in the future on other financial actors such as listed companies, but not on pension schemes, this would result in an unaligned UK regulatory framework on climate change for pension schemes relative to other financial market participants.

Guidance Only - A non-mandatory policy option; issuing guidance to trustees on how to take into account climate change risks and opportunities. Without regulation trustees are not likely to take the necessary action with the necessary urgency and coverage.

Mandatory TCFD by 2023 for large and medium-sized schemes (Preferred) –trustees of all Occupational Pension Schemes (OPS) with £5bn or more in assets, and TPR-authorized schemes, disclose in line with TCFD by the end of 2022, followed by all OPS with £1bn or more in assets a year later. This would ensure that schemes who have the immediate resources and capability properly account for climate change risk and opportunity, and disclose it, first. The staged approach is preferred to allow small/medium-sized schemes to learn from the largest schemes who set industry standards and are in a better position to meet the new requirements and disclose.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 2024

Does implementation go beyond minimum EU requirements?	Yes			
Is this measure likely to impact on trade and investment?	No			
Does this measure comply with our international trade and investment obligations, including those arising under WTO agreements, UK free trade agreements, and UK Investment Treaties?	Yes			
Are any of these organisations in scope?	Micro No	Small No	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions?	Traded:		Non-traded:	

Departmental Policy signoff (SCS): Hilda Massey	Date: 14/08/2020
Economist signoff (senior analyst): Joy Thompson - Deputy Chief Economist	Date: 07/08/2020
Better Regulation Unit signoff: Prabhavati Mistry	Date: 06/08/2020

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Summary: Analysis & Evidence

Phased Mandatory TCFD

Description: Climate Change Risk – Governance and Disclosure (TCFD) – Requiring trustees of pension schemes to have in place effective governance, strategy and risk management processes to manage climate-related risks and opportunities and to disclose information on these, including scenario analysis, metrics and targets, in line with the internationally adopted recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years 10 years	Net Benefit (Present Value (PV)) (£m)		
			Low: -£26.2m	High: -£62.6m	Best Estimate: -£40.4m

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£0.0m	Years 1 & 2 (Phased Rollout)	£3.2m	£26.2m
High	£0.1m		£7.6m	£62.6m
Best Estimate	£0.1m		£4.9m	£40.4m

Description and scale of key monetised costs by 'main affected groups'

Pension Schemes In Scope:

Minor transition costs of all trustees familiarising themselves with the requirements and accompanying statutory guidance, and

Annual ongoing costs to meet requirements to carry out certain activities, including to produce and publish a TCFD report. The main activities driving total costs are the requirements on trustees to undertake Scenario Analysis activities and the production of Metrics & Targets.

Other key non-monetised costs by 'main affected groups'

The Pensions Regulator:

The Pensions Regulator (TPR) would be responsible for monitoring and enforcing compliance with these requirements. We have engaged with TPR and are working with them to estimate their costs ahead of making any secondary legislation.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	N/A		N/A	Not Quantitatively Estimated at Consultation Stage

Description and scale of key monetised benefits by 'main affected groups'

The various potential benefits of the requirements are discussed qualitatively (see below). At this stage it would be disproportionate to estimate these potential benefits quantitatively so they have not been monetised, nor therefore included in the Total Net Present Social Value figure.

Other key non-monetised benefits by 'main affected groups'

Members of Pension Schemes in Scope - estimated 81% of all UK pension scheme members at full rollout

Improved expected retirement outcomes for members of schemes due to increased consideration and potentially better-informed decision making by trustees. Better informed trustees can better manage members' exposure to financially-material climate change risks, whilst also placing schemes in a better position to take advantage of any investment opportunities that emerge during any transition towards a lower carbon economy.

Increased transparency on an issue that research shows UK pension scheme members care about¹, which may ultimately lead to increased sense of engagement with and ownership of their pension pot.

Wider Society

Reduced negative spillovers if trustees choose to address their exposure to carbon and other transition risks, whether by limiting investment in higher carbon sectors or firms who are less prepared for the low-carbon transition, or by active engagement and voting in relation to firms to mitigate climate-related risks to their investments.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

We have engaged with relevant industry contacts and estimated a range for sensitivity purposes around the key costs per scheme of completing the requirements for Scenario Analysis and Metrics & Targets.

There is also the potential for the estimated costs to business (pension schemes) to be lower because, in line with DWP's research and engagement with the industry, there is a non-negligible number of schemes in scope that are already doing some or all of the recommended TCFD-related activities voluntarily. The estimated costs to business may be lower if these schemes could be readily and robustly identified.

Policy Background

Climate Change Risk

1. Climate change poses an existential threat to our planet and our society¹, and the UK Government is committed to action to prevent it. In 2019, the Government set the target of achieving net-zero greenhouse gas emissions by 2050². Alongside its commitments as a signatory of the Paris Agreement³, the UK is a world leader in commitments to transition to a low carbon economy.
2. Occupational pension schemes (OPS) in the UK hold almost £2tn in assets⁴, with the figures set to grow with the success of automatic enrolment. This makes OPS the largest single group of institutional investors in the UK and with significant influence over the flow of investments in the economy. Coupled with their long-term investment horizons, this means they are particularly susceptible to the impacts of climate change in the next 5, 10 and 30 years. Conversely, it also means OPS are uniquely placed to invest in the financial opportunities that are emerging, and will continue to emerge, to drive us towards a lower carbon economy.
3. Climate change risks manifest themselves in the form of physical and transition risks. All pension schemes are exposed to these climate-related risks. As with interest rate risk, inflation risk, insolvency risk etc., trustees of occupational pension schemes are bound by their fiduciary duty to act to protect their beneficiaries against risk and deliver them a return

¹ Navigating ESG: a practical guide - <https://www.dcif.co.uk/wp-content/uploads/2018/04/navigating-esg-final-lo-res.pdf>

¹ Leading on Clean Growth (October 2019). [Link](#).

² <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>

³ <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

⁴ Figure 4.1 Purple Book 2019 ([LINK](#)), Table 3.1 TPR Scheme Return ([LINK](#)).

on their savings.

4. The UK is a signatory of the Paris Agreement⁵. In 2019, the Government wrote into law the target of achieving net-zero greenhouse gas emissions by 2050⁶.
5. Trustees of pension schemes need to take into account the risks that are associated with this transition and the investment opportunities that are available to them. The emergence of transition risks and opportunities will inevitably impact the viability of current investments but will also require schemes to set out a strategy – to have a plan – to enable them to navigate the transition to ensure they deliver their members a sustainable retirement income, protected effectively against climate change risks.
6. The Government acknowledges that the impact of COVID-19 on society and the economy has meant that many pension schemes have shifted their focus to the short-term operational challenges, and threats to their funding/investment strategy. The Government is however clear the threat of climate change has not gone away. Indeed, the current crisis has brought into sharp focus the importance of financial resilience and strengthened the case for government intervention.

Rationale for Intervention

Building on existing requirements

7. Trustees of pension schemes must act in the best financial interests of the beneficiaries of the ‘trust’, the scheme members, and deliver an appropriate financial return – this is part of a legal duty known as their ‘fiduciary duty’. Accounting for the risks and opportunities associated with climate change falls within fiduciary duty.
8. A recent consultation on guidance⁷ for trustees to align their scheme with the TCFD recommendations, sets out the three core aspects of fiduciary duty that relate to climate:
 - Exercising investment powers for their proper purpose.
 - Taking account of material financial factors - their duties are not limited to “traditional” factors such as interest rate, exchange rate, or inflation risk.
 - Acting in accordance with the “prudent person” principle –trustees must consider likely future climate scenarios, how these may impact their investments and what a prudent course of action might be as part of their scheme’s risk management framework.
9. In June 2018, the Government consulted on measures to strengthen and clarify the role of fiduciary duty in relation to financially material factors such as climate change and other environmental, social and governance (ESG) factors⁸.
10. In September 2018, the Government then introduced regulations⁹ to require trust-based pension schemes with at least 100 members (and defined contribution ‘DC’ schemes with a default arrangement, irrespective of membership, subject to certain exceptions) to have a

⁵ <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

⁶ <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>

⁷ <https://www.gov.uk/government/consultations/aligning-your-pension-scheme-with-the-tcfd-recommendations>

⁸ Clarifying and strengthening trustees’ investment duties: The Occupational Pension Schemes (Investment and Disclosure) (Amendment) Regulations – <https://www.gov.uk/government/consultations/pension-trustees-clarifying-and-strengthening-investment-duties>

⁹ The Pension Protection Fund (Pensionable Service) and Occupational Pension Schemes (Investment and Disclosure) (Amendment and Modification) Regulations 2018. <https://www.legislation.gov.uk/uksi/2018/988/contents/made>

policy on all ESG factors that it deemed financially material to their investments, including but not limited to climate change. Since October 2019, trustees of DC schemes have been required to publish the policy in the scheme's Statement of Investment Principles (SIP).

