Title: Consultation Stage Impact Assessment on Climate Change Risk – Governance and Disclosure (TCFD) Proposals **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: 27/01/2021
	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** Qualifying provision
-£53.6m	-£53.6m	£6.2m	

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 climate governance by 2022 for large and medium-sized schemes (Preferred) – trustees of all Occupational Pension Schemes (OPS) with £5bn or more in assets, and The Pensions Regulator (TPR)-authorised master trusts and authorised schemes offering collective money purchase benefits, must comply with climate governance requirements, and subsequently disclose in line with TCFD from October 1 2021, followed by all OPS with £1bn or more in assets a year later. Once in scope, schemes would have seven months from their scheme-year end date to publish a TCFD Report. This phased approach would ensure that schemes with 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:** 2023

Question				
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): David Bateman **Date: 19/01/2021**

Economist signoff (senior analyst): Joy Thompson - Deputy Chief Economist **Date: 15/01/2021**

Better Regulation Unit signoff: Prabhavati Mistry **Date: 06/01/2021**

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Summary: Analysis & Evidence

Phased Mandatory TCFD

Description: Climate Change Risk – Governance and Disclosure – 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	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low:	High:	Best Estimate:
2019	2020	10 years	-£86.4m	-£32.0m	-£53.6m

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£0.7m	Years 1 & 2 (Phased Rollout)	£3.7m	**£32.0m**
High	£2.2m		£10.1m	**£86.4m**
Best Estimate	£1.5m		£6.2m	**£53.6m**

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 have been provided with an assessment of their estimated key unit costs for the respective monitoring and enforcement activities required by the proposals.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	N/A	Optional	**N/A**
High	Optional		Optional	**N/A**
Best Estimate	N/A		Optional	**N/A**

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

The major potential benefits of the requirements are discussed qualitatively (see below). It would be disproportionate to estimate these potential benefits quantitatively so they have not been monetised and therefore are not included in the EANDCB or Total Net Present Social Value figures. However, for select benefits indicative monetisation, and proportionate "breakeven" analysis has been conducted to accompany the described benefits.

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. Improved transparency on a key issue members frequently report caring about[3], and report a specific interest in learning and receiving more information about[4], could also lead to members feeling an increased sense of engagement with and ownership of their pension pot[5]. As a result of increased information and transparency by pension schemes on an issue that research suggests UK pension scheme members care about[6] and report a specific interest in learning more about[7]. Increased member engagement could potentially also benefit UK Occupational Pension Schemes themselves[8]. 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	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

2. Climate change poses an existential threat to our planet and our society, 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 2050[9]. Alongside its commitments as a signatory of the Paris Agreement[10], the UK is a world leader in commitments to transition to a low carbon economy.
3. Occupational pension schemes (OPS) in the UK hold almost £2tn in assets[11], 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, with significant influence over the flow of investments in the economy. Coupled with their long-term investment horizons, this means

[3] The key to unlocking member engagement: A report for the DC Investment Forum, prepared by Ignition House - https://dcif.co.uk/wp-content/uploads/2020/07/the_key_to_unlocking_member_engagement.pdf

[4] Investing In A Better World: Understanding the UK public's demand for opportunities to invest in the Sustainable Development Goals. (September 2019). LINK.

[5] Pensions for the Next Generation: Communicating What Matters. (March 2018). LINK.

[6] The key to unlocking member engagement: A report for the DC Investment Forum, prepared by Ignition House - https://dcif.co.uk/wp-content/uploads/2020/07/the_key_to_unlocking_member_engagement.pdf

[7] "New research finds savers want pensions with strong environmental and social credentials". NEST. (October 2018). LINK.

[8] The Key To Unlocking Member Engagement – DCIF (July 2020). LINK.

[9] https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law

[10] https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

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

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.

4. Climate change risks manifest themselves in the form of physical and transition risks, as well as related risks such as litigation 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 on their savings.
5. The UK is a signatory of the Paris Agreement[12] . In 2019, the Government wrote into law the target of achieving net-zero greenhouse gas emissions by 2050 [13].
6. 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.
7. 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 that 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 in this area.

Rationale for Intervention

Building on existing requirements

8. 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.
9. Guidance[14] for trustees to align their scheme with the TCFD recommendations summarises 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.

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[12] https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

[13] https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law

[14] https://www.gov.uk/government/consultations/aligning-your-pension-scheme-with-the-tcfd-recommendations

10. 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) factors[15].

11. In September 2018, the Government then introduced regulations[16] 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 policy on all ESG factors that it deemed financially material to their investments, including but not limited to climate change. Trustees of DC schemes have been required to publish the policy in the scheme's Statement of Investment Principles (SIP) since 1 October 2019, with similar requirements coming into force for trustees of defined benefit (DB)schemes from 1 October 2020.

12. Also from 1 October 2020, trustees of DC schemes have been required to publish an implementation statement alongside their SIP which sets out how they have followed their ESG and climate change policy. Trustees of DB schemes will need to include information detailing how they have implemented their engagement policy.

Response to Government regulation so far

13. Reaction to Government regulation in this area so far has been broadly positive. The pensions law firm Sackers[17] 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 found[18] 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.

14. 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.

15. The Pensions Regulator (TPR)'s DC schemes survey[19] found that only 21% of schemes took climate change into account when formulating their investment strategies and approaches. From the research conducted by TPR[20], 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. As a result of this, the Government is proposing to phase the TCFD proposals (see Options section).

Improving current level of disclosure

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[15] 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

[16] 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

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

[18] 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

[19] Defined Contribution trust-based pension schemes research: report of findings on the 2019 surveyhttps://www.thepensionsregulator.gov.uk/-/media/thepensionsregulator/files/import/pdf/dc-research-summary-report-2019.ashx

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

16. 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.

17. 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.

18. 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 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

19. 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.

20. As detailed in Paragraphs 15 to 17, the current take-up of voluntary TCFD disclosures is low and limited 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.

21. 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 is currently consulting on rules to

implement the TCFD recommendations for UK listed companies[21], and have indicated their intention to consult on rules for asset managers and for workplace personal pension schemes[22]. 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.

22. Without pension schemes taking action to reinforce their investment strategy against climate risks, which is a key aspect of the TCFD recommendations, those investments are at risk financially. One particular likely outcome is known as *"stranded assets"*[23], as described in the Pensions Climate Risk Industry Group guidance[24].

23. 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 or for the Government to support pensioners via state support.

Option 2 – Guidance only

24. 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.

25. 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') which has already been consulted on and subsequently published[25].

26. 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.

27. 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

[21] 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

[22] Correspondence between Christopher Woolard, Financial Conduct Authority, and Guy Opperman MP, Minister for Pensions and Financial Inclusion. https://www.gov.uk/government/publications/financial-conduct-authoritys-plans-for-climate-related-financial-disclosures

[23] https://carbontracker.org/terms/stranded-assets/

[24] 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

[25] 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

necessary urgency and coverage, putting pension schemes and savers at risk of loss due to climate change.

