

Title: Mandating climate-related financial disclosures by publicly quoted companies, large private companies and Limited Liability Partnerships (LLPs). IA No: RPC Reference No: Lead department or agency: Department for Business, Energy and Industrial Strategy Other departments or agencies: N/A	Impact Assessment (IA)			
	Date: 29/01/2021			
	Stage: Consultation			
	Source of intervention: Domestic			
	Type of measure: Secondary Legislation			
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Summary: Intervention and Options			RPC Opinion: RPC Opinion Status	

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
£-1,144.5m	£-1144.4m	£132.9m	

What is the problem under consideration? Why is government action or intervention necessary?

Poor understanding of climate-related risks and opportunities in companies and financial institutions means that these risks cannot be managed and is likely to lead to an inefficient allocation of capital. This results in a significant risk of stranded assets. A voluntary approach to climate risk reporting is unlikely to be effective; companies do not want to have first mover disadvantage, and amongst those that do report, reporting quality varies significantly. Even if some businesses could signal their relative attractiveness through voluntary climate disclosures, uncertainty would remain over those who did not report, making financial risks harder to judge. Government is best placed to resolve this issue to achieve a level playing field across all areas of the economy and to move industry towards best practice, decision-useful disclosures.

What are the policy objectives of the action or intervention and the intended effects?

The aim of the intervention is to improve the quality and quantity of climate-related financial disclosures by UK businesses across the UK economy. This would better inform investors, policymakers, and civil society of how businesses are likely to be impacted by climate change. This should allow investment decisions to better reflect climate risks, leading to more climate-resilient investment and economic activity.

What policy options have been considered, including any alternatives to regulation?

The Green Finance Strategy¹ set out that all listed companies and large asset owners should disclose in line with the Taskforce for Climate-Related Financial Disclosures (TCFD) recommendations by 2022. We have considered the following long list of options within this Impact Assessment: Option 0) Do Nothing, Option 1) Voluntary Disclosure, and Option 2) Mandatory disclosure. The options considered under mandatory disclosure (Options 2a to 2d) vary in their coverage and comprise our short-list. Our preferred option, 2a, subject to consultation, is for mandatory TCFD requirements to apply to Relevant Public Interest Entities (PIEs), including Premium and Standard Listed Companies with over 500 employees, UK registered companies with securities admitted to AiM with more than 500 employees, Limited Liability Partnership (LLPs) within the threshold of the “500 test” and UK registered companies which are not included in the categories above and are within the threshold of the “500 test.”

Will the policy be reviewed? Yes. Timing of review to be set out in final Impact Assessment.				
Does implementation go beyond minimum EU requirements?		Yes		
Is this measure likely to impact on international trade and investment?		Yes		
Are any of these organisations in scope?		Micro No	Small No	Medium No
			Large Yes	
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: N/A		Non-traded: N/A

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible SELECT SIGNATORY:  Date: 03/03/2021

¹ UK Green Finance Strategy, 2019, [https://www.gov.uk/government/publications/green-finance-strategy]

Summary: Analysis & Evidence

Policy Option 2a (Preferred Option)

Description: Mandatory disclosure covering the following: Relevant Public Interest Entities (PIEs), including Premium and Standard listed companies with over 500 employees, UK registered companies with securities admitted to AiM with more than 500 employees, LLPs covered by the "500 test" and UK registered companies which are not included in the categories above and are covered by the "500 test".

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: n/a	High: n/a	Best Estimate: -1144.5

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	1		
High			
Best Estimate		18.4	130.4

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

Monetised costs include the additional reporting costs to 1,700 companies that fall within scope of the incoming requirements. This includes the cost of disclosing their governance strategy, risk management and calculating and disclosing the metrics and targets used to assess and manage climate related risks. One-off monetised costs include the cost to government of producing guidance and the cost of familiarisation, which we expect to occur in the first year of implementation and apply to all in scope.

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

Monetised costs not included within this Impact Assessment include the cost to the regulator for the monitoring and enforcement of incoming requirements.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	0	0
High	0	0	0
Best Estimate	0	0	0

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

Benefits have not been monetised given the difficulty of estimating the change in the allocation of capital.

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

We expect this option to lead companies to develop a stronger understanding of the climate-related risks they face and therefore be better equipped to develop a strategy to effectively monitor and manage those risks and take advantage of opportunities. Proper disclosure of climate-related risks, in line with TCFD recommendations, will better inform investors how companies are likely to be impacted by climate change; supporting a more efficient allocation of capital and more orderly transition, through improved information and shifting investment flows in line with climate risks. The benefits of managing climate-related risks is likely to be substantial e.g The Bank of England estimates that loan exposures to fossil fuel producers, energy utilities and emission intensive sectors are equivalent to around 70% of the largest UK banks' regulatory capital.

Key assumptions/sensitivities/risks	Discount rate
	3.5

- The number of entities in scope is expected to remain broadly stable over the appraisal period of 10 years.
- The average cost to each company that falls in scope is assumed to be equal, albeit we recognise that the cost to each company will vary depending on their business model, the complexity of their corporate structure, starting level of expertise internally, etc.
- A key uncertainty is the extent to which the costs estimated within this IA are likely to be additional. It is likely that some of the companies in scope of this option are already complying with TCFD recommendations to some degree or have pre-existing risk management and governance processes that can be adapted to TCFD. However, given the lack of evidence, we have assumed that none of the companies in scope are complying with recommendations set out under TCFD.