11. From October 2020, trustees of DC schemes must also publish an implementation statement alongside their SIP which sets out how they have followed their ESG and climate change policy. Similar requirements will apply to defined benefit schemes (DB) in October 2021.

Response to Government regulation so far

12. Reaction to Government regulation in this area so far has been broadly positive. The pensions law firm Sackers¹⁰ in August 2019 found that 85% had already updated, or would update their SIP for compliance purposes, but that only 13% had made or intended to make material changes to their investments. The Society of Pensions Professionals found¹¹ that for 38% of members, the approach taken by most clients was tick box only, although they also found that 57% thought their clients had a genuine interest in ESG but had simply not changed their portfolio yet.
13. There is therefore evidence to suggest that whilst those who have complied have made significant progress, some trustees have been slower on the uptake and have not made substantial changes to their governance, risk management and strategy processes.
14. The Pensions Regulator (TPR)'s DC schemes survey¹² found that only 21% of schemes took climate change into account when formulating their investment strategies and approaches. From the research conducted by TPR¹³, it is understood that those schemes who have failed to comply so far and are perhaps facing challenges in response to what Government has required them to do, tend to be at the smaller end of the defined contribution market – this has caused the Government to consider phasing the proposals (see Options section).

Improving current level of disclosure

15. In October 2019, the Minister for Pensions and Financial Inclusion wrote to the 40 largest defined benefit (DB) schemes and the 10 largest defined contribution (DC) schemes on the topic of ESG and TCFD. Just 42% of respondents stated that they had produced a TCFD report or had plans to do so in the next year.
16. The rate is likely to be much lower amongst those schemes with fewer than £5bn in assets (for DB) and £1bn in assets (for DC), the approximate threshold for schemes receiving the letters. This suggests that the vast majority of schemes are not yet fully taking into account climate change and disclosing how they have done so to their members and the public.
17. The Government's proposed approach is therefore to ensure that schemes in scope meet a minimum standard in terms of climate change governance and disclosure, by mandating the TCFD recommendations with enforcement powers. This will mean only limited change for the aforementioned 42% of large scheme respondents who already disclose in line with TCFD or are actively planning to do so. For the 58%, and medium-sized schemes who do not already have plans to disclose in line with the TCFD recommendations, these new

¹⁰ Sackers ESG survey for pension schemes –<https://www.sackers.com/app/uploads/2019/09/Sackers-ESG-Survey-Summary-Report.-August-2019.pdf>

¹¹ Putting ESG into practice: the SPP member research series <https://the-spp.co.uk/wp-content/uploads/2020/01/SPP-ESG-report-paper-FINAL-January-2020.pdf>

¹² Defined Contribution trust-based pension schemes research: report of findings on the 2019 survey <https://www.thepensionsregulator.gov.uk/-/media/thepensionsregulator/files/import/pdf/dc-research-summary-report-2019.ashx>

¹³ Defined Contribution trust-based pension schemes research (May 2019). [Link](#).

requirements will help to protect members' benefits and employer liabilities against climate change transition and physical risk and ensure the scheme is well-positioned to take advantage of green investment opportunities.

Options considered

	Do Nothing	Guidance Only	Phased Mandatory TCFD (Preferred)
Governance	Covered by Fiduciary Duty	Covered by Fiduciary Duty	Codified standard in regulation
Strategy	Covered by Fiduciary Duty	Covered by Fiduciary Duty	Codified standard in regulation
Risk Management	Covered by Fiduciary Duty	Covered by Fiduciary Duty	Codified standard in regulation
Metrics and Targets	No requirement	No requirement	Required
Scenario Analysis	No requirement	No requirement	Required
Guidance issued?	No	Yes	Yes (statutory)

Description of other options considered

Do nothing

18. The Government has considered the option of not introducing regulation to require TCFD-compliant disclosures by occupational pension schemes. However, there are several reasons why the 'Do Nothing' option is not preferred.
19. As detailed in Paragraphs 15 to 17, the current take-up of voluntary TCFD disclosures is low and isolated amongst the very largest, most engaged pension schemes. If nothing is done to change the coverage, the majority of pension savers will not be in a scheme that has an effective and transparent system of governance of climate-related risks and opportunities.
20. Choosing not to require occupational pension schemes to disclose in accordance with the TCFD recommendations would also place the sector at odds with the other actors in the investment chain. The Financial Conduct Authority are currently consulting on rules to implement the TCFD recommendations for UK listed companies¹⁴. Given that most UK pension schemes invest significantly in UK listed equities, such a divergence of governance and disclosure requirements would create a patchwork of misaligned regulation through the investment chain.
21. Independent of the rest of the investment chain, without pension schemes taking action to reinforce their investment strategy against the climate risks they have identified, which is one key aspect of the TCFD recommendations, those investments are at risk financially. One

¹⁴ CP20/3: Proposals to enhance climate-related disclosures by listed issuers and clarification of existing disclosure obligations - <https://www.fca.org.uk/publications/consultation-papers/cp20-3-proposals-enhance-climate-related-disclosures-listed-issuers-and-clarification-existing>

particular likely outcome is known as “*stranded assets*”¹⁵, as described in the Pensions Climate Risk Industry Group guidance¹⁶.

22. Ultimately, for defined benefit schemes, this could lead to significant deficits on the balance sheets of the sponsoring employer, or in the case of defined contribution schemes, a material negative impact on returns. Both outcomes could leave savers with lower retirement income, potentially leaving other schemes to support members via increased Pension Protection Fund levy contributions for the Government to support pensioners via state support.

Option 2 – Guidance only

23. The Government has also considered a less comprehensive non-mandatory policy option; issuing further guidance to schemes on how to take into account climate change risks and opportunities.

24. This option, would not confer any new responsibilities or duties on occupational pension scheme trustees. Instead the guidance would be published by the Department with the objective of increasing the standard of governance of climate change as a financial risk in the industry. The basis for the guidance would be similar to that which the Pensions Climate Risk Industry Group (‘PCRIG’) has already consulted on¹⁷.

25. Whilst industry engagement indicates that the guidance would be well received by pension schemes and their advisers, as was seen at the launch of the PCRIG consultation in March 2020, the lack of statutory weight behind the guidance would not be expected to result in the level of compliance and implementation that the policy objective requires.

26. This option would not require trustees to do anything specific in relation to their management of climate change risks and opportunities, beyond complying with their general fiduciary duty. Without regulation, as cited in evidence from responses to the Minister for Pensions and Financial Inclusion’s letters, schemes are not likely to take the necessary action with the necessary urgency and coverage putting pension schemes and savers at risk of loss due to climate change.

27. Whilst schemes adhering to their fiduciary duty already should have effective systems of governance of all financially-material risks, including climate change, there is no clear fiduciary requirement to carry out scenario analysis and the calculation of metrics and targets which are essential to a scheme’s ownership of climate-related risk.

28. Moreover, without mandatory disclosure requirements, the policy objective of ensuring members are aware of their scheme’s processes for managing their exposure to climate-related risks and opportunities would be jeopardised. Only a small number of schemes currently disclose information to their members on their climate risk management process, let alone the emissions of their portfolio or the resilience of the portfolio to future warming scenarios.

¹⁵ <https://carbontracker.org/terms/stranded-assets/>

¹⁶ Page 17 of aligning your pension scheme with the TCFD recommendations.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/877305/aligning-your-pension-scheme-with-the-TCFD-recommendations-consultation-guidance.pdf

¹⁷ Aligning your pension scheme with the TCFD recommendations.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/877305/aligning-your-pension-scheme-with-the-TCFD-recommendations-consultation-guidance.pdf

Preferred Option - Mandatory TCFD by large and medium-sized schemes by 2023

Regulations and Statutory Guidance – TCFD as a Framework

- 29. The preferred option is to use regulations, supported by statutory guidance, to require pension scheme trustees to deliver the TCFD recommendations.
- 30. The guidance would set out an approach that schemes should seek to adopt but allow flexibility where they already have adopted their own approach, meaning no scheme would need to adjust an adequate pre-existing climate framework at significant cost.
- 31. The TCFD framework includes 11 recommendations. These are split into Governance, Strategy, Risk Management and Metrics and Targets.

Core elements of recommended climate-related financial disclosures



Governance

The organisation's governance around climate-related risks and opportunities

Strategy

The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning

Risk Management

The processes used by the organisation to identify, assess and manage climate-related risks

Metrics and Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Governance

- 32. The preferred option seeks to require all occupational pension schemes in scope to disclose in line with TCFD recommendations on governance of climate change risk and opportunities and to carry out the underlying activities which would enable them to do so. Trustees are already required to take into account all financially material risks, including climate change, as part of their fiduciary duty, which therefore necessitates having an effective system for doing so. The assumption in this impact assessment is that all trustees in scope are already complying with pre-existing requirements under their fiduciary duty and have a system for management of financially material climate change risks and opportunities in place.
- 33. The additional requirement in the area of governance applicable to all schemes in scope would come in writing down and disclosing the system of governance of climate change risks and opportunities that the scheme employs.