28. 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.

29. 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.

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

Regulations and Statutory Guidance – TCFD as a Framework

30. The preferred option is to use regulations, supported by statutory guidance, to require pension scheme trustees to deliver the TCFD recommendations.

31. 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.

32. 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

33. The preferred option seeks to require all occupational pension schemes in scope to disclose in line with TCFD recommendations on disclosure 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.

34. The additional requirements in the area of governance applicable to all schemes in scope would come in recording and disclosing the system of governance of climate change risks and opportunities that the scheme employs.

Strategy & Scenario Analysis

35. The preferred option would require trustees to describe and disclose the climate-related risks and opportunities they have identified over the short, medium and long term and to describe the impact of these risks and opportunities on the scheme's investment strategy and, in the case of DB schemes, the funding strategy.

36. It is proposed that regulations will state the high level factors (namely, the scheme's liabilities and its obligations to pay benefits) trustees should consider in setting their time horizons and require that trustees disclose their chosen time horizons in their published report.

37. 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 on an ongoing basis.

38. Regulations would also require trustees to undertake scenario analysis which considers at least two scenarios, one of which must be a scenario within the range of 1.5°C above pre-industrial levels to and including 2°C above pre-industrial levels– and to disclose the results of this assessment.

39. It is proposed that trustees must, as far as they are able, undertake scenario analysis in the first year in which the regulations apply to them and every three years thereafter. In the intervening years they must review, on an annual basis, whether or not circumstances are such that they should refresh their analysis. If they decide not to refresh their scenario analysis, they must explain in their report the reasons for their decision. Further guidance will be set out in statutory guidance.

Risk Management

40. The preferred option would require trustees to have effective processes in relation to identification, assessment and management of financially material climate-related risks, as identified and assessed by the strategy requirements described above, and to describe the processes in their report. As with the proposed governance activities, all but the disclosure should form part of the scheme's risk management currently, as part of fiduciary duty. Further guidance on how trustees should integrate management of climate-related risks within their schemes' wider risk management process would be set out in statutory guidance.

Metrics & Targets

41. 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. To implement this recommendation, we propose to require that trustees must first select a minimum of two emissions-based metrics (one of which must be an absolute measure of emissions and one which must be an intensity-based measure of emissions) and one additional climate change metric. Trustees

must, as far as they are able, obtain the data required to calculate their chosen metrics on an annual basis and disclose their calculations.

42. It is also proposed that they must set at least one target relating to their chosen metrics and, on an annual basis measure performance against the target(s) as far as they are able - and disclose this information.

Disclosure

43. The preferred option is to require that trustees publish a TCFD report on a publically available website accessible free of charge and that the Annual Report and Accounts must include a link to the website address. It is also proposed that trustees would have a duty to tell members via the annual benefit statement – and in the case of DB Scheme members, the annual funding statement also – 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.

44. We also propose to require that trustees provide a link to their SIP and (where applicable) implementation statement and published excerpts of the chair's statement in the annual scheme return form. This avoids duplication of efforts on the scheme's behalf to inform TPR that these documents have been published. It would also release TPR from the supervisory burden of requesting this information separately.

Trustee Knowledge

45. It is proposed that trustees would also be specifically required by regulations to have a sufficient degree of knowledge and understanding of the principles relating to the identification, assessment and management of climate change risks and opportunities in respect of occupational pension schemes, to enable them to properly exercise their functions and implement the proposed underlying activities and disclosure requirements effectively. As with the proposed governance and risk management activities, this should form part of the scheme's risk management currently, as part of fiduciary duty.

Penalties

46. We propose that a mandatory penalty is only appropriate for complete failure to publish any TCFD report. All other penalties, compliance notices and third-party compliance notices would be issued at TPR's discretion.

47. Penalties in relation to climate change governance and publication could be imposed without recourse to the Determinations Panel. We propose that requirements to reference the TCFD report from the Annual Report and inform members about the TCFD report's availability would be subject to the existing penalty regime in the Occupational and Personal Pension Schemes (Disclosure of Information) Regulations 2013. Our proposed requirements to inform TPR of the web address of the published TCFD report and the web address of the published SIP, implementation statement (where applicable) and excerpts of the Chair's statement would be subject to the penalty regime in section 10 of the Pensions Act 1995.

48. There are no immediate penalty provisions in relation to trustee knowledge and understanding. Instead TPR are able to issue improvement notices for breaches of the requirements in line with section 13 of the Pensions Act 2004. If the trustees fail to comply with an improvement notice, then the breach would again be subject to the penalty regime in section 10 of the Pensions Act 1995.

Costs and Benefits to Business

Scope of Proposed Measures

49. In line with the Green Finance Strategy[26] commitment, the Government proposes to initially apply these measures to the largest occupational pension schemes, with assets of £5bn or more, along with all authorised master trusts[27] and authorised schemes offering collective money purchase benefits[28].

50. 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	
If	*Trustees must meet the climate governance requirements for*	*Trustees must publish a TCFD report*	*Trustees must include a link to the TCFD report from*
Phase 1 On 1st scheme year to end on or after 1 March 2020, the scheme has assets ≥ £5bn (excluding buy-ins)* *Or* On 1 October 2021, the scheme is an authorised master trust *Or* 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. *And* [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. *And* Within 7 months of the end of the next scheme year.	The annual report and accounts produced for that scheme year
Phase 2 On 1st scheme year to end on or after 1 March 2021, The scheme has assets ≥ £1bn (excluding buy-ins)*	Current scheme year from 1 October 2022 to end of that scheme year	Within 7 months of end of that scheme year.	

* assets associated with buy-ins should not contribute to the assets threshold and the draft regulations therefore explicitly carve them out of the asset threshold calculation.

51. This phased introduction is estimated by The Pensions Regulator (TPR) to currently capture approximately 102 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

[26] https://www.gov.uk/government/publications/green-finance-strategy

[27] List of authorised master trusts. https://www.thepensionsregulator.gov.uk/en/master-trust-pension-schemes/list-of-authorised-master-trusts

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

requirements to a currently estimated 351 schemes, covering approximately 71% of all UK pensions assets and 81% of all UK members[29].

52. 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 2023.

Requirements - Costs to Business

Costs to Pension Schemes in Scope

53. 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.

54. 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 practices[30];

55. 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

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

56. 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.

57. We assume that it would take all trustees of in-scope schemes approximately 5 hours to read and understand the TCFD requirements & guidance. We have assumed the length of requirements & statutory guidance to total approximately 50 pages[31]. We have estimated that schemes in scope of the proposed requirements will have approximately 8 trustees per

[29] 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.