BUSINESS ASSESSMENT (Option 4a)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m: 664.7
Costs: 132.9	Benefits: 0	Net: 132.9	

Summary: Analysis & Evidence

Policy Option 2b

Description: Mandatory disclosure covering the following: Relevant Public Interest Entities (PIEs), in addition to all Premium and Standard Listed Companies, UK registered companies with securities admitted to AiM with more than 500 employees, LLPs covered by the "500 test" and UK registered companies which are not included in the categories above and are covered by the "500 test."

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: n/a	High: n/a	Best Estimate: -1450.2

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	1		
High			
Best Estimate		23.3	165.3

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

Monetised costs include the additional reporting costs to 2,100 companies that fall within scope of the incoming requirements. This includes the cost of disclosing their governance strategy, risk management and calculating and disclosing the metrics and targets used to assess and manage climate related risks. One-off monetised costs include the cost to government of producing guidance and the cost of familiarisation, which we expect to occur in the first year of implementation and apply to all in scope.

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

Monetised costs not included within this Impact Assessment include the cost to the regulator for the monitoring and enforcement of incoming requirements.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	0	0
High		0	0
Best Estimate		0	0

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

Benefits have not been monetised given the difficulty of estimating the change in the allocation of capital.

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

We expect this option to lead companies to develop a stronger understanding of the climate-related risks they face and therefore be better equipped to develop a strategy to effectively monitor and manage those risks and take advantage of opportunities. Proper disclosure of climate-related risks, in line with TCFD recommendations, will better inform investors how companies are likely to be impacted by climate change; supporting a more efficient allocation of capital and more orderly transition, through improved information and shifting investment flows in line with climate risks. The benefits of managing climate-related risks is likely to be substantial e.g The Bank of England estimates that loan exposures to fossil fuel producers, energy utilities and emission intensive sectors are equivalent to around 70% of the largest UK banks' regulatory capital.

Key assumptions/sensitivities/risks	Discount rate	3.5
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- The number of entities in scope is expected to remain broadly stable over the appraisal period of 10 years.
- The average cost to each company that falls in scope is assumed to be equal, albeit we recognise that the cost to each company will vary depending on their business model, the complexity of their corporate structure, starting level of expertise internally, etc.
- A key uncertainty is the extent to which the costs estimated within this IA are likely to be additional. It is likely that some of the companies in scope of this option are already complying with TCFD recommendations to some degree or have pre-existing risk management and governance processes that can be adapted to TCFD. However, given the lack of evidence, we have assumed that none of the companies in scope are complying with recommendations set out under TCFD.

BUSINESS ASSESSMENT (Option 4b)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m: 842.3
Costs: 168.5	Benefits: 0	Net: 168.5	

Summary: Analysis & Evidence

Policy Option 2c

Description: Mandatory disclosure covering the following: Relevant Public Interest Entities (PIEs), including Premium and Standard listed companies with over 500 employees, UK registered companies with securities admitted to AiM with more than 500 employees, LLPs covered by The Wates Principles and UK registered companies which are not included in the categories above and are covered by The Wates Principles.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: n/a	High: n/a	Best Estimate: -1876.4

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	1		
High			
Best Estimate		30.1	213.9

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

Monetised costs include the additional reporting costs to 2,700 companies that fall within scope of the incoming requirements. This includes the cost of disclosing their governance strategy, risk management and calculating and disclosing the metrics and targets used to assess and manage climate related risks. One-off monetised costs include the cost to government of producing guidance and the cost of familiarisation, which we expect to occur in the first year of implementation and apply to all in scope.

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

Monetised costs not included within this Impact Assessment include the cost to the regulator for the monitoring and enforcement of incoming requirements.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	0	0
High	0	0	0
Best Estimate	0	0	0

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

Benefits have not been monetised given the difficulty of estimating the change in the allocation of capital.

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

We expect this option to lead companies to develop a stronger understanding of the climate-related risks they face and therefore be better equipped to develop a strategy to effectively monitor and manage those risks and take advantage of opportunities. Proper disclosure of climate-related risks, in line with TCFD recommendations, will better inform investors how companies are likely to be impacted by climate change; supporting a more efficient allocation of capital and more orderly transition, through improved information and shifting investment flows in line with climate risks. The benefits of managing climate-related risks is likely to be substantial e.g The Bank of England estimates that loan exposures to fossil fuel producers, energy utilities and emission intensive sectors are equivalent to around 70% of the largest UK banks' regulatory capital.

Key assumptions/sensitivities/risks	Discount rate	3.5
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- The number of entities in scope is expected to remain broadly stable over the appraisal period of 10 years.
- The average cost to each company that falls in scope is assumed to be equal, albeit we recognise that the cost to each company will vary depending on their business model, the complexity of their corporate structure, starting level of expertise internally, etc.
- A key uncertainty is the extent to which the costs estimated within this IA are likely to be additional. It is likely that some of the companies in scope of this option are already complying with TCFD recommendations to some degree or have pre-existing risk management and governance processes that can be adapted to TCFD. However, given the lack of evidence, we have assumed that none of the companies in scope are complying with recommendations set out under TCFD.