Strategy & Scenario Analysis

34. The preferred option would require trustees to describe and disclose the climate-related risks and opportunities identified by trustees or management and to describe the impact of these risks and opportunities on the scheme's investment strategy and financial planning.
35. As with governance above, this is something which trustees should already be doing, within the bounds of fiduciary duty – identifying risks and adapting their investment strategy to such risks.
36. Regulations would also require trustees to produce a scenario analysis which considers at least two scenarios, one of which must be a scenario that includes a transition to a world with a temperature rise '2°C or lower' than pre-industrial levels.

Risk Management

37. The preferred option would require schemes to have effective risk management processes in response to identification of significant financially material climate risks, which are uncovered by the strategy requirements described above, and to disclose the process itself. As with governance, all but the disclosure should form part of the scheme's risk management currently, as part of fiduciary duty.

Metrics & Targets

38. A key part of the TCFD recommendations is for organisations to calculate their carbon footprint and use metrics to track their management of climate change risks and opportunities, including through the setting of targets. The preferred option proposes to require that trustees must, as far as they are able, obtain data required to calculate their chosen metrics and disclose their calculations. It is also proposed that they must set at least one target relating to their chosen metrics, measure performance against the target(s) as far as they are able and disclose this information.

Disclosure

39. The preferred option is to require that the TCFD report is published on a publically available website accessible free of charge and that the Annual Report and Accounts must include a link to the website address. Trustees would have a duty to tell members via the annual benefit statement that their TCFD reports have been published, and where they can locate them. We propose to also require trustees to provide TPR with the full website address of the published TCFD report in their annual scheme return.

Penalties

40. The preferred option is for compliance notices, penalties and third-party compliances to generally be administered at TPR's discretion. We are proposing to require that TPR must only issue a mandatory penalty where trustees had produced no TCFD report at all.

Costs and Benefits to Business

Scope of Proposed Measures

41. In line with the Green Finance Strategy¹⁸ commitment, the Government proposes to initially apply these measures to the largest occupational pension schemes, with assets more than £5bn, along with all authorised master trusts¹⁹ and authorised schemes offering collective money purchase benefits²⁰.

42. A year later, the next tranche of medium-sized schemes would follow, those with assets of £1bn or more but less than £5bn. This phased introduction is detailed in Chapter 2 of the Consultation Document. The timeline proposed is as follows:

The Condition	Governance Requirement	Disclosure Requirements	
<i>If</i>	<i>Trustees must meet the climate governance requirements for</i>	<i>Trustees must publish a TCFD report</i>	<i>Trustees must include a link to the TCFD report from</i>
Phase 1 On 1st scheme year to end on or after 1 June 2020, the scheme has assets ≥ £5bn <i>Or</i> On 1 October 2021, the scheme is an authorised master trust <i>Or</i> On 1 October 2021 the scheme is an authorised scheme providing collective money purchase benefits	Current scheme year from 1 October 2021 to end of that scheme year. <i>And</i> [unless scheme is no longer authorised, and assets are <£500m] Next full scheme year to begin after 1 October 2021 to end of that scheme year.	Within 7 months of the end of the scheme year which is underway on 1 October 2021, or by 31 December 2022 if earlier. <i>And</i> Within 7 months of the end of the next scheme year, or by 31 December 2023 if earlier.	The annual report and accounts produced for that scheme year
Phase 2 On 1st scheme year to end on or after 1 June 2021, The scheme has assets ≥ £1bn	Current scheme year from 1 October 2022 to end of that scheme year	Within 7 months of end of that scheme year, or by 31 December 2023 if earlier.	

43. This phased introduction is estimated by The Pensions Regulator (TPR) to currently capture approximately 103 pension schemes, and approximately 42% of all UK pension assets in phase one. The second phase increases the number of schemes in scope of the requirements to a currently estimated 367 schemes, covering approximately 74% of all UK pensions assets and 81% of all UK members²¹.

44. The Government acknowledges that pension savers have little or no choice over the scheme they are in, and the preferred scope and timing approach will mean that the requirement for

¹⁸ <https://www.gov.uk/government/publications/green-finance-strategy>

¹⁹ List of authorised master trusts. <https://www.thepensionsregulator.gov.uk/en/master-trust-pension-schemes/list-of-authorized-master-trusts>

²⁰ In future, as the legal process for establishing authorised CMP schemes in the current Pension Schemes Bill and subject to Parliamentary approval.

²¹ These TPR estimates on the schemes in scope do not include parent, wound-up, non-registerable, gone away schemes, as well as schemes with less than 2 members. Except for DC, where only schemes with 12 or more members were included in the estimates, and also where Micro DC, EPP or DC RSS schemes are also excluded.

effective protection against climate change risks will not apply equally to all pension assets. Therefore, the Government proposes to review the inclusion of smaller schemes in 2024.

Requirements - Costs to Business

Costs to Pension Schemes in Scope

45. During the process of estimating the potential costs to pension schemes, the Department has engaged with the UK pensions industry. This included initial informal roundtable discussions which included a call for estimates of specific elements of compliance costs from those in industry already publishing TCFD reports and carrying out the associated activities, or planning to do so, on a voluntary basis.
46. The elements of costs are divided into:
- familiarisation costs;
 - the costs of completing scenario analysis;
 - the costs of producing TCFD-aligned metrics & targets;
 - the cost of documenting and disclosing their climate change-related practices²²;
 - the cost of uploading and signposting a completed TCFD report.
47. As described in the Governance section above, trustees of pension schemes already have a legal duty to act in the best interests of the beneficiaries of the 'trust', the scheme members – known as their 'fiduciary duty' – and this impact assessment assumes that all trustees are doing so. Therefore costs associated with meeting fiduciary duty are assumed in the baseline, and not double counted in this impact assessment.

Required Activities - Familiarisation

One-off familiarisation cost to schemes in scope for trustees to read guidance and understand the requirements based on the TCFD recommendations.

48. There would be one-off costs to all the scheme trustees to familiarise themselves with the new requirements. A pension scheme in scope will experience these one-off costs on the first year in which they are in scope of the requirements.
49. We assume that it would take all trustees of in-scope schemes approximately 3 hours to read and understand the TCFD requirements & guidance. We have assumed the length of requirements & statutory guidance to total approximately 30 pages. We have estimated that schemes in scope of the proposed requirements will have approximately 3 trustees per scheme²³, with an estimated hourly cost (including overheads) of £29.11 per hour²⁴.

²² Trustees would be required to disclose their existing practices about financially material considerations, which are required already in line with their fiduciary responsibilities to account for and managing financially material risks (such as those associated with Climate Change). However, their existing activities accounting for "financially material risks" will benefit from, and be informed by, the additional Scenario Analysis and Metrics & Targets activities completed. This feedback mechanism helps embed the consideration of climate change into the pre-existing processes carried out under their fiduciary duties.

²³ The Pensions Regulator - Trustee Landscape Quantitative Research, Figure 3.2.2. [Link](#).

²⁴ Based on 2019 Annual Survey of hours and Earnings (ASHE) data for Corporate Managers & Directors. See "Key Assumptions" for further information.

50. These total one-off costs to all schemes in scope are estimated to be £27,000²⁵ in year one of the requirements, and then £69,200²⁶ in year two when the second tranche of schemes are brought into scope and need to familiarise²⁷.

Required Activities - Governance

51. Trustees are already required to take into account all financial material risks, including those posed by climate change, as part of their fiduciary duty²⁸. Codifying the requirement explicitly in regulations may help trustees increase the proficiency of their current climate risk governance. However, the assumption in this impact assessment is that trustees who would be in scope are already complying with pre-existing requirements under their fiduciary duty and have a process for management of climate change risks and opportunities already in place.

52. However, there is an additional requirement in documenting and disclosing the system of governance of climate change risks and opportunities that the scheme employs.

Ongoing cost to schemes in scope to document & disclose their governance of climate-related risks and opportunities.

53. The estimated ongoing costs and activities are comprised of three elements. For *'Collating Information & Drafting Text'* we have allowed for an initial 3 hours plus further drafting (typing) time per typical page length of existing Governance TCFD sections²⁹. This work is to be carried out by an administrator. We allow an additional fixed hour plus further reading time per page to enable the administrator adequate time for *'Proof-Reading & Checking'*. The time of an administrator, using ONS Earnings & Hours Worked 2019 data, is estimated to cost schemes approximately £14.92 per hour (accounting for overheads).