[30] 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.

[31] This page length is an increase from 30 pages in the previous impact assessment, and is reflected in the increased familiarisation time allowed rising from 3 hours previously to the 5 hours in this impact assessment.

scheme[32], with an estimated average hourly cost (including overheads) of £100.78 per hour[33].

58. These total one-off costs to all schemes in scope are estimated to be £411,000[34] in year one of the requirements, and then £1,004,000[35] in year two when the second tranche of schemes are brought into scope and need to familiarise[36].

59. Compared to the initial August 2020 impact assessment[37], this represents an increase in familiarisation costs, reflecting industry feedback to the consultation. The increase in costs results from the direct increase in allowed time for familiarisation time from 3 hours to 5 hours. The cost increase is also due to an increased estimated number of Trustees per Scheme (with a higher average hourly cost than initially estimated[38]) having to familiarise than was presented in the August 2020 impact assessment.

Required Activities – Reporting and Disclosure

60. Schemes in scope of the proposals would be required to document and disclose their climate change-related practices covering the four ‘core elements’ of recommended climate-related financial disclosures recommendations: Governance, Strategy, Risk Management and Metrics & Targets.

61. On Governance, trustees are already required to take into account all financially material risks, including those posed by climate change, as part of their fiduciary duty[39]. 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.

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

63. Similarly with regards to ‘strategy’ (excluding scenario analysis) and ‘risk management’, the proposals require schemes to have effective strategy and risk management processes in response to financially material climate risks (and, for strategy, opportunities). All but the disclosure of these processes should form part of the scheme’s strategy and risk management currently, as part of fiduciary duty and this impact assessment assumes this to be the case.

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[32] The Pensions Regulator - Trustee Landscape Quantitative Research, Figure 3.2.2. Link.

[33] See ‘Key Assumptions & Sensitivity Analysis’ for further details. Industry feedback post-consultation has been taken on board to allow for a more representative size, structure and wage profile of a board of trustees the Pension Schemes in Scope.

[34] Calculations: (5 Hours to Familiarise) * (102 Schemes in Scope) * (8 Trustees Per Scheme in Scope) * (£100.78 Average Trustee In Scope’s Wage) = £411,200 to the nearest £100.

[35] Calculations: (5 Hours to Familiarise) * (249 Schemes in Scope) * (8 Trustees Per Scheme in Scope) * (£100.78 Average Trustee In Scope’s Wage) = £1,003,800 to the nearest £100.

[36] See ‘Key Assumptions & Sensitivity Analysis’ for further details.

[37] Impact Assessment (consultation): Climate change risk – governance and disclosure (TCFD). (August 2020). LINK.

[38] See ‘Key Assumptions & Sensitivity Analysis’ for further details. Industry feedback post-consultation has been taken on board to allow for a more representative size, structure and wage profile of a board of trustees for the Pension Schemes in Scope.

[39] 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.

Ongoing cost to schemes in scope to produce and publish a compliant TCFD-aligned report

64. The first consultation impact assessment estimated the ongoing costs and activities for reporting and disclosing a TCFD-aligned report as a result of three main elements. These elements were assumed amounts of time deemed sufficient for an administrative member of staff or trustee to conduct the following activities[40]:
    - *'Collating Information & Drafting Text'*
    - *'Proof-Reading & Checking'*
    - *'Trustee Reading, Discussion & Sign-Off'*

65. The associated costs of these activities across the four respective 'core elements' of a TCFD report totalled below £1,000 per scheme in the August 2020 impact assessment. As discussed in the Policy Consultation Response, this was a cost element that industry respondents felt was underestimated.

66. This impact assessment has taken on board the evidenced Reporting and Disclosure costs feedback from industry. Whilst previous industry engagement yielded estimates of reporting costs ranging from 'a few hundred pounds' to '£20,000', the evidenced feedback in the responses post-consultation will allow the costs of a scheme complying with the requirements to be reflected more accurately, and aligned more closely with the scale of costs associated with a report such as the annual Chair's Statement.

67. The cost of producing a Chair Statement was estimated to increase with the size of the scheme by membership. With the unit cost of producing a Chair Statement estimated at £3,250 for schemes of "1000+ members" in 2013/14 prices[41]. The schemes in scope of the proposed regulations are predominantly the largest occupational pension schemes by membership in the UK, with many schemes having over 10,000 members. Accounting for the scale of schemes in scope, and accounting for inflation since the original estimates, this impact assessment estimates an ongoing reporting costs for producing a TCFD report to be approximately £5,000 per scheme per year. We also assume the cost will be higher in the first year by an assumed 20% in the first year for which a scheme is in scope[42]. This cost estimate aligns well with particularly well-evidenced industry feedback estimating similar ongoing costs per annum "to write, review and format the report" once an original report has been produced.

68. The total ongoing costs to pension schemes of this proposed annual requirement is estimated to be approximately £612,000[43] in the first year of requirements; £2,004,000[44] in the second year; and £1,755,000[45] annually from the third year onwards.

[40] These activities and their respective time and wage components are detailed in full in the first consultation impact assessment. LINK.

[41] Minimum Governance Standards for DC trust-based schemes (2014). IA DWP0045. LINK

[42] This assumed figure reflects a range of qualitative and quantitative industry feedback. Industry feedback on potential for cost efficiencies after the first year ranged from negligible efficiencies identified to to some industry estimates anticipating reporting cost efficiencies after the first year of 50% and over.

[43] Calculations: (102 Schemes in Scope) * (£6,000 Unit Cost per TCFD Report) = £612,000 to the nearest £100.

[44] Calculations: [(102 Schemes in Scope) * (£5,000 Unit Cost per TCFD Report)] + [(249 Schemes in Scope) * (£6,000 Unit Cost per TCFD Report = £2,004,000 to the nearest £100.

[45] Calculations: (351 Schemes in Scope) * (£5,000 Unit Cost per TCFD Report) = £1,755,000 to the nearest £100.

Required Activities - Scenario Analysis

69. It is proposed that regulations will require trustees[46] of schemes in scope to, as far as they are able, undertake scenario analysis covering at least two scenarios, one of which must be a scenario within the range of 1.5°C above pre-industrial levels to and including 2°C above 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.

70. The August 2020 consultation on mandating the TCFD recommendations, did 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 recommendations[47], is arguably more robust and stakeholders with whom we have had informal discussions on impacts have informed us that they plan to carry it out[48].

71. Schemes will be mandated to repeat scenario analysis every three years, so this would be the minimum they could do. However, schemes will be required to assess annually whether or not they should re-do their scenario analysis. Statutory guidance will set out the types of circumstances that might give rise to a new analysis. These include:
    - An increase in availability of data.
    - A significant/material change to the investment and/or funding strategy (where relevant) or to strategic asset allocation.
    - The availability of new scenarios.
    - A change in best practice on scenario analysis.
    - Some other material change in the scheme's position.