BUSINESS ASSESSMENT (Option 4c)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m: 1089.9
Costs: 218.0	Benefits: 0	Net: 218.0	

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Section 1: Problem under Consideration:

1. The UK Government has set a world-leading target to reach net zero greenhouse gas emissions by 2050. Green finance is a critical enabler for these ambitions by ensuring private finance is allocated in a way which properly considers the risks and opportunities from climate change.
2. Climate change poses significant risks to businesses, financial institutions, communities, and individuals. These may manifest as physical risks or transition risks. Physical risks are those arising from the rise in global average temperature (e.g., increased frequency and severity of extreme weather events), whilst transition risks are those arising from the changes in technology, policy, markets, and consumer sentiment which will result from our transition to a low-carbon economy.
3. Both physical and transition risks have the potential to have material financial impacts on businesses and individuals in the short, medium, and long-term. If exposure to these risks is not properly analysed, understood and disclosed, capital may be misallocated, with implications for financial stability, whilst the likelihood of unexpected and unmanageable losses from extreme weather events, and the likelihood of assets becoming 'stranded' because of our transition to a low-carbon economy, will increase.
4. Additionally, the opportunities arising from the low-carbon transition will be significant, as new technologies, products and services are required to meet regulatory and consumer expectations. Those companies best placed to profit from the transition should, over time, attract more capital from investors, as greater risk-adjusted returns are realised.
5. The Task Force on Climate-related Financial Disclosures (TCFD), composed of industry participants, was created to improve and increase reporting of climate-related financial information. This taskforce developed recommendations¹ ("TCFD recommendations") to ensure that business risks and opportunities from climate change were clearly communicated in their corporate reporting. The recommendations were designed to be voluntarily and have already attracted considerable support internationally. More than 1400 organisations worldwide – spanning non-financial and financial organisations – have now formally indicated their support for the recommendations.
6. In July 2019, the UK Government published its Green Finance Strategy². This set out the Government's vision for transforming the global financial system for a greener future and to further enhance the competitiveness of the UK's real economy and financial services sector. Leadership on green finance will enable the UK to maximise the economic opportunities of the global and domestic shifts to clean and resilient growth. The strategy set out the Government's expectation that all listed companies and large asset owners should disclose in line with the TCFD recommendations by 2022. The Government recognises that delivering the systemic changes required to align private financial flows with environmentally sustainable growth will require collaborative efforts across the public and private sector, and that leadership on green finance will in turn strengthen the competitiveness of the UK financial sector.
7. In addition to this expectation, the Government established a joint taskforce with UK regulators to examine the most effective way to approach disclosure, including exploring the appropriateness of mandatory reporting. The joint taskforce proposed, in its interim

¹ Recommendations of the Task Force on Climate-Related Financial Disclosures, 2017, [<https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf>]

² UK Green Finance Strategy, 2019, [<https://www.gov.uk/government/publications/green-finance-strategy>]

report published on 9th November 2020³, to require mandatory TCFD reporting across various sectors of the economy through both regulatory and legislative means. This proposal complements other regulatory activity. The FCA have recently consulted on proposed changes to the listing rules, to require premium listed companies to disclose in line with TCFD on a comply or explain basis. Additionally, DWP have recently consulted on requiring the largest occupational pension schemes to disclose in line with TCFD.

8. This Impact Assessment evaluates the options for mandating disclosures from large corporate entities including private companies and companies admitted to trading on a regulated market. These disclosures would meet the recommendations outlined in the 2017 TCFD recommendations report⁴ and ensure that companies adequately set out material climate related risks and opportunities to business models as well as organisational strategies for dealing with these risks.

Section 2: Rationale for Intervention:

9. The rationale for intervention is built around the following:

Externalities:

- Greenhouse gas (GHG) emissions impose externalities: as GHG emissions rise, GHG concentrations increase, and global temperatures rise. Various studies have set out the adverse consequences on climate from higher temperatures⁵. In response, Governments across the world have implemented emission reduction strategies involving regulation, carbon pricing and other market-based mechanisms. These will have a significant impact on energy generation and distribution systems, and the way energy is used in industry, homes, transport, and agriculture.
- Businesses will therefore need to adapt to both adverse consequences of climate change, and to the changes in their energy use and the type of products they sell. For example, the continued use of some existing products will be inconsistent with future emissions reductions, or too expensive when the GHG externality is priced in. In this changing environment, businesses and investors will need to make different investment decisions. If they do not consider climate change risks, there is a significant risk of **stranded assets** – i.e. assets that will be unviable in the future – and will ultimately be scrapped prematurely. In addition, businesses may miss out on opportunities that are enabled by governments' responses to climate change.
- These risks are likely to be substantial. The Intergovernmental Panel on Climate Change (IPCC) estimates \$69 trillion in global financial losses by 2100 from a 2-degree warming scenario⁶. In the UK, the Bank of England estimates that loan exposures to fossil fuel producers, energy utilities and emission intensive sectors are equivalent to around 70% of the largest UK banks' regulatory capital (defined as common equity Tier 1 CET1 capital). For UK insurers, around 12% of equity and 8% of corporate bond portfolio exposures are in 'high carbon' technologies⁷.