54. We then also allow time for *'Trustee Reading, Discussion & Sign-Off'* for each trustee of a scheme to read through the administrator's work, as well as allowing for an additional hour to enable trustees to discuss the contents (ensuring the disclosure demonstrates how they comply with the new requirements and their pre-existing fiduciary duties) and reach final agreement. We assume the average cost (wages & allowing for overhead costs) of the trustee's time to be £29.11 per hour.

55. The total ongoing costs to pension schemes of this proposed annual requirement is estimated to be approximately £16,500³⁰ in the first year of requirements and £58,800³¹ per year from the second year onwards (once the second tranche of schemes join the initial schemes in scope).

²⁵ Calculations: (3 Hours to Familiarise) * (103 Schemes in Scope) * (3 Trustees Per Scheme in Scope) * (£29.11 Trustee Wage) = £27,000 to the nearest £100.

²⁶ Calculations: ((3 Hours to Familiarise) * (264 Schemes in Scope) * (3 Trustees Per Scheme in Scope) * (£29.11 Trustee Wage) = £69,200 to the nearest £100.

²⁷ See 'Key Assumptions & Sensitivity Analysis' for further details.

²⁸ As detailed in the Consultation document: Trustees have a duty to act in the best interests of pension scheme beneficiaries, as well as acting prudently, conscientiously and with upmost good faith, seeking advice where needed. This duty extends to 'taking account of material financial factors'. Given the nature and likely materiality of the risks posed by climate change, trustees' fiduciary duty requires them to take it into account.

²⁹ Assumed, based on existing TCFD disclosures, to be approximately 1 page of pure text to the nearest page.

³⁰ Calculations: (103 Schemes in Scope) * [(£14.92 Administrator Wage) * (3.2 Collating & Drafting Hours + 1.1 Checking Hours) + (£29.11 Trustee Wage) * (3 trustees per Scheme in Scope) * (1.1 Hours Reading & Sign-Off Time)] = £16,500 to the nearest £100.

³¹ Calculations: (367 Schemes in Scope) * [(£14.92 Administrator Wage) * (3.2 Collating & Drafting Hours + 1.1 Checking Hours) + (£29.11 Trustee Wage) * (3 trustees per Scheme in Scope) * (1.1 Hours Reading & Sign-Off Time)] = £58,800 to the nearest £100.

Required Activities - Strategy

Ongoing reporting cost to schemes in scope to document & disclose strategy activities in relation to climate-related risks and opportunities.

56. This includes reporting on both pre-existing strategic activities, as well as reporting on the newly-required scenario analysis activities (covered below).
57. The costs are again comprised of an administrator spending time completing the necessary ‘Collating Information & Drafting Text’ and ‘Proof-Reading & Checking’ activities, followed by the time for the scheme’s trustees to complete any required ‘Trustee Reading, Discussion & Sign-Off’ activities³².
58. The total ongoing costs to pension schemes of this proposed annual requirement is estimated to be approximately £19,200³³ in the first year of requirements. The total annual ongoing costs to pension schemes are then estimated to be £68,400³⁴ per year from the second year onwards (*once the second tranche of schemes join the initial schemes in scope*).

Required Activities - Scenario Analysis

59. It is proposed that regulations will require trustees³⁵ of schemes in scope to consider at least two scenarios, one of which must be a scenario that includes a transition to a world with average temperatures 1.5 to 2°C warmer than pre-industrial levels. The information and data generated by undertaking these activities would also, importantly, feed back into and help inform other elements of the trustee’s pre-existing decision-making and management processes around the financially-material risks of climate change.
60. Our consultation on mandating the TCFD recommendations, which this impact assessment accompanies, does make clear that trustees can, if they deem fit and suitable for the scheme, conduct qualitative scenario analysis, which is less complex and more exploratory than quantitative scenario analysis. This impact assessment assumes that trustees of schemes in the proposed scope would conduct quantitative scenario analysis as this has already become associated with the TCFD recommendations³⁶ and stakeholders with whom we have had informal discussions on impacts have informed us that they plan to carry it out³⁷.

Ongoing cost to schemes in scope to produce and disclose Scenario Analysis in line with the TCFD requirements

61. The costs of reporting and disclosing this in the ‘Strategy’ section has been accounted for in the Reporting Costs section.

³² This section is assumed, based on existing TCFD disclosures, to be approximately 3 page of pure text to the nearest page.

³³ Calculations: (103 Schemes in Scope) * [£14.92 Administrator Wage) *(3.2 Collating & Drafting Hours + 1.1 Checking Hours) + (£29.11 Trustee Wage) *(3 trustees per Scheme in Scope) *(1.1 Hours Reading & Sign-Off Time)] = £19,200 to the nearest £100.

³⁴ Calculations: (367 Schemes in Scope) * [£14.92 Administrator Wage) *(3.6 Collating & Drafting Hours + 1.3 Checking Hours) + (£29.11 Trustee Wage) *(3 trustees per Scheme in Scope) *(1.3 Hours Reading & Sign-Off Time)] = £68,400 to the nearest £100.

³⁵ As documented and explained in detail in the accompanying Consultation document, the policy of mandatory TCFD is the “as far as trustees are able” approach for Scenario Analysis and Metrics & Targets.

³⁶ <https://www.tcfdhub.org/scenario-analysis/>

³⁷ See ‘Key Assumptions and Sensitivity Analysis’ for further details.

62. We estimate a cost per scheme of £12,000 in a scheme's first year, and £10,800 per scheme per year in following years³⁸ to produce and disclose a quantitative scenario analysis, based on engagement with industry stakeholders. We received information from stakeholders which included estimates of their planned/past cost of carrying out a range of scenario analysis exercises. These estimates contained a range of costs and covered scenario analysis exercises of differing complexity; some included advanced bespoke analysis (e.g. enhanced stress testing) above and beyond the requirements, whereas others estimated the specific costs to comply with the proposed requirements (which were sent to stakeholders along with the request for information). This feedback has informed our estimated costs for a scheme in scope to align with and meet the proposed scenario analysis requirements.
63. The information received from industry ranged from some anticipated scenario analysis exercises budgeted to cost below £5,000, with others at the upper limit of some schemes' estimated ranges (complex, upper-end bespoke modelling and stress testing) being more expensive scenario analysis exercises costing £40,000 and £50,000 respectively. The majority of the estimates, and those where the described activities most aligned with the activities required, were between £10,000 and £17,000.
64. Proportionate sensitivity analysis of these unit costs³⁹ have been considered in the 'Key Assumptions & Sensitivity Analysis' section, and like the central estimates have been informed by the feedback received from industry engagement. The key elements of these costs are expected to relate to the sourcing and acquisition of the required information from relevant parties, along with the relevant staff time of the relevant analyst/expertise in carrying out and explaining the analysis.
65. Whilst these costs account for a suitable quantitative scenario analysis compliant with our proposed requirements, the Department acknowledges that there could be higher costs for schemes that may voluntarily go over and above the requirements.
66. In line with these unit costs, and the proposed gradual rollout of schemes in scope, the total cost to all schemes in scope is estimated at £1,236,000⁴⁰ in year one, £4,280,400⁴¹ in year two and then an annual £3,963,600⁴² ongoing cost from year three onwards.

Required Activities - Risk Management

67. The proposals require schemes to have effective risk management processes in response to significant financially material climate risks. All but the disclosure should form part of the scheme's risk management currently, as part of fiduciary duty and this impact assessment assumes this to be the case.

Ongoing reporting cost to schemes in scope to document and disclose their Risk Management activities of climate-related risks.

³⁸ See 'Key Assumptions and Sensitivity Analysis' for further details.

³⁹ Scenario Analysis Unit Costs Estimate Sensitivity Analysis: The Upper Limit Estimate of a compliant scenario analysis was £17,500 in the first year, and £15,750 in ongoing years. The Lower Limit Estimate of a compliant scenario analysis exercise £8,000 in the first year and £7,200 in ongoing years.

⁴⁰ Calculations: (103 Schemes in Scope) * (£12,000 Estimated Unit Cost) = £1,236,000 to the nearest £100.

⁴¹ Calculations: (103 Schemes in Scope) * (£10,800 Estimated Unit Cost) + (264 Schemes in Scope) * (£12,000 Estimated Unit Cost) = £4,280,400 to the nearest £100.

⁴² Calculations: (367 Schemes in Scope) * (£10,800 Estimated Unit Cost) = £3,963,600 to the nearest £100.

68. The costs are once again comprised of an Administrator spending time completing the necessary ‘Collating Information & Drafting Text’ and ‘Proof-Reading & Checking’ activities, and then followed by the time for the Scheme’s Trustees to complete any required ‘Trustee Reading, Discussion & Sign-Off’ activities⁴³.
69. The total ongoing costs to pension schemes of this annual requirement is estimated to be approximately £17,800⁴⁴ in the first year of requirements and £63,600⁴⁵ per year from the second year onwards once the second tranche of schemes join the initial schemes in-scope.