72. Given the rapidly developing best practice and data-availability in this area, we expect most schemes to need to re-do analysis on an almost annual basis, at least initially[49].

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

73. We estimate a cost per scheme of £12,000 in a scheme's first year, and £10,800 per scheme per year in following years[50] 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

[46] 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.
[47] https://www.tcfdhub.org/scenario-analysis/
[48] See 'Key Assumptions and Sensitivity Analysis' for further details.
[49] In this impact assessment, this is modelled as schemes completing Scenario Analysis every year that they are in scope up to and including 2023/24. After which, they complete scenario analysis every third year from the year they first came into scope of the requirements.
[50] See 'Key Assumptions and Sensitivity Analysis' for further details.

estimated costs for a scheme in scope to align with and meet the proposed scenario analysis requirements.

74. 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.

75. Proportionate sensitivity analysis of these unit costs[51] 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.

76. 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.

77. The above estimates were published in the August 2020 impact assessment[52]. As discussed in the Policy Consultation Response, only a small number of trustees commented specifically on the scenario analysis unit costs included. As a result of the broad agreements on the costs per exercise, the central estimate costs for conducting a compliant scenario analysis exercise have remained unchanged. However, the impact assessment does now include adjustments to reflect policy proposals that certain types of scheme in scope will need to conduct more work than simply completing one 'scenario analysis exercise'. Hybrid schemes will be expected in line with statutory guidance to produce two distinct scenario analyses for their respective DB and DC assets, and as a result the annual costs for these schemes has been doubled. There is also additional coordinating work across portfolios for schemes offering multiple default funds. The Department followed up evidenced feedback from the consultation with a number of these providers in scope as well as relevant consultants. Reflecting the experienced reported scenario analysis costs of £20,000 for one such relevant provider in a past year, the higher unit costs faced by these particular schemes are now reflected, with the assumed 10% efficiency after the initial year applied as with other scheme types.

Unit Costs to Conduct Compliant Scenario Analysis in Relevant Years	**Schemes in Scope**	**Unless:**	
		Hybrid Schemes	**Schemes With Multiple Default Funds**
First Year In Scope	*£12,000*	*£24,000*	*£20,000*

51 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.

52 Taking action on climate risk: improving governance and reporting by occupational pension schemes. DWP. (August 2020). LINK.

Ongoing Relevant Years	*£10,800*	*£21,600*	*£18,000*
Source	Unchanged from initial IA and has been consulted on – discussed above.	Post-Consultation Feedback	Industry Engagement Post-Consultation

78. The impact assessment has also been updated post-consultation to reflect a change to the proposed frequency of scenario analysis. It is now proposed that trustees must undertake scenario analysis in the first year in which the regulations apply to them and – subject to the checks outlined above in paragraph 72 above – a minimum of every three years thereafter.

79. Given anticipated industry-wide changes around data availability, for example due to companies and asset managers reporting in line with proposed FCA requirements[53], it is assumed in this impact assessment that these imminent year-on-year industry-wide changes will result in schemes completing scenario analysis each year until and including 2023/24[54], at which point thereafter it is expected they will end up performing a fresh scenario analysis exercise every third year from their first in scope.

80. In line with these unit costs; the proposed gradual rollout of schemes in scope and the anticipated years in which schemes are anticipated to conduct scenario analysis, the total cost to all schemes in scope is estimated as below:

Year One *(2021 to 2022)*	£1,820,000[55]	Phase 1 schemes in scope for first time.
Year 2 *(2022 to 2023)*	£5,850,000[56]	Phase Two schemes in scope for the first year; Phase One schemes conducting a refreshed scenario analysis due to anticipated industry-wide factors detailed in Paragraphs 71 and 79.
Year 3 *(2023/24)*	£5,429,000[57]	Phase One and Phase Two schemes conducting a refreshed scenario analysis due to anticipated industry-wide factors detailed in Paragraphs 71 and 79.
Year 4, 7, 10 *(2024 to 2025, 2027 to 2028, 2030 to 2031)*	£1,638,000[58]	Phase One schemes completing Scenario Analysis every third year their first year in scope as required.
Year 5, 8 *(2025 to 2026, 2028 to 2029)*	£3,791,000[59]	Phase Two schemes completing Scenario Analysis every third year their first year in scope as required.

[53] Letter from Christopher Woolard, Financial Conduct Authority, to the Minister for Pensions and Financial Inclusion: climate-related financial disclosures. (October 2020). LINK.

[54] This is in line with the conditions listed in Paragraph 71

[55] Calculations: (46 'Regular' Schemes in Scope) * (£12,000 Estimated Unit Cost) + (37 Hybrid Schemes in Scope) * (£24,000 Estimated Unit Cost) + (19 Schemes in Scope with Multiple Default Funds) * (£20,000 Estimated Unit Cost) = £1,820,000 to the nearest £100.

[56] Calculations: (46 'Regular' Schemes in Scope) * (£10,800 Estimated Unit Cost) + (37 Hybrid Schemes in Scope) * (£21,600 Estimated Unit Cost) + (19 Schemes in Scope with Multiple Default Funds) * (£18,000 Estimated Unit Cost) + (147 'Regular' Schemes in Scope) * (£12,000 Estimated Unit Cost) + (102 Hybrid Schemes in Scope) * (£24,000 Estimated Unit Cost) = £5,850,000 to the nearest £100.

[57] Calculations: (193 'Regular' Schemes in Scope) * (£10,800 Estimated Unit Cost) + (139 Hybrid Schemes in Scope) * (£21,600 Estimated Unit Cost) + (19 Schemes in Scope with Multiple Default Funds) * (£18,000 Estimated Unit Cost) = £5,428,800 to the nearest £100.

[58] Calculations: (46 'Regular' Schemes in Scope) * (£10,800 Estimated Unit Cost) + (37 Hybrid Schemes in Scope) * (£21,600 Estimated Unit Cost) + (19 Schemes in Scope with Multiple Default Funds) * (£18,000 Estimated Unit Cost) = £1,638,000 to the nearest £100.

[59] Calculations: (147 'Regular' Schemes in Scope) * (£10,800 Estimated Unit Cost) + (102 Hybrid Schemes in Scope) * (£21,600 Estimated Unit Cost) = £3,790,800 to the nearest £100.

Ongoing cost to schemes in scope to assess whether or not they should re-do their Scenario Analysis in Intermediate Years[60]

81. In the intervening years trustees must review, on an annual basis, whether or not circumstances are such that they should refresh their analysis. If they decide not to refresh their scenario analysis, they must explain in their report the reasons for their decision[61].