³ Interim Report of the UK's Joint Government Regulator TCFD Taskforce, Nov 2020, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933782/FINAL_TCFD_REPORT.pdf]

⁴ Recommendations of the Task Force on Climate-Related Financial Disclosures, 2017, [<https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf>]

⁵ IPCC, Global warming of 1.5°C, 2019, [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf]

⁶ IPCC Global Warming of 1.5 °C, 2019, Chapter 3, [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Chapter3_Low_Res.pdf]

⁷ Bank of England, Dec 2019, [<https://www.bankofengland.co.uk/-/media/boe/files/paper/2019/the-2021-biennial-exploratory-scenario-on-the-financial-risks-from-climate-change.pdf>]

Information asymmetry:

- Faced with these risks, investors need to differentiate between investments with different levels of climate exposure so that they can make appropriate investment decisions. However, at present there is no direct formal requirement for businesses to disclose information on their exposure to climate risks. With a lack of information, investors are likely to misprice climate risks and the cost of capital is likely to be too high for some businesses and too low for others. In extremis, some viable firms may not be able to get access to capital at all as risk – reward trade-offs are not fully understood by markets.
- In addition to informing investment decisions, disclosures are needed to enable financial institutions to meet new regulatory requirements. For instance, banks are being asked to conduct climate stress tests, and occupational pension schemes are being asked to disclose their own climate risk in line with TCFD. For these regulatory requirements, it is important that financial institutions can access information about the climate risk they are exposed to through their loan books and investment portfolios. To access this information, financial institutions need disclosures from the underlying businesses that they are exposed to.
- A solution to the information asymmetry problem would be for businesses to voluntarily signal their preparedness to deal with climate-risk through their company reports, which some businesses are already doing. The disclosure of climate-related financial information aligned with the TCFD recommendations has steadily increased since the recommendations were published in 2017⁸. For example, the TCFD found that amongst 1,701 public companies across 69 countries, voluntary disclosures increased, on average, by 6 percentage points between 2017 and 2019⁹.
- However, even amongst those that do report, evidence from TCFD status reports indicates that reporting standards vary, and compliance is inconsistent. Even when companies do disclose, they do not disclose across all the TCFD recommended areas. Only 7% of those within the sample population of the 2020 TCFD status report disclosed information relating to the resilience of its strategy to climate risk; and 41% of the sample disclosed information that aligned with the TCFD recommendation to outline the risks and opportunities associated with the company's climate risk. The 2020 TCFD status report also identified that, on average, information that aligned with TCFD recommendations was four times more likely to be located within sustainability reporting than within annual financial reports¹⁰. This suggests that climate reporting still may not be fully integrated into companies' financial decision making.

10. Other barriers to reporting may include:

- The costs associated with making and complying with extensive disclosure requirements, as well as the reluctance to disclose commercially sensitive information and the potential legal liability that may arise with forward looking projections associated with climate risk.
- Fears of impact on investor confidence and share prices: Those companies in scope who do not have a well-developed strategy to address climate risk would likely choose not to voluntarily disclose in line with TCFD recommendations to avoid a negative impact on investor confidence and share prices.

⁸Task Force on Climate-related Financial Disclosures, 2020 Status Report, October 2020, [www.fsb.org/wp-content/uploads/P291020-1.pdf]

⁹ *Ibid.*

¹⁰ *Ibid.*

- First Mover disadvantage: The current lack of mandatory and standardised disclosure requirements means that companies are unwilling to disclose unless their comparators are also disclosing. This is because of the fear of adverse market response to their disclosures if their competitors are not producing equivalent disclosures.
- Investors may not be able to effectively co-ordinate to encourage and influence a market led improvement in climate-related disclosures across companies. Disclosures are therefore then determined through the private incentives companies themselves face. This is likely to be of more relevance to businesses with traded shares where the shareholder base is fragmented.
- Further, even if some businesses could signal their relative attractiveness through climate disclosures, uncertainty would remain over those who did not report, making financial risks harder to judge. Further, this group would also be more likely to include more of those who are most exposed to climate risks.