Required Activities - Metrics & Targets

70. The proposal would require schemes to calculate an emissions-related metric [broadly, their carbon footprint] and use other metrics to track their management of climate change risks and opportunities. Separately, it is proposed that trustees must set a target for at least one of their metrics and disclose it. It is also proposed that they must measure performance against the target(s) as far as they are able and disclose that information.
71. Trustees would be required to obtain data, importantly, as far as they are able, on emissions and another non-emissions-based climate change characteristic, calculate at least two metrics, and set a target for at least one of these metrics.
72. To support the effectiveness of the “as far as trustees are able” approach⁴⁶, the Government proposes that statutory guidance will expect trustees to explain why any metrics they have chosen to disclose do not fully cover the portfolio or extend to include all of a firm’s emissions.

Ongoing cost to schemes in scope to produce and disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

73. Engagement with industry stakeholders resulted in an estimated costs per scheme of £2,500 in the first year, and £2,250 per scheme per year in subsequent years⁴⁷. Proportionate sensitivity analysis of these unit costs have been considered in the ‘Key Assumptions & Sensitivity Analysis’ section, and like the central estimates have been informed by the feedback received from industry engagement. The key elements of these costs are expected to relate to the sourcing and acquisition of the required information from relevant parties, along with the relevant staff time of collating and analysing the relevant information.
74. Engagement with stakeholders has told us that trustees are sometimes able to obtain the data for free – this is typically due to pre-existing contractual arrangements with third parties who would produce these metrics for them. Where necessary, some small payment may be reasonable. However, the exact proportion of schemes which have such arrangements in place is unclear (it appears to be a minority) and would be difficult to robustly estimate. To appropriately account for the total costs to all businesses (whether costs are borne by a pension scheme or passed on to another firm in the supply chain) the Department has not

⁴³ Assumed, based on existing TCFD disclosures, to be approximately 2 page of pure text to the nearest page.

⁴⁴ Calculations: (103 Schemes in Scope) * [£14.92 Administrator Wage) *(3.4 Collating & Drafting Hours + 1.2 Checking Hours) + (£29.11 Trustee Wage) *(3 trustees per Scheme in Scope) *(1.2 Hours Reading & Sign-Off Time)] = £17,800 to the nearest £100.

⁴⁵ Calculations: (367 Schemes in Scope) * [£14.92 Administrator Wage) *(3.4 Collating & Drafting Hours + 1.2 Checking Hours) + (£29.11 Trustee Wage) *(3 trustees per Scheme in Scope) *(1.2 Hours Reading & Sign-Off Time)] = £63,600 to the nearest £100.

⁴⁶ As detailed and explained in the Consultation document, some requirements about metrics and targets subject to an “as far as trustees are able” approach. This acknowledges the potential hurdles to calculation and disclosure of metrics that represent fully the entire portfolio.

⁴⁷ See ‘Key Assumptions and Sensitivity Analysis’ for further details.

included instances where obtaining relevant data does not cost a scheme due to existing arrangements when estimating an appropriate range of unit costs for Metrics & Targets. This approach is taken so as not to risk underestimating total costs to business.

75. In line with these unit costs, and the gradual rollout of schemes in scope, the total cost to all schemes in scope would be approximately £257,500 in year one, £891,800 in year two and then an annual £825,800 ongoing cost from year three onwards.

Ongoing reporting cost to schemes in scope to disclose their calculated metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

76. The costs are once again comprised of an Administrator spending time completing the necessary 'Collating Information & Drafting Text' and 'Proof-Reading & Checking' activities, and then followed by the time for the Scheme's Trustees to complete any required 'Trustee Reading, Discussion & Sign-Off' activities⁴⁸.

77. The total ongoing costs to pension schemes of this proposed annual requirement is estimated to be approximately £17,800⁴⁹ in the first year of requirements (*when only the first tranche of the largest pension schemes are in scope*). The total annual ongoing costs to pension schemes are then estimated to be £63,600⁵⁰ per year from the second year onwards (*once the second tranche of schemes join the initial schemes in scope*).

Required Activities - Publishing and Signposting

Ongoing cost to schemes in scope to upload the report & reference it in their Annual Report

78. This relates to costs associated with an in-scope scheme's staff member's time to upload the completed TCFD report to the scheme's website or the website of the sponsoring employer, as well as the time of an administrator to add a reference or link to the TCFD report in the scheme's Annual Report⁵¹.

79. The total ongoing costs to pension schemes of this annual requirement is estimated to be approximately £800⁵² in the first year of requirements (*when only the first tranche of the largest pension schemes are in scope*). The total annual ongoing costs to pension schemes are then estimated to be £2,700⁵³ per year from the second year onwards (*once the second tranche of schemes join the initial schemes in scope*).

Indirect Costs to Pension Schemes

80. Increased transparency-enabled scrutiny as well as comparability between pension schemes in scope may result from standardised, widespread TCFD-reporting. Therefore, in practice some pension schemes may choose to go above-and-beyond their pre-existing fiduciary requirements. This would be a choice made by trustees of individual schemes, not

⁴⁸ Assumed, based on existing TCFD disclosures, to be approximately 2 page of pure text to the nearest page.

⁴⁹ Calculations: (103 Schemes in Scope) * [£14.92 Administrator Wage] * (3.4 Collating & Drafting Hours + 1.2 Checking Hours) + (£29.11 Trustee Wage) * (3 trustees per Scheme in Scope) * (1.2 Hours Reading & Sign-Off Time)] = £17,800 to the nearest £100.

⁵⁰ Calculations: (367 Schemes in Scope) * [£14.92 Administrator Wage] * (3.4 Collating & Drafting Hours + 1.2 Checking Hours) + (£29.11 Trustee Wage) * (3 trustees per Scheme in Scope) * (1.2 Hours Reading & Sign-Off Time)] = £63,600 to the nearest £100.

⁵¹ Allowing 30 minutes in total (10 minutes to upload a completed document and 20 minutes to add a reference to the existing Annual Report).

⁵² Calculations: (103 Schemes in Scope) * [£14.92 Administrator Wage] * (0.17 Uploading Hours + 0.33 Drafting Hours) = £800 to the nearest £100.

⁵³ Calculations: (367 Schemes in Scope) * [£14.92 Administrator Wage] * (0.17 Uploading Hours + 0.33 Drafting Hours) = £2,700 to the nearest £100.

a regulatory requirement and is thus not costed in this impact assessment. Similarly, on the Metrics & Targets activities, some schemes may want to be ambitious and disclose metrics that are not constrained by the proposed “as far as they are able” approach but that fully cover the portfolio, possibly relying on estimation where data gaps exist. This kind of innovation is welcomed, but would not form a requirement on schemes.

Costs and Benefits to Other Affected Parties

81. The potential benefits of the proposed requirements are discussed qualitatively. At this stage it would be disproportionate to estimate these potential benefits quantitatively so they have not been estimated, nor included in the *Total Net Present Social Value* calculation.

Benefits to Scheme Members

Increased Climate Change-Related Information Informing the Trustees Managing Their Respective Pensions

82. Requiring the schemes in scope to undertake additional TCFD-recommended activities (notably around scenario analysis and the generation of metrics and targets) would generate crucial information and data that can feed back into the trustees’ existing management of the financially-material risks of climate change. The increased availability and quality of climate-related information is likely to lead to better, evidence-based climate-related decision-making by trustees. This ultimately reduces the exposure/likelihood of scheme members experiencing climate change-related losses of pension value (stranded assets etc.) and this subsequently improves their expected outcomes in retirement.

83. Schemes with better information, insights and data (generated by scenario analysis and metrics & targets activities) feeding into their governance and management practices around climate change may also be better positioned to take advantage of emerging investment opportunities linked to the transition to a lower carbon economy. For example, a scheme that now understands that they are extremely exposed to assets which are likely to become stranded in the future due to reduced economic dependency on fossil fuels, may seek to invest instead in companies that depend more on the emergence of alternative energies such as electric vehicle manufacturers. Without an effective strategy on climate change and decision-useful scenario analysis, this kind of decision would be made without the necessary scheme-relevant information. Therefore, these proposals could reduce the risk of members being in schemes that miss out on any such opportunities for a sustainable income stream in future, and subsequently reduce the risk of any such opportunity cost from foregone returns.

Pension Schemes Potentially Choosing to Improve Climate-Related Practices: Transparency-Enabled Scrutiny & Industry Peer Learning

84. Over time schemes may choose voluntarily to improve their own climate change-related governance practices. This could be due to reasons of ‘*transparency-enabled scrutiny*’ as well as ‘*industry peer learning*’ due to the proposed staggered introduction of the requirements.