82. We assume that it would take a professional staff member[62] of the respective schemes in scope to spend one working day reviewing the conditions to be detailed in Statutory Guidance and noted in Paragraph 71. We also assume the board of trustees of in-scope schemes spend 1 hour reviewing and deciding whether or not they are required to conduct a scenario analysis exercise[63].

83. These total ongoing costs to all schemes in scope are estimated to be as below:
    - £105,000[64] in the "intermediate years" between Phase One schemes completing scenario analysis exercises[65];
    - £255,000[66] in the "intermediate years" between Phase Two schemes completing scenario analysis exercises[67];
    - £360,000[68] in the "intermediate years" between Phase One and Two schemes completing scenario analysis exercises[69].

Required Activities - Metrics & Targets

84. The proposal would require schemes to calculate a minimum of two emissions-based metrics, and one additional climate metric, 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.

85. In order to make these calculations, trustees would be required to obtain data, importantly, as far as they are able, on the greenhouse gas emissions of the scheme's assets and another climate change characteristic.

86. To support the effectiveness of the "as far as trustees are able" approach[70], the Government proposes that where the trustees have not been able to obtain data to calculate their chosen

[60] Intermediate Years is used here to indicate the anticipated years in the appraisal period where schemes are not anticipated to be required to conduct renewed scenario analysis.

[61] The costs of documenting the reasons for not refreshing scenario analysis are covered by the "Reporting & Disclosure" cost element.

[62] A term we define and explain in the 'Key Assumptions & Sensitivity Analysis'.

[63] See 'Key Assumptions & Sensitivity Analysis' for further details. Industry feedback post-consultation has been taken on board to allow for a more representative size, structure and wage profile of a board of trustees the Pension Schemes in Scope.

[64] Calculations: (102 Schemes in Scope) * [(7.5 Hours to Review) * (£29.11 Estimated Wage) + (1 Hour for Board to Discuss & Decide) * (8 Trustees per Board) * (£100.78 Weighted Average of Board Member Wage)] = £104,500 to the nearest £100.

[65] Years Five and Eight of the appraisal period. As detailed in paragraphs 79 and 80.

[66] Calculations: (249 Schemes in Scope) * [(7.5 Hours to Review) * (£29.11 Estimated Wage) + (1 Hour for Board to Discuss & Decide) * (8 Trustees per Board) * (£100.78 Weighted Average of Board Member Wage)] = £255,100 to the nearest £100.

[67] Years Four, Seven and Ten of the appraisal period. As detailed in paragraphs 79 and 80.

[68] Calculations: (351 Schemes in Scope) * [(7.5 Hours to Review) * (£29.11 Estimated Wage) + (1 Hour for Board to Discuss & Decide) * (8 Trustees per Board) * (£100.78 Weighted Average of Board Member Wage)] = £359,600 to the nearest £100.

[69] Years Six and Nine of the appraisal period. As detailed in paragraphs 79 and 80.

[70] 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.

metrics for all of the assets of the scheme, regulations will require them to explain in their report why this was the case.

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.

87. 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 years[71] in the August 2020 impact assessment. Proportionate sensitivity analysis of these unit costs was 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.

88. As discussed in the Policy Consultation Response, only a small number of trustees commented specifically on the Metrics & Targets unit costs included in the first consultation. However, given policy development, we are now proposing to require schemes in scope to calculate 3 metrics instead of the 2 costed in the August 2020 Impact Assessment[72]. Therefore we have increased the unit costs from the consulted-on, August 2020 Impact Assessment by 50% to account for the extra requirement being proposed. The central unit costs have been increased by 50% to £3,750 in a scheme's first year in scope, and the same 10% decrease (to £3,375) in ongoing years as seen in the August 2020 Impact Assessment.

89. Post-consultation, the impact assessment has also been updated to reflect that certain types/structures of scheme in scope may experience higher unit costs as a result of their exercise needing to cover DB & DC sides of their portfolios (in the case of Hybrid schemes) or covering multiple default funds. Hybrid schemes will be required to undertake two distinct exercises for their respective DB and DC assets, and as a result the annual costs for these schemes has been doubled. In acknowledgement of consultation feedback, similarly the unit costs for schemes with multiple default funds[73] have also been doubled to reflect any additional activity required in cross-fund coordination such exercises for these schemes to comply.

Unit Costs for Metrics & Targets Activities	**Schemes in Scope**	**Unless:**
		Hybrid Schemes And/Or Schemes With Multiple Relevant Default Funds
First Year In Scope	*£3,750*	*£7,500*
Ongoing Years	*£3,375*	*£6,750*

[71] See 'Key Assumptions and Sensitivity Analysis' for further details.

[72] New proposals are for one absolute emissions metric, one intensity emissions metric and one non-emissions based metric.

[73] Which specific default funds will be in scope is expanded upon in draft statutory guidance. To ensure proportionality, and following industry discussions, a threshold based on the default fund's size by members is proposed to determine if a default is in scope.

Source	Increasing the initial, consulted on IA unit cost by 50% to reflect post-consultation policy development.	Post-Consultation Feedback

90. 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 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.

91. 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 £593,000[74] in year one, £1,850,000[75] in year two and then an annual £1,718,000[76] ongoing cost from year three onwards.

Indirect Costs to Pension Schemes

92. 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 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

93. The potential benefits of the proposed requirements are mainly discussed qualitatively. It would be disproportionate to estimate all of the potential benefits quantitatively so the majority have not been monetised. The indicative, illustrative monetisation demonstrated in this section have not been included in either the EANDCB or *Total Net Present Social Value* calculations respectively.

<u>Benefits to Scheme Members</u>

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

94. Requiring the schemes in scope to undertake additional TCFD-recommended activities (notably around scenario analysis and the generation of metrics and targets) would generate

[74] Calculation: (Calculations: (46 ‘Regular’ Schemes in Scope) * (£3,750 Estimated Unit Cost) + (37 Hybrid Schemes in Scope) * (£7,500 Estimated Unit Cost) + (19 Schemes in Scope with Multiple Default Funds) * (£7,500 Estimated Unit Cost) = £592,500 to the nearest £100.

[75] Calculations: (46 ‘Regular’ Schemes in Scope) * (£3,375 Estimated Unit Cost) + (37 Hybrid Schemes in Scope) * (£6,750 Estimated Unit Cost) + (19 Schemes in Scope with Multiple Default Funds) * (£6,750 Estimated Unit Cost) + (147 ‘Regular’ Schemes in Scope) * (£3,750 Estimated Unit Cost) + (102 Hybrid Schemes in Scope) * (£7,500 Estimated Unit Cost) = £1,849,600 to the nearest £100.

[76] Calculations: (193 ‘Regular’ Schemes in Scope) * (£3,375 Estimated Unit Cost) + (139 Hybrid Schemes in Scope) * (£6,750 Estimated Unit Cost) + (19 Schemes in Scope with Multiple Default Funds) * (£6,750 Estimated Unit Cost) = £1,717,900 to the nearest £100.