Section 3: Policy objective

11. The government wants to improve the quantity and quality of climate-related financial disclosures across a significant portion of the UK economy. As set out above, despite some voluntary take up, the coverage is not good enough for all the potential benefits of TCFD to be realised. Ultimately, the Government expects the measure will support a better allocation of capital in line with our net zero target and reduce material financial risks from climate change.
12. The theory of change for mandating TCFD requirements is illustrated below:

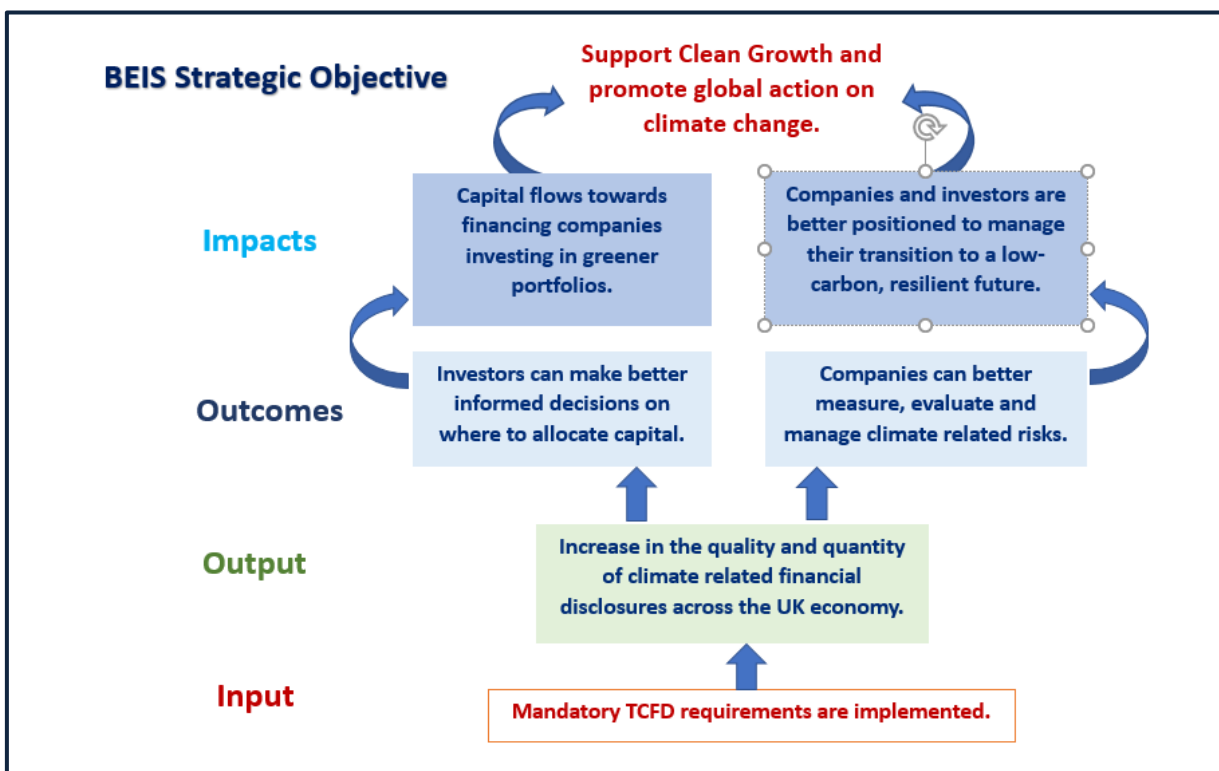


Figure 1: Theory of Change

Section 4: Description of the long-list options considered:

13. We have considered the following options:
 - **Option 0: Do nothing:** The government will not pursue the “do nothing” option for the reasons set out in Section 2. In summary, there are several reasons why this option is not preferred. Primarily, current levels of TCFD disclosure are lower than

optimal¹¹. Without better coverage of the economy, it will be difficult to compare companies on their climate credentials and as a result it will be difficult for investment and other decisions to be made based on that information. Additionally, with current low levels of coverage, there is less pressure on companies to develop best practice. This is particularly the case for those sectors/companies that are currently under less scrutiny and may have reached a view that they are not materially exposed to climate-related risks and opportunities without having carried out the analysis to support such a position.

- **Option 1: Voluntary disclosure (non-regulatory option):** The government has also considered a less comprehensive non-mandatory policy option – for example, issuing further guidance on how to account for climate change risks. Whilst these options may further encourage consistent TCFD compliant disclosures, the lack of statutory weight behind guidance would be expected to result in a level of compliance and implementation that is insufficient relative to policy objectives. Additionally, there is already a significant amount of guidance available and work ongoing on TCFD and climate-risk analysis more generally, and it is unlikely additional government guidance would have a significant impact (and risks adding complexity).
- **Option 2: Mandatory disclosure:** The government has considered several mandatory disclosure requirements, which differ in their scope of coverage.

To note that, for the options outlined below, all UK companies that are currently required to produce a non-financial information statement, being UK companies that have more than 500 employees and either have securities admitted to trading on a UK regulated market or undertake banking or insurance activities are from here on in referred to as “**Relevant Public Interest Entities (PIEs)**”. Further, Premium and Standard listed companies which fall within this definition of “relevant public interest entities”, have been split into their own discrete category below, in order to conduct relevant analysis on the number of companies in scope and to avoid double counting.

- **Option 2a) Preferred Option:**

- “Relevant Public Interest Entities”
- UK Premium and Standard Listed Companies with over 500 employees
- UK registered companies with securities admitted to AIM with over 500 employees
- LLP’s covered by the “500 test”¹²
- UK registered companies which are not included in the categories above and are covered by the “500 test”

- **Option 2b):**

- “Relevant Public Interest Entities”
- All UK Premium and Standard Listed Companies
- UK registered companies with securities admitted to AIM with over 500 employees
- LLP’s covered by the “500 test”

¹¹ Task Force on Climate-related Financial Disclosures, 2020 Status Report, October 2020, [https://www.fsb.org/wp-content/uploads/P291020-1.pdf]

¹² The 500 test includes companies with over 500 employees and turnover over £500m.