85. The transparency-enabled scrutiny ensured by the disclosure requirements of the proposed regulations would enable the climate change-related governance, strategy and risk management practices of in scope pension schemes to be compared and contrasted with one another. This comparability may result in schemes in the longer term seeking to learn from – or indeed compete with – one another and become industry leaders in their practices

relating to accounting for and managing the risks of climate change. Schemes making such choices would ultimately benefit their members whose expected retirement outcomes could improve as a result of being members of a scheme with more robust measures in place to protect their pension pots from the risks of climate change.

86. The proposed staggered approach of introducing the TCFD requirements could also lead to the emergence of industry-wide governance standards regarding climate change being improved voluntarily, which would be to the ultimate benefit of smaller schemes and their members who come within the scope of these requirements later. The reason for this is because the staggered approach would see the pensions schemes most likely to go above the minimum requirements disclosing their TCFD reports first. These schemes may 'set the bar', meaning that subsequent schemes preparing to come into scope later may learn from and try to follow 'above-and-beyond' exemplary measures taken by Phase 1 schemes around climate change governance. If industry peer-learning and example-setting of the first tranche of schemes ends up influencing smaller schemes to adopt more rigorous climate change-related governance practices, this can ultimately benefit the members of these schemes through improved expected retirement outcomes due to potentially reduced exposure to financially-material climate risk.

Improved Transparency & Potential Engagement with their Pensions

87. Another benefit for members of schemes in scope stems from the disclosure and transparency element of the proposed requirements. Research suggests that people care about the impact that their money has on society and the environment⁵⁴, and the Pension Policy Institute's report in 2018⁵⁵ found evidence that member engagement in ESG factors is increasing significantly. Therefore, pension scheme members may benefit from the additional transparency due to increased awareness of (and ability to scrutinise) how their scheme is investing and managing risks with respects to an issue - in climate change – that many of them care about.

Costs to Regulator

88. The Pensions Regulator (TPR) would be responsible for monitoring and enforcing compliance with the proposed requirements. We have engaged with TPR and plan to work with them to robustly estimate the cost and impact on them ahead of introduction of any secondary legislation.
89. It is proposed that schemes in scope of these TCFD requirements would be required to report to TPR the web address of where they have published their TCFD report via the annual scheme return form, along with locations of the published Statement of Investment Principles, the Implementation Statement and published excerpts of the Chair's Statement
90. We also propose that complete failure to publish any TCFD report is appropriate for a mandatory penalty. Other penalties would be subject to TPR discretion.

Wider Economic and Societal Impacts

91. The key potential societal benefits stem from the fact that UK occupational pension schemes are investors of significance to the UK economy, although it should be noted that the

⁵⁴ Navigating ESG: a practical guide - <https://www.dcf.co.uk/wp-content/uploads/2018/04/navigating-esg-final-lo-res.pdf>

⁵⁵ PPI - 'ESG: past, present and future'

Government has made it clear during debates in the House of the Lords that the climate change provisions within the Pension Schemes Bill cannot be used to direct pension scheme investment – investment decisions are solely the responsibility of trustees.

92. However recent research by the International Monetary Fund has specifically identified that global equity prices do not reflect future climate risk⁵⁶, and it is likely that the risks and opportunities associated with climate change are unlikely to have been fully priced-in by the market^{57,58}. It is possible that as a result of these proposed requirements, the increased salience of climate change as a risk to current valuations and the outcomes from climate-related scenario analysis (feeding into the decision making process of trustees) may result in some trustees wishing to divest on financial materiality grounds from higher carbon firms or sectors where they believe that stewardship has been or will be unsuccessful. They may also divest on non-financial grounds within the narrow range of circumstances identified by the Law Commission in their two-stage test⁵⁹.
93. The proposed disclosure requirements for TCFD also increase transparency and comparability between pension schemes and their climate-related practices, and some schemes in this new environment of transparent reporting on climate change risk may seek to establish themselves as an industry leader in considering climate change in its investment decisions and wider practices.
94. The proposed requirements can lead to increased transparency-enabled scrutiny and better embedded considerations around the financially material risks of climate change in trustee decision making and investment strategies. As a result, it may be that after more robustly accounting for these physical and transition risks of climate change, trustees are in a better position to invest and benefit from the potential emergence of low carbon opportunities. This potential switching away from higher carbon firms and sectors and towards greener alternatives may have wider societal impacts over time by averting potential negative spill over effects/externalities of such higher-carbon firms' and sectors' contribution to atmospheric greenhouse-gas levels and any associated climate change related costs to wider society.
95. One final wider economic and societal impact of these requirements is that if pension funds are viewed by their members to be more actively sustainable institutions on climate change, an issue on which there is evidence of member interest, then this may lead to increased engagement by members. Increased member engagement could mean a reduced likelihood of opting out over time, or more active consideration around optimal rates of contribution. Over time, this increased engagement by some members with their pensions and savings may result in more effective consumption smoothing and associated welfare effects⁶⁰. Any increased consumption in retirement could also result in knock-on impacts to healthcare if this cohort of retirees are in better health due to higher, better smoothed consumption/a higher material standard of living.

⁵⁶ International Monetary Fund. Global Financial Stability Report on Climate Change: Physical Risk and Equity Prices - <https://www.imf.org/en/Publications/GFSR/Issues/2020/04/14/global-financial-stability-report-april-2020#Chapter5>

⁵⁷ <https://climateactiontracker.org/global/temperatures/>

⁵⁸ All Swans are Black in the Dark: how the short-term term focus of financial analysis does not shed light on long term risks - <https://www.genfound.org/media/1383/all-swans-are-black-in-the-dark.pdf>

⁵⁹ "Is it always about the money? Pension trustees' duties when setting an investment strategy: Guidance from the Law Commission. [Link](#).

⁶⁰ Impact Assessment of the Pensions Bill (2008). [Link](#).

Key Assumptions and Sensitivity Analysis

General Assumptions

- The number of schemes in scope, is assumed to remain broadly similar over the appraisal period.
 - Master Trusts are already in scope of the proposed requirements, so any Master Trusts forecast to pass the £1billion AUM threshold over the appraisal period are already accounted for and thus would not impact the number of schemes in scope.
 - The sensitivity of the schemes in scope, and this assumption more generally, has also been checked against TPR estimates assessing the number of schemes marginally either side of the £1bn AUM threshold at present.
- It is assumed that trustees of the schemes in scope conduct quantitative scenario analysis.
 - The Government's proposals mirror the recommendations of the TCFD in allowing instances where schemes conduct qualitative scenario analysis if they are unable to source sufficient expertise, data etc. to quantitatively model the impact of future warming scenarios on their portfolio and/or investment strategy. However, this is not assumed to be of relevance given the nature of schemes in scope of these proposals at this time (large occupational pension schemes and authorised Master Trusts). It may be more likely to be a consideration in 2024 when it is proposed to consider the potential extension to smaller pension schemes.
- We assume there will be a 10% decrease in the cost of conducting Scenario Analysis, and also of producing Metrics & Targets, after each scheme's first year of completing these activities. This is based on engagement with industry and accounts for the required infrastructure and arrangements being in place from the previous (first) year of completion, as well as a result of other experience-related efficiencies. However, we assume, in line with engagement with industry, that the unit cost of an appropriate scenario analysis & metrics and targets from the second year onwards remains the same (i.e. no assumed further, year-on-year efficiencies).
- We have assumed an average cost of an hour of time for a Trustee is £29.11 per hour, this is based on 2019 Annual Survey of hours and Earnings (ASHE) data for Corporate Managers & Directors⁶¹.
 - The median hourly gross pay for corporate managers and directors is £22.92 in Table 2.5. This is uplifted by 27% for overheads from the previous version of the Green Book, no updated estimate is available.
- Similarly, we have assumed an average cost of an hour of time for an Administrator is £14.92, this is based on 2019 Annual Survey of hours and Earnings (ASHE) data for Administrative Occupations.
 - The median hourly gross pay for administrative occupations is £11.75 in Table 2.5. This is uplifted by 27% for overheads from the previous version of the Green Book, no updated estimate is available.
- We also assume approximately 3 trustees per relevant scheme, based on calculations using TPR data on '*Number of Trustees – by scheme size*'⁶².
- For familiarisation costs we assume a reading time of 6 minutes per page for Trustees.

⁶¹ 2019 Annual Survey of hours and Earnings (ASHE). [Link](#).

⁶² The Pensions Regulator - Trustee Landscape Quantitative Research, Figure 3.2.2. [Link](#).

- For Reporting Costs, the 'drafting/typing' time elements are calculated using an assumed typing speed of 52 Words per Minute⁶³.

Sensitivity Analysis

One-off familiarisation cost to schemes in scope for trustees to read guidance and understand the requirements based on the TCFD recommendations.