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.

95. 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.

96. It would not be proportionate, or sensible, to attempt to determine a potential industry-wide percentage point improvement caused and attributable directly to these proposed requirements. However, for the total TPR-estimated asset coverage of £1.3trn, it should be noted that for the exercise to be cost-neutral[77] for the industry as a whole, the increased climate-related information feeding into trustee decision-making would only need to improve industry-wide returns[78] by 0.0005 percentage points, or 0.05 "basis points" (hundredths of a percent).

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

97. 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.

98. 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.

[77] For the "Average Ongoing Business Costs" across industry to be exactly offset by improved returns.

[78] Improved returns could result from enhanced return due to identified opportunities; through loss avoided; or a downward management of risk

99. 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

100. 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 environment[79], and the Pension Policy Institute's report in 2018[80] 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.

101. For the specific benefit to scheme members of increased availability of information they report an interest in, the wider social value of this can be estimated for inclusion in the Total Net Present Social Value calculation.

102. The Pensions Regulator estimates approximately 20.8 million UK Pension Scheme members to be covered by the proposed requirements in the first year, and 24.6 million from the second year onwards. However, many of these members will not be engaged with their pension, and may not ever be aware of the additional information published in a TCFD report on a topic they are likely to care about.

103. The benefits or utility derived from the additional information of interest will only be felt by those members that are aware of the report's existence in the first place. We approximate this proportion of engaged members using evidence from the 2017 Financial Lives Survey – specifically the finding that only 52% of adults with a DC pension report that they have 'received and read' their annual statement[81].

104. Industry research of member attitudes frequently finds a significant proportion of pension scheme members to be engaged and feel strongly on a range of ESG issues including the environment specifically. For example a Defined Contribution Investment Forum report finding 73% of DC pension scheme members aged 22-65 reporting to *"feel strongly about*

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

[80] PPI - 'ESG: past, present and future'

[81] Understanding the financial lives of UK adults (Survey 2017). LINK.

environmental issues"[82]. Regarding ESG considerations by pension providers, NEST research into its members and the wider auto-enrolment eligible population similarly *found "63 per cent of savers want to hear more about it from their pension scheme"*, further indicating a reported demand from pension members for more of the information a TCFD report would include[83].

105. Although there is a clear, reported interest by UK pension scheme members in the sort of information that a TCFD report would include, a cautious approach to monetisation when estimating these benefits needs to be taken. This is to account for the significant social desirability bias in which surveyed individuals or pension members are likely to overstate their strength of feeling towards issues such as climate change.

106. For illustrative purposes, we assume that for the subset of members in scope that are engaged enough to be aware of the report[84], and that have specifically reported that they *"feel strongly about environmental issues"* would still derive in monetary terms only a tokenistic, small amount of value (utility) on average. This value would be derived from the additional information on a subject they report to care about: their pension scheme's resilience to different climate scenarios, its carbon footprint and accompanying climate-related governance, strategy and risk management practices. To give an indication of scale and range, some illustrative estimates of the annual transparency benefits monetised are demonstrated below for a range of values representing member utility from £0.05 per year to £2.50 per year.

Illustrative Range of Transparency-related Social Value by Members per Year.

Illustrative, Assumed Value from TCFD Information per Relevant Member[85]	**Year One**[86]	**Year Two & Onwards**[87]
£0.05	£394,000	£467,000
£0.25	£1,969,000	£2,334,000
£0.50	£3,939,000	£4,669,000
£1.00	£7,877,000	£9,338,000
£2.50	£19,694,000	£23,344,000

All Figures Rounded to the Nearest £1,000.

82 The key to unlocking member engagement. DCIF. (July 2020). LINK.

83 "New research finds savers want pensions with strong environmental and social credentials". NEST. (October 2018). LINK.

84 Using the Financial Lives Survey finding as a proxy of this "engagement".

85 As detailed in paragraph 107, this is specifically limited to the estimated subset of members likely to be engaged enough to notice the TCFD report, and who report to "feel strongly about environmental issues".

86 Calculations: (20,752,000 Members In Scope) * (52% 'Engaged' members aware of the TCFD Report) * (73% Reporting to Care Strongly About Environmental Issues) * (£ Relevant Token "Value Derived" Assumption)

87 Calculations: (24,598,700 Members In Scope) * (52% 'Engaged' members aware of the TCFD Report) * (73% Reporting to Care Strongly About Environmental Issues) * (£ Relevant Token "Value Derived" Assumption).

107. There is a range of evidence that suggests consumers generally report and demonstrate a Willingness To Pay[88] for more environmentally sustainable final products[89,90], and specifically value increased visibility and supply chain transparency[91,92]. However, it would not be proportionate to robustly determine where, within the above range or otherwise, the average UK occupational pension scheme member's 'utility derived' value may be. As such, this is not included in the Total Net Present Social Value calculation in this impact assessment.

108. The above table however illustrates that even conservatively estimated transparency benefits can alone (irrespective of the other substantial benefits discussed) generate substantial Social Value. It is also worth noting the potential that the above indicative values may underestimate the benefits to members over the appraisal period. This calculation assumes that producing a TCFD report does not increase the proportion of 'engaged' membership over time despite a reasonable case for the potential of this by the likes of ShareAction[93] and the DCIF[80]. Similarly, this calculation does not include extrapolations as to the proportion of members, and the strength of their views/feelings, towards the issue of climate change, even though it is likely that these metrics can be expected to increase in the next decade.

Costs to Regulator

109. 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.

110. 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. 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.

111. TPR have estimated a one-off cost in the first year of the requirements of approximately £16,000 to update the scheme return to include new questions related to the TCFD report, Statement of Investment Principles, Implementation Statement and published excerpts of the Chair's Statement.

112. For ongoing monitoring and enforcement costs, TPR have estimated a unit cost of £192 to conduct a review of a TCFD report. In relation to the mandatory penalty, in the event of non-compliance TPR have estimated the cost of a follow-up enquiry and the potential imposing of a penalty to be £542 per enquiry. The total impacts to TPR will depend on the proportion of reports reviewed as well as the rates of non-compliance. The Department will work closely with TPR to monitor and review these post implementation.

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88 One methodological approach to estimating the "value" or "utility" an individual derives from something.

89 Accenture Chemicals Global Consumer Sustainability Survey 2019 LINK.

90 Biswas, Aindrila. (2016). A Study of Consumers' Willingness to Pay for Green Products. Journal of Advanced Management Science. LINK.

91 Kraft, Tim and Valdés, León and Zheng, Yanchong, Consumer Trust in Social Responsibility Communications: The Role of Supply Chain Visibility. LINK.