- UK registered companies which are not included in the categories above and are covered by the “500 test”
- **Option 2c:**
 - “Relevant Public Interest Entities”
 - UK Premium and Standard Listed Companies with over 500 employees
 - UK registered companies with securities admitted to AIM with over 500 employees
 - LLP’s covered by the Wates Principles¹³
 - UK registered companies which are not included in the categories above and are covered by the Wates Principles
- **Option 2d)**
 - All Public Interest Entities
 - All UK Premium and Standard Listed Companies
 - All UK registered companies with securities admitted to AIM
 - LLP’s covered by the Wates Principles
 - UK registered companies which are not included in the categories above and are considered large companies as defined by the 2006 Companies Act¹⁴

14. Within private companies, we have considered three varying levels of coverage to align with existing definitions:

- Companies Act definition: Companies which are larger than the definition of a ‘medium-sized company’ under the Companies Act 2006, i.e. those that meet at least two of the following criteria: Turnover of more than £36m; Balance sheet total of more than £18m; More than 250 employees.¹⁵
- Wates Principles of Corporate Governance definition: more than 2,000 employees; or turnover of more than £200 million and balance sheet of more than £2 billion¹⁶.
- The “500 Test” definition: Over 500 employees and turnover over £500m. This definition incorporates the threshold for additional non-financial reporting requirements currently applied to UK Public Interest Entities (PIEs)¹⁷.

¹³ Financial Reporting Council, *The Wates Corporate Governance Principles for Large Private Companies*, Dec 2018, [www.frc.org.uk/getattachment/31dfb844-6d4b-4093-9bfe-19cee2c29cda/Wates-Corporate-Governance-Principles-for-LPC-Dec-2018.pdf]

¹⁴ By Companies Act definition, a large company is any company that meets any two of the following: turnover of more than £36m, balance sheet of more than £18, and more than 250 employees. [www.legislation.gov.uk/ukpga/2006/46/contents].

¹⁵ The Companies Act, 2006, [www.legislation.gov.uk/ukpga/2006/46/contents].

¹⁶ Financial Reporting Council, *The Wates Corporate Governance Principles for Large Private Companies*, Dec 2018, [www.frc.org.uk/getattachment/31dfb844-6d4b-4093-9bfe-19cee2c29cda/Wates-Corporate-Governance-Principles-for-LPC-Dec-2018.pdf]

¹⁷ Section 414CA-414CB of the Companies Act 2006 implements Article 19a, Directive 2013/34/EU on disclosure of non-financial and diversity information by certain large undertakings and groups. It requires large undertakings which are PIEs and have more than 500 employees to disclose a range of non-financial information, including disclosure on environmental, employee, social, anti-corruption, and bribery matters.

15. The above options for those in scope of mandatory disclosure are summarised in Table 1 below.

Table 1: Overview of Options under Mandatory TCFD Requirements.

	Other Companies			LLP's		Listed Companies		Aim Companies		Public Interest Entities	
	WATES	The "500 Test"	Companies Act	WATES	The "500 Test"	All Premium & Standard listed	Premium and Standard Listed (≥500 employees)	All AIM Listed Companies	AIM listed Companies (≥500 Employees)	All Public Interest Entities	Public Interest Entities (≥500 employees)
Option 2a (Preferred)		X			X		X		X		X
Option 2b		X			X	X			X		X
Option 2c	X			X			X		X		X
Option 2d			X	X		X		X		X	

16. Table 2 below outlines the expected number of entities falling within scope for each option under mandatory reporting requirements. Whilst the regulations will be applied at group level, the numbers quoted below include subsidiaries given that we expect some burden to fall on subsidiaries to provide information at the group level. We have explored the impact of not including subsidiaries within our analysis within sensitivity analysis in Section 9.

Table 2: Summary Statistics of Options under Mandatory TCFD Requirements¹⁸.

Option Under Consideration:	Number of Entities in Scope (to nearest 100)	Employees (million)	Turnover (£trn)
Option 2a (Preferred)	1,600	15.2	4.0
Option 2b	2,000	15.3	4.0
Option 2c	2,600	22.6	4.6
Option 2d	15,400	25.9	6.7

17. We have taken forward Option 2a, 2b and 2c as our shortlist of options under Mandatory disclosure, for the reasons set out in Section 4. We have not included Option 3d within our shortlist of options, as we do not view that this to be proportionate. Mandating TCFD requirements to all companies that are above the thresholds of a medium company in the 2006 Companies Act would include approximately 13,000 entities. There is a 'long tail' of smaller companies within this definition, for whom the cost of TCFD would be high relative to their economic and environmental significance, and to whom we expect exposure will be less material for investors, banks and other stakeholders. This option would therefore place a disproportionate burden on businesses for little additional benefit and is not included within our short list.