96. When allowing for sensitivity around the required time assumptions of 50 per cent the one-off cost decreases to £13,500 in Year One and £34,600 in Year Two, or increases to £40,500 in Year One and £103,700 in Year Two.
97. When assuming, for sensitivity, only 1 trustee per scheme familiarising with the requirements, this decreases the one-off cost to £9,000 in Year One and £23,100 in Year Two.

Ongoing cost to schemes in scope to document & disclose their governance of climate-related risks and opportunities.

98. When allowing for sensitivity around the required time assumptions of 50 per cent the one-off cost decreases to £8,200 in year one and £29,400 for year two onwards. Whereas a 50% increase in time required would see the total costs to schemes increase to £24,700 in year one and £88,100 for year two onwards.

Ongoing reporting cost to schemes in scope to document & disclose strategy activities in relation to climate-related risks and opportunities.

99. When allowing for sensitivity around the required time assumptions of 50 per cent the one-off cost decreases to £9,600 in year one and £34,200 for year two onwards. Whereas a 50% increase in time required would see the total costs to schemes increase to £28,800 in year one and £102,600 for year two onwards.

Ongoing cost to schemes in scope to produce and disclose Scenario Analysis in line with the TCFD requirements

100. Based on discussions and feedback from the pensions industry, including those already completing TCFD-compliant reports voluntarily, we have produced both a central estimate and accompanying upper & lower estimates for the task of conducting a TCFD-compliant Scenario Analysis exercise.
101. We allow for sensitivity around the scenario analysis unit cost estimate. These estimates are based on pensions industry feedback on costs related to existing TCFD reports or planned TCFD reports. The upper limit cost per scheme of completing appropriate scenario analysis is estimated at £17,500 in the first year and £15,750 from the second year onwards. In this instance, the subsequent total cost to all schemes in scope is approximately £1,802,500 in Year One, £6,242,300 in Year Two and then an annual £5,780,300 ongoing cost from Year Three onwards.
102. The lower limit cost per scheme of completing appropriate scenario analysis is estimated at £8,000 in the first year and £7,200 from the second year onwards. In this instance, the subsequent total cost to all schemes in scope is approximately £824,000 in Year One, £2,853,600 in Year Two and then an annual £2,642,400 ongoing cost from Year Three onwards.

⁶³ Dhakal, V., Feit, A., Kristensson, P.O. and Oulasvirta, A. 2018. 'Observations on typing from 136 million keystrokes.' (CHI 2018). ACM Press. [Link](#)

Ongoing reporting cost to schemes in scope to document and disclose their Risk Management activities of climate-related risks.

103. When allowing for sensitivity around the required time assumptions of 50 per cent the one-off cost decreases to £8,900 in Year One and £31,800 for year two onwards. Whereas a 50% increase in time required would see the total costs to schemes increase to £26,800 in year one and £95,300 for Year Two onwards.

Metrics & Targets

Ongoing cost to schemes in scope to produce and disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

104. Based on discussions and feedback from the pensions industry, including those already completing TCFD-compliant reports voluntarily, we have produced both a central estimate and accompanying upper & lower estimates for the task of calculating or obtaining appropriate TCFD-relevant Metrics & Targets for their respective portfolios.

105. As with the scenario analysis cost estimates, we assume there will be a 10% decrease in the cost per scheme after the first year, to account for the required infrastructure being in place from the year before, as well as other experience-related efficiencies. However, we again assume no further efficiency gains from the second year onwards.

106. After having engaged with the pensions industry, we estimate a cost of approximately £2,500 for a Pension Scheme to complete a TCFD-appropriate scenario analysis in the first year, and £2,250 from their second year onwards. This total cost to all schemes in scope is approximately £257,500 in Year One, £891,800 in Year Two and then an annual £825,800 ongoing cost from Year Three onwards.

107. We allow for sensitivity around the scenario analysis unit cost estimate. These estimates are based on pensions industry feedback on costs related to existing TCFD reports or planned TCFD reports. The upper limit cost per scheme of completing appropriate scenario analysis is estimated at £5,000 in the first year and £4,500 from the second year onwards. In this instance, the subsequent total cost to all schemes in scope is approximately £515,000 in Year One, £1,783,500 in Year Two and then an annual £1,651,500 ongoing cost from Year Three onwards.

108. The lower limit cost per scheme of completing appropriate scenario analysis is estimated at £1,500 in the first year and £1,350 from the second year onwards. In this instance, the subsequent total cost to all schemes in scope is approximately £154,500 in Year One, £535,100 in Year Two and then an annual £495,500 ongoing cost from Year Three onwards.

Ongoing reporting cost to schemes in scope to disclose their calculated metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

109. When allowing for sensitivity around the required time assumptions of 50 per cent the one-off cost decreases to £8,900 in year one and £31,800 for year two onwards. Whereas a 50% increase in time required would see the total costs to schemes increase to £26,800 in year one and £95,300 for year two onwards.

Ongoing cost to schemes in scope to upload the report & reference it in their Annual Report

110. The final task of 'Uploading Completed Report to Scheme/Sponsor Website' is estimated to take approximately 10 minutes (0.17 hours). We have also allowed for 20 minutes (0.3 hours) for the task of adding a referring line/link to the scheme's existing Annual Report. This work is to be carried out by an Administrator. The time of an administrator, based on calculations using ONS Earnings & Hours Worked 2019 data, is estimated to cost Schemes approximately £14.92 per hour (once accounting for overheads).
111. When allowing for sensitivity around the required time assumptions of 50, the ongoing total cost decreases to £400 in year one and £1,400 for year two onwards. Whereas a 50% increase in time required would see the total costs to all schemes in scope increase to £1,200 in year one and £4,100 for year two onwards.

Accounting for pension schemes in scope already completing elements of the proposed requirements on a voluntary basis

112. Through engagement with industry, there is evidence to suggest that there are pension schemes that are already completing aspects of the proposed new requirements and producing TCFD reports already on a voluntary basis.
113. This is supported by evidence from October 2019 sent by the Minister for Pensions and Financial Inclusion to the 40 largest defined benefit schemes (each with more than £5bn in assets) and the 10 largest defined contribution schemes (each with £1bn or more in assets). Responses showed that 42% of respondents had already reported in line with TCFD or planned to in the next year
114. Similarly, evidence from reporting by UK asset owners to the Principles for Responsible Investment⁶⁴ earlier this year showed that more than 50 of its signatories – many of them large pension schemes – were reporting on TCFD-based indicators.
115. It would not be proportionate to look into the individual voluntarily-published TCFD reports from pension schemes envisaged to be in scope to assess their described activities against each of the Government's proposed requirements just in order to reduce different cost elements in any EANDCB calculations. Especially as it is not thought that the majority of voluntary TCFD disclosures will include a scenario analysis conducted in line with these proposed requirements (a key driver of total costs), and that any costs 'already being done by schemes voluntarily' that could be 'chalked off' would be related to the smaller Reporting and Disclosure cost elements of the other proposed requirements.
116. Furthermore, the evidence around existing activities being undertaken on a 'voluntary' basis may also be the result of anticipation effects, given both Government announcements such as in the expectation in the Green Finance Strategy⁶⁵ as well as more general engagement between government and the pensions industry. Elements of the proposed requirements being completed prior to regulation due to anticipation effects would not be appropriate to subsequently 'chalk off' when estimating the costs to business.
117. However, for sensitivity purposes we do investigate the EANDCB's downwards sensitivity when factoring in that some of schemes in scope are completing different elements of the TCFD report and activities. Estimates of the specific nature of these activities, such as whether a TCFD report includes a scenario analysis (and if it specifically includes a scenario

⁶⁴ UNPRI. [Link](#).

⁶⁵ The Green Finance Strategy was published in July 2019, in which the Government expectation for all listed companies and large asset owners to disclose in line with the TCFD recommendations by 2022. Including the consideration around whether to mandate. [Link](#).

with an increase of under 2°C) are based on PRI estimates⁶⁶ about their signatories (including pension schemes as well as other organisations).