92 "Study Shows Consumers Willing to Pay Premium for Supply Chain Transparency" – Environmental Leader Article. (December 2018).LINK.

93 Pensions for the Next Generation: Communicating What Matters. Share Action. (March 2018). LINK.

Wider Economic and Societal Impacts

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

114. However recent research by the International Monetary Fund has specifically identified that global equity prices do not reflect future climate risk[94], and it is likely that the risks and opportunities associated with climate change are unlikely to have been fully priced-in by the market[95,96]. 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 limit their exposure on financial materiality grounds to higher carbon firms or sectors where they believe that stewardship has been or will be unsuccessful. They may also do so on non-financial grounds within the narrow range of circumstances identified by the Law Commission in their two-stage test[97].

115. 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.

116. 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.

117. 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

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[94] 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

[95] https://climateactiontracker.org/global/temperatures/

[96] 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

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

effects[98]. 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.

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 may 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 2023 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).
    - This assumption has since been included in the previous consultation impact assessment. No respondents raised concerns with this assumption.
- We have assumed an average cost of an hour of time for a typical 'professional staff member' of a Scheme in Scope is £29.11 per hour, this is based on 2019 Annual Survey of hours and Earnings (ASHE) data for Corporate Managers & Directors[99].
    - 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.
- We have assumed 8 trustees per relevant scheme, this is based on industry feedback received after the first consultation. This is an increase from initial estimates of 3 Trustees per Scheme based on calculations using TPR data on '*Number of Trustees – by scheme size'*[100].

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

[99] 2019 Annual Survey of hours and Earnings (ASHE). Link.

[100] The Pensions Regulator - Trustee Landscape Quantitative Research, Figure 3.2.2. Link.

- The Wage Profile the Board of Trustees of a Scheme in Scope has also been updated to reflect the specific schemes in scope of the requirements. This is based on industry feedback to the first consultation, as well as follow up engagement.

	Professional Trustee	**Corporate Trustees**	**Member-Nominated Trustee**
Number of Members	1	4	3
Hourly Cost To Schemes in Scope	£250[101]	£117.23[102]	£29.11[103]
Source	Consultation Response	Industry Engagement Post-Consultation	ASHE

- The trustee board of a scheme in scope, in response to consultation feedback, has been updated to allow for the presence of a Professional Trustee, these are not permanent staff members of the Pension Schemes and they charge schemes by the hour. The hourly costs to business of £250 is based on Consultation Responses received from Industry.
- The trustee board also reflects the presence of Corporate Trustees, and their respective wages earned at the Schemes in Scope of the proposals are based on post-consultation follow up conversations with industry. Using industry feedback, the Corporate Trustee wage calculation uses the midpoints of a Corporate Trustees typical annual workload (60 to 70 days) and the midpoints of the quoted typical remuneration range (£30,000 to £60,000 annually). We then assume a 7.5-hour day and uplift by 27% for overheads as per the previous version of the Green Book.
- The wage (including overheads) of a Member-Nominated Trustee is assumed to be the same as that of a 'professional staff member'.

Sensitivity Analysis

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

118. When allowing for sensitivity around the required time assumptions of 50 per cent the one-off cost decreases to £205,600 in Year One and £501,900 in Year Two, or increases to £616,800 in Year One and £1,505,700 in Year Two.

Ongoing cost to schemes in scope to produce and publish a compliant TCFD report.

119. When allowing for sensitivity around the required ongoing cost of 50 per cent, the total costs decrease to £318,800 in year one, £1,033,100 in year two and £877,500 for year three onwards. Conversely, a 50% increase in the required ongoing cost would see the total costs to schemes increase to £956,300 in year one, £3,099,375 in year two and £2,632,500 for year two onwards.

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

[101] Relevant Industry Responses are included and discussed in greater detail in the published Consultation Response document.

[102] £117.23 = (1.27 Green Book Overhead Adjustment) * [[(£45,000 Midpoint Trustee Annual Remuneration)/(65 Annual Day Worked)]/(7.5 hours per working day)].

[103] 2019 Annual Survey of hours and Earnings (ASHE). Link.

120. 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.

121. We allow for sensitivity around the scenario analysis unit cost estimates for the respective types of scheme in scope. These central 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, with these upper limit costs per scheme once again being doubled for Hybrids schemes and 2/3 greater for schemes with multiple default funds[104]. In this instance, the subsequent ongoing total cost to all schemes in scope in the respective years are approximately (to the nearest £1000):

- £2,654,000 in Year One;
- £8,531,000 in Year Two;
- £7,917,000 in Year Three;
- £2,389,000 in Year Four, Seven and Ten;
- £5,528,000 in Year Five and Eight.[105]

122. 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, with these costs per scheme once again being double for Hybrids schemes and 2/3 greater for schemes with multiple default funds[106]. In this instance, the subsequent ongoing total cost to all schemes in scope in the respective years are approximately (to the nearest £1000):

- £1,213,000 in Year One;
- £3,900,000 in Year Two;
- £3,619,000 in Year Three;
- £1,092,000 in Year Four, Seven and Ten;
- £2,527,000 in Year Five and Eight.[107]

<u>Ongoing cost to schemes in scope to assess whether or not they should re-do their Scenario Analysis in Intermediate Years</u>

123. We allow for sensitivity around the required time assumptions of 50 per cent the ongoing costs for the "intermediate years" for the respective Phase One and Two Schemes as detailed in paragraph 79. Allowing for this range, the total annual costs of these activities increase or decrease as described below (to the nearest £1000):

- An upper estimate of £157,000 and a lower estimate of £52,000 in the "intermediate years" between Phase One schemes completing scenario analysis exercises[108].
- An upper estimate of £383,000 and a lower estimate of £128,000 in the "intermediate years" between Phase Two schemes completing scenario analysis exercises[109].

[104] Upper Limit Unit Costs: £35,000 in first year for Hybrids. £29,200 in first year for Schemes with Multiple Default Funds. 10% efficiency for ongoing years still applies. Figures to the nearest £100.

[105] These years indicate the anticipated years in the appraisal period where phase one and phase two schemes respectively are anticipated to be required to conduct renewed scenario analysis. This is detailed in paragraph 79.

[106] Lower Limit Unit Costs: £16,000 in first year for Hybrids. £13,300 in first year for Schemes with Multiple Default Funds. 10% efficiency for ongoing years still applies. Figures to the nearest £100.

[107] These years indicate the anticipated years in the appraisal period where schemes are anticipated to be required to conduct renewed scenario analysis. This is detailed in paragraph 79.

[108] Years Five and Eight of the appraisal period. As detailed in paragraphs 79 and 80.

[109] Years Four, Seven and Ten of the appraisal period. As detailed in paragraphs 79 and 80.