18. The shortlist of options evaluated within this Impact Assessment are therefore options 2a, 2b and 2c. The primary difference between these three shortlisted options is the definition we have applied to private companies. We assume that the same threshold applied to private companies will also apply to LLP's. Our shortlisted options also differ by applying a 500-employee threshold to Premium and standard listed companies, AIM listed companies and Public Interest Entities.

19. Our approach to listed companies overall will complement the FCA's 'comply or explain' rule for premium listed commercial companies and future anticipated rules for a wider scope of listed companies, which the FCA have stated that they will consult on in 2021, while also considering enhancing the compliance basis.

¹⁸ Estimates by BEIS based off Fame data. Estimates include subsidiaries. [Fame accessed 14/01/21]

Section 5: Summary and preferred option with description of implementation plan

20. Our preferred option is Option 2a. This is because the entities that fall within this option are of both economic and environmental significance. We also view a threshold of over 500 employees for public interest entities and AIM listed companies to be proportionate and welcome views on this option within our consultation. We will further refine scope and coverage of mandatory disclosures in line with the TCFD recommendations in our full stage Impact Assessment.
21. Our preferred option would be implemented through secondary legislation. Specifically, this would be done via an affirmative Statutory Instrument (SI), making changes to the Companies Act 2006. There would be a sufficient time lag between when the SI is made in Parliament and when the rules would come into force on the Common Commencement Date of 6th April 2022¹⁹ for companies to prepare for the requirements. Accounting periods starting on or after 6 April 2022 will need to be compliant with these regulations. In the absence of shortened accounting periods the first accounts that must be compliant with these regulations will be in respect of the period 1st May 2022 to 30th April 2023. For this reason, there will be no further transitional arrangements.
22. We have proposed that we would amend the Companies Act to mandate TCFD disclosures in a company's strategic report. The Financial Reporting Council's (FRC) Conduct Committee is an authorised body under section 457 Companies Act 2006 for the purposes of section 456 of the 2006 Act²⁰, and the FRC has a role to ensure that the provision of financial information (including directors' reports) by public and large private companies complies with Companies Act requirements. In other matters, the FRC challenges companies where they have concerns with accounts and report on their findings. The FRC would therefore regulate TCFD disclosures in the annual reports and accounts of companies.
23. The intervention will increase the quantity of disclosures, as significantly more companies will be required to disclose in line with the TCFD recommendations than are currently disclosing voluntarily. Additionally, reaching this critical mass of disclosures will move industry towards best practice in terms of quality of disclosures on faster timelines. This option will mitigate the current first mover issue companies are concerned about, lead to greater standardisation of reporting and, as a result, improve comparability and the decision-usefulness of disclosures.

Section 6: Summary of monetised and non-monetised costs and benefits of each option (including administrative burden)

Proportionality of Analytical Approach:

24. The analysis contained in this IA is considered proportionate. The key analytical risks and uncertainties are identified in Section 8, and sensitivity analysis has been undertaken on key variables in Section 9.
25. The analysis included within this Impact Assessment represents our current best estimates. These are based off internal benchmarking and through initial engagement with stakeholders. We expect to refine these estimates further in the full stage Impact Assessment, following responses from consultation and through detailed discussion with relevant stakeholders.

¹⁹ For more information on Common Commencement Dates, see the Better Regulation Framework <https://www.gov.uk/government/publications/better-regulation-framework>

²⁰ The Financial Reporting Council, *Relevant Procedure: Conduct Committee Operating Procedures For Reviewing Corporate Reporting*, April 2017, [www.frc.org.uk/getattachment/fb5437a7-641b-4c18-b9f8-8baa7f36c7a5/Conduct-Committee-Operating-Procedures-April-2017.pdf]

Description of the Counterfactual (Option 0):

26. As outlined in Section 2, the Department is aware that there are several entities in scope which currently comply with TCFD disclosures to some degree. However, given the lack of compliance and extent of variation, the central scenario in the Impact Assessment assumes that all companies in scope will have a baseline of no pre-existing climate related disclosures.
27. As a result of this, the cost estimates quantified in section 7 are uncertain given that we do not have sufficient evidence to understand how additional this intervention is likely to be. We have also undertaken Sensitivity Analysis for additionality to account for this uncertainty in Section 9 to understand the impact of some entities within scope already undertaking disclosures in line with TCFD recommendations to some degree.
28. Further, the Department plans to commission external research to develop our evidence base in this area to determine the current state of climate-related risk reporting by large UK private firms. This research will develop our evidence base on the expected costs and barriers for UK private firms in providing TCFD disclosures and will inform and refine estimates in the full stage Impact Assessment. We would welcome further information from those in scope of the proposed requirements to feedback which elements of the specific activities costed within this Impact Assessment are already being completed voluntarily (e.g. completing a TCFD report/conducting a scenario analysis/calculating relevant metrics). The feedback of any further information should be provided via the consultation process.