118. It is assumed that PRI-signatory pension schemes in scope are undertaking similar TCFD and climate-related activities as other PRI-signatory organisations (e.g. PRI-signatory investment managers). 21 UK pension schemes (19 of which would be expected in the first tranche of schemes coming into scope) are identified as PRI-signatories and therefore expected to already be undertaking elements of the costs associated with the new proposed government requirements. Once factoring these activities into the costs to business estimates (and ignoring potential anticipation effects), this would see the Net Direct Cost to Business Per Year decrease to £4.6m per annum.
119. As well as PRI-signatory schemes, and based on aforementioned industry engagement, for the purposes of sensitivity analysis, it can be assumed that potentially as many as 35 of the largest UK pension schemes (within the estimated first tranche of 103 schemes) may be producing TCFD reports and undertaking elements of these newly proposed requirements already. Of the estimated 264 'second tranche' of schemes to come into scope, it might also be assumed for the purposes of this sensitivity analysis that an additional 20 of these schemes may also be similarly undertaking these activities on a voluntary basis. If the activities of these schemes (e.g. the proportions undertaking scenario analysis within their TCFD activities) are assumed to be similar to those of the subset of PRI-signatory schemes, then once factoring in these activities into the costs to business estimates (and ignoring potential anticipation effects) the Net Direct Cost to Business Per Year decreases to £4.5m per annum.
120. The consideration of these sensitivities around voluntary activities being completed already is because it is particularly important to consider costs to business in the current economic conditions. Therefore some of these requirements may not represent a 'new' cost to some schemes already completing such activities by choice.
121. We would welcome further information from pension schemes in scope of the proposed requirements to feedback which elements of the specific activities costed in this impact assessment that they are already completing voluntarily (e.g. completing a TCFD report/ conducting a scenario analysis/calculating relevant metrics). The feedback of any further information should be provided via the consultation process.

Small and Micro Business Assessment

122. As detailed in "Scope of Proposed Measures", the introduction of TCFD requirements are proposed to take place in a phased two-stage approach beginning with the occupational pension schemes that can be expected to have the resources in place to allow them to implement and report in line with the TCFD requirements most readily.
123. The proposed approach to include all Master Trusts at the earlier stage (including those with below £1bn total asset value), without a gradual approach by value of assets under management, is driven by a desire to ensure a level playing field amongst master trusts. The authorisation procedure requires Master Trusts to have a given level of governance capability – by having met such tests, all Master Trusts should be able to embed the TCFD framework and make the necessary disclosures more easily than some other schemes. There is a strong argument for ensuring a level playing field across all master trusts and

⁶⁶ "PRI climate snapshot 2020", July 2020. [Link](#).

ensuring that schemes implementing enhanced climate governance and reporting on TCFD are not undercut by, say, smaller exempt schemes taking an approach which does not take full account of climate considerations and exposes members to unnecessary risk.

124. The Government acknowledges that pension savers have little or no choice over the scheme they are in, and the preferred scope and timing approach will mean that the requirement for effective protection against climate change risks will not apply equally to all pension assets. Therefore, the Government proposes to review the inclusion of smaller schemes in 2024.
125. The Government proposes that it will take stock in 2024 and consult more widely again before extending to schemes with < £1bn in assets, taking account both of the quality of climate risk governance and associated disclosures carried out to date, and the current and future costs of compliance.

Monitoring and Evaluation

126. The Pensions Regulator (TPR) would be responsible for monitoring and enforcing compliance with these proposed requirements. The schemes in scope would be required to report to The Pensions Regulator (TPR).
127. With regards to evaluating the impacts of the proposed measures, the Government proposes a review in 2024. This would provide an opportunity to examine the emerging effects of the measures and any unintended consequences. It is proposed that this would include an assessment of whether the key “as far as trustees are able” requirements can be replaced with stronger requirements on data collection, in light of any development of capabilities by others in the sector and the economy more widely.
128. Should the proposed measures be adopted, the Government also proposes to consult more widely again in 2024 before extending them to schemes with < £1bn in assets, taking account both of the quality of climate risk governance and associated disclosures carried out to date, and the current and future costs of compliance.

Summary of Total Costs

Table 1.1: One-off costs for tranche one schemes in scope to understand and familiarise themselves with the guidance, and ongoing costs to complete TCFD-aligned disclosure and reporting requirements, scenario analysis and activities around the production of metrics and targets.

All figures in 2019/20 prices, rounded to the nearest £1000.

<u>Type Of Cost</u>	<u>Scheme Volumes</u>	<u>Cost – Year One</u>	<u>Cost – Year Two</u>	<u>Cost – Year Three & Onwards</u>	<u>Frequency</u>	<u>Assumptions and Rationale</u>
One-Off Costs - Familiarisation	103 in Year One 264 in Year Two	£27,000	£69,000	£0	Once per scheme (year one or two depending on rollout)	Assumed all trustees of a scheme in scope are required to familiarise and understand the requirements.
Ongoing - Reporting & Disclosure Costs ¹	103 in Year One 367 in Year Two and Onwards	£71,000 ²	£254,000 ³		Yearly Once in Scope	As detailed in “Key Assumptions and Sensitivity Analysis” section. Assumptions on time required for Collating, Drafting & Checking by an Administrator. As well as discussion and reading time by Trustees.
Ongoing – Completion and Disclosure of Scenario Analysis	103 in Year One 367 in Year Two and Onwards	£1,236,000	£4,280,000	£3,964,000	Yearly Once in Scope	As detailed in “Key Assumptions and Sensitivity Analysis” section. An assumed one-off 10% decrease in cost for a scheme completing a Scenario Analysis for the second time and onwards.
Ongoing – Production of Metrics & Targets	103 in Year One 367 in Year Two and Onwards	£258,000	£892,000	£826,000	Yearly Once in Scope	As detailed in “Key Assumptions and Sensitivity Analysis” section. An assumed one-off 10% decrease in cost for a scheme producing relevant Metrics and Targets for the second time and onwards.

¹ (Reporting & Disclosure Costs) = (Governance Reporting & Disclosure Costs) + (Strategy Reporting & Disclosure Costs) + (Risk Management Reporting & Disclosure Costs) + (Metrics & Targets Reporting & Disclosure Costs)

² (£71,000) = (£17,000 for Governance) + (£19,000 for Strategy) + (£18,000 for Risk Management) + (£18,000 for Metrics & Targets). Figures may not sum to total due to rounding.

³ (£254,000) = (£59,000 for Governance) + (£69,000 for Strategy) + (£64,000 for Risk Management) + (£64,000 for Metrics & Targets). Figures may not sum to total due to rounding.

Ongoing – Uploading & Signposting Completed Report	103 in Year One 367 in Year Two and Onwards	£1,000	£3,000	Yearly Once in Scope	Assumed time required for an administrator to upload a document. Assumed schemes in scope (or sponsoring employers) will already have a website.
Total Cost	£1,593,000 in Year One; £5,499,000 in Year Two and £5,047,000 in Year Three & Onwards.				

Summary of Total Costs – Sensitivity Analysis (Upper and Lower Estimates)

Table 1.2: Summary of the upper and lower cost estimates of each cost element, detailed in Table 1.1, as detailed in the ‘Sensitivity Analysis’ section.

All figures in 2019/20 prices, rounded to the nearest £1000.

<u>Type Of Cost</u>	<u>Scheme Volumes</u>	<u>Cost – Year One</u>	<u>Cost – Year Two</u>	<u>Cost – Year Three & Onwards</u>	<u>Frequency</u>	<u>Assumptions and Rationale</u>
One-Off Costs - Familiarisation	103 in Year One 264 in Year Two	Lower: £14,000 Upper: £41,000	Lower: £35,000 Upper: £104,000	Lower: £0 Upper: £0	Once per scheme (year one or two depending on rollout)	Allowing for sensitivity around the required time assumptions of 50 per cent.
Ongoing - Reporting & Disclosure Costs ⁴	103 in Year One 367 in Year Two and Onwards	Lower: £36,000 Upper: £107,000	Lower: £127,000 Upper: £381,000		Yearly Once in Scope	Allowing for sensitivity around the required time assumptions of 50 per cent.
Ongoing – Completion and Disclosure of Scenario Analysis	103 in Year One 367 in Year Two and Onwards	Lower: £824,000 Upper: £1,802,000	Lower: £2,854,000 Upper: £6,242,000	Lower: £2,642,000 Upper: £5,780,000	Yearly Once in Scope	Accompanying lower & upper unit cost estimates based on stakeholder engagement and the information they returned.
Ongoing – Production of Metrics & Targets	103 in Year One 367 in Year Two and Onwards	Lower: £155,000 Upper: £515,000	Lower: £535,000 Upper: £1,784,000	Lower: £495,000 Upper: £1,652,000	Yearly Once in Scope	Accompanying lower & upper unit cost estimates based on stakeholder engagement and the information they returned.
Ongoing – Uploading & Signposting Completed Report	103 in Year One 367 in Year Two and Onwards	Lower: £0 Upper: £1,000	Lower: £1,000 Upper: £4,000		Yearly Once in Scope	Allowing for sensitivity around the required time assumptions of 50 per cent.
Total Cost - Sensitivity Analysis	Lower: £1,028,000 in Year One; £3,552,000 in Year Two and £3,266,000 in Year Three & Onwards. Upper: £2,466,000 in Year One; £8,515,000 in Year Two and £7,817,000 in Year Three & Onwards.					

⁴ (Reporting & Disclosure Costs) = (Governance Reporting & Disclosure Costs) + (Strategy Reporting & Disclosure Costs) + (Risk Management Reporting & Disclosure Costs) + (Metrics & Targets Reporting & Disclosure Costs)