- An upper estimate of £539,000 and a lower estimate of £180,000 in the "intermediate years" between Phase One and Two schemes completing scenario analysis exercises[110].

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.

124. 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.

125. 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.

126. We allow for sensitivity around the updated metrics and targets 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 the updated metrics and targets proposed requirements is estimated at £7,500 in the first year and £6,750 from the second year onwards, with these upper limit costs per scheme being doubled for Hybrids schemes and schemes with multiple default funds[111]. In this instance, the subsequent total cost to all schemes in scope is approximately £1,185,000 in Year One, £3,699,000 in Year Two and then an annual £3,435,800 ongoing cost from Year Three onwards.

127. The corresponding lower limit cost per scheme is estimated at £2,250 in the first year and £2,025 from the second year onwards, with these upper limit costs per scheme being doubled for Hybrids schemes and schemes with multiple default funds[112]. In this instance, the subsequent total cost to all schemes in scope is approximately £355,500 in Year One, £1,109,700 in Year Two and then an annual £1,030,700 ongoing cost from Year Three onwards.

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

128. 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.

129. 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).

[110] Years Six and Nine of the appraisal period. As detailed in paragraphs 79 and 80.

[111] Upper Limit Unit Costs: £15,000 in first year for Hybrids and Schemes with Multiple Default Funds. 10% efficiency for ongoing years still applies. Figures to the nearest £100.

[112] Lower Limit Unit Costs: £4,500 in first year for Hybrids and Schemes with Multiple Default Funds. 10% efficiency for ongoing years still applies. Figures to the nearest £100.

Responses showed that 42% of respondents had already reported in line with TCFD or planned to in the next year

130. Similarly, evidence from reporting by UK asset owners to the Principles for Responsible Investment[113] earlier this year showed that more than 50 of its signatories – many of them large pension schemes – were reporting on TCFD-based indicators.

131. 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.

132. 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 Strategy[114] 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.

133. 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 with a temperature increase of between 1.5°C to and including 2°C above pre-industrial levels) are based on PRI estimates[115] about their signatories (including pension schemes as well as other organisations).

134. 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 £5.8m per annum.

135. 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. We assume these schemes are split proportionately across the respective scheme types in scope. If the

[113] UNPRI. Link.

[114] 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.

[115] "PRI climate snapshot 2020", July 2020. Link.

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 £5.2m per annum.

136. 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.

Small and Micro Business Assessment

137. 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.

138. 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 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.

139. 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 2023.

140. The Government proposes that it will take stock in 2023 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

141. 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).

142. With regards to evaluating the impacts of the proposed measures, the Government proposes a review in 2023. 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.

143. Should the proposed measures be adopted, the Government also proposes to consult more widely again in 2023 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 schemes in scope to understand and familiarise themselves with the guidance, and the ongoing costs to complete TCFD-aligned disclosure and reporting requirements, scenario analysis activities in the relevant years and annual activities around the production of metrics and targets.

All figures in 2019/20 prices, rounded to the nearest £1000. Total figures may not sum exactly due to rounding.

Type Of Cost	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven	Year Eight	Year Nine	Year Ten
One-Off Costs - Familiarisation	£411,000	£1,004,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ongoing - Reporting & Disclosure Costs	£612,000	£2,004,000	£1,755,000	£1,755,000	£1,755,000	£1,755,000	£1,755,000	£1,755,000	£1,755,000	£1,755,000
Ongoing – Completion and Disclosure of Scenario Analysis	£1,820,000	£5,850,000	£5,429,000	£1,638,000	£3,791,000	£0	£1,638,000	£3,791,000	£0	£1,638,000
Ongoing – Assessing Whether to Refresh their Scenario Analysis in Intermediate Years	£0	£0	£0	£255,000	£105,000	£360,000	£255,000	£105,000	£360,000	£255,000
Ongoing – Production of Metrics & Targets	£593,000	£1,850,000	£1,718,000	£1,718,000	£1,718,000	£1,718,000	£1,718,000	£1,718,000	£1,718,000	£1,718,000
Total Cost	**£3,436,000**	**£10,707,000**	**£8,902,000**	**£5,366,000**	**£7,368,000**	**£3,833,000**	**£5,366,000**	**£7,368,000**	**£3,833,000**	**£5,366,000**

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. Total figures may not sum exactly due to rounding.

Type Of Cost		Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven	Year Eight	Year Nine	Year Ten
One-Off Costs - Familiarisation		U:£617,000 L:£206,000	U:£1,506,000 L:£502,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ongoing - Reporting & Disclosure Costs		U:£956,000 L:£319,000	U:£3,099,000 L:£1,033,000	U:£2,633,000 L:£878,000	U:£2,633,000 L:£878,000	U:£2,633,000 L:£878,000	U:£2,633,000 L:£878,000	U:£2,633,000 L:£878,000	U:£2,633,000 L:£878,000	U:£2,633,000 L:£878,000	U:£2,633,000 L:£878,000
Ongoing – Completion and Disclosure of Scenario Analysis		U:£2,654,000 L:£1,213,000	U:£8,531,000 L:£3,900,000	U:£7,917,000 L:£3,619,000	U:£2,389,000 L:£1,092,000	U:£5,528,000 L:£2,527,000	U:£0 L:£0	U:£2,389,000 L:£1,092,000	U:£5,528,000 L:£2,527,000	U:£0 L:£0	U:£2,389,000 L:£1,092,000
Ongoing – Assessing Whether to Refresh their Scenario Analysis in Intermediate Years		U:£0 L:£0	U:£0 L:£0	U:£0 L:£0	U:£383,000 L:£128,000	U:£157,000 L:£52,000	U:£539,000 L:£180,000	U:£383,000 L:£128,000	U:£157,000 L:£52,000	U:£539,000 L:£180,000	U:£383,000 L:£128,000
Ongoing – Production of Metrics & Targets		U:£1,185,000 L:£356,000	U:£3,699,000 L:£1,110,000	U:£3,436,000 L:£1,031,000	U:£3,436,000 L:£1,031,000	U:£3,436,000 L:£1,031,000	U:£3,436,000 L:£1,031,000	U:£3,436,000 L:£1,031,000	U:£3,436,000 L:£1,031,000	U:£3,436,000 L:£1,031,000	U:£3,436,000 L:£1,031,000
Total Cost - Sensitivity Analysis	**Upper:**	**£5,412,000**	**£16,835,000**	**£13,985,000**	**£8,840,000**	**£11,753,000**	**£6,608,000**	**£8,840,000**	**£11,753,000**	**£6,608,000**	**£8,840,000**
	Lower:	**£2,093,000**	**£6,545,000**	**£5,527,000**	**£3,128,000**	**£4,488,000**	**£2,088,000**	**£3,128,000**	**£4,488,000**	**£2,088,000**	**£3,128,000**