Overview of Costs to Entities in Scope:

29. The TCFD framework²¹ includes 11 recommendations which are split into four pillars of Governance, Strategy, Risk Management and Metrics & Targets. These are illustrated below:

²¹ *TCFD Recommendations Report*, June 2017 [<https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf>]

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	Recommended Disclosures	Recommended Disclosures	Recommended Disclosures
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Figure 2: The TCFD Recommendations and the Supporting Recommended Disclosures

30. We expect that the costs associated with the incoming disclosure requirements will broadly fall into divisions that align with these four pillars. An overview of these expected costs are outlined in further detail below:

- **Familiarisation Costs:** These are the one-off costs for all entities that fall in scope to familiarise themselves with the incoming disclosure requirements. These costs will be experienced in the first-year companies fall into scope of the requirements, expected to be 2022.
- **Governance:** These are the ongoing annual costs that fall on all entities in scope to adapt governance structures and document and disclose their governance of climate related risks and opportunities.
- **Strategy:** These are the ongoing annual costs that fall on all entities in scope to identify, document and disclose climate-related risks and opportunities, as well as reporting on the impact of these risks on the company's business, strategy and financial planning.
- **Risk Management:** These are the ongoing annual costs that fall on all entities in scope to disclose the company's management of climate-related risks. This includes the identification and assessment of risks and their integration into the company's overarching risk-management strategy.
- **Metrics & Targets:** These are the ongoing annual costs to those in scope of developing, calculating and disclosing the metrics and targets used to assess and manage climate related risks. This includes the costs of collecting data on an annual

basis to report against these metrics and targets, which we have quantified separately in section 7.

31. The above costs are classified as direct costs to businesses. These have been quantified as far as possible in Section 7.
32. There will be also an additional one-off cost for producing the required disclosure guidance. We currently expect this guidance to be produced by BEIS employees given the necessary timings for implementation, however, this is uncertain. **We estimate the costs to government of producing the required guidance to be £116,500, to the nearest £100.**²²
33. Scenario analysis is a useful tool for companies to effectively communicate the potential impact of a range of future climate scenarios. However, we recognise that this is one of the most challenging areas of the TCFD recommendations, and as such this element will be encouraged but not required. Some companies are already able to produce quantitative scenario analysis and we encourage those companies to continue to disclose their outputs to support the disclosures provided in the Strategic Report, however we also recognise that this is the area where there is the biggest gap relating to capability and expertise.
34. We also expect there to be an additional ongoing cost of monitoring, supervision and enforcement to the Financial Reporting Council (FRC) as the appropriate regulating body for disclosures under this proposed Companies Act requirement. However, additional activity for the FRC associated with the incoming requirements should be accounted for within the regulator's business as usual scenario. Any additional ongoing costs to the regulator would be covered through an increase in the FRC levy which we note is out of scope of the Better Regulation Framework. As a result, these costs are excluded from the Business Impact Target Calculations within this Impact Assessment.
35. We assume that the companies within scope will be able to understand, interpret and incorporate the proposed regulations in-house and without the need for external legal advice. We have therefore omitted legal costs from our analysis on direct costs to businesses and would welcome feedback on this within the consultation process to refine estimates further.

Benefits:

36. We do not consider it proportionate to reasonably estimate and monetise the benefits of these proposals at this stage, given their nature. As a result, we have qualitatively outlined key benefits below, which can be split into two categories: 1) the direct benefits to the companies in scope and their counterparties in terms of preparedness for business risks from climate change, plus an increased ability to exploit opportunities from climate change; and 2) the wider benefits that derive from the more efficient allocation of capital.
37. There are several potential benefits for companies that fall in scope of the incoming requirements. The proper implementation of the TCFD recommendations should lead companies to develop a much better understanding of the climate-related risks they may face and therefore be better equipped to develop a strategy to effectively monitor and manage those risks. We have spoken extensively with stakeholders, including those who

²² Calculation based on internal BEIS wage estimates: [(1 * Grade 5) * (3 hours sign-off) * (£55.65 Wage)] + [(2 * Grade 6) * (5 hours to sign-off) * (£49.04 Wage)] + [(3 Grade 7) * (1/3 year) * (£77,000 Gross yearly wage)] + [(2 SEO) * (1/3 Year) * (£58,276 Gross yearly wage)] = £116,500 to nearest £100.

have chosen to disclose in line with TCFD voluntarily. One thing which has been clear is the potentially transformational impact TCFD implementation can have on an organisation; the framework is such that to be implemented properly, it requires significant change across several departments and levels of senior engagement leading to an increased understanding of climate-related risks and opportunities.

38. In addition to the direct benefits to companies, there will be a range of external benefits to widespread TCFD implementation. Firstly, TCFD reporting can support better and more transparent decision-making processes. Regulatory and consumer pressures are growing for financial institutions to 'green' their investment decisions. If an investor is comparing the climate-credentials of companies as part of their investment decisions, having standardised, comparable information from those companies will allow more informed decisions to be made. Over time, this should provide investors with the information they need to make consistent, climate positive and transparent decisions.
39. The resulting second-order benefits of TCFD implementation should include banks and investors being better equipped to make more climate-positive decisions throughout their loan books and portfolios, including across different asset classes. As such, the cost of capital should more appropriately reflect the climate risk.
40. Finally, on a wider scale and from the perspective of governments and regulators, widespread TCFD implementation should help to improve system financial stability by preventing the build-up of systemic climate-related financial risk, as more companies and financial institutions analyse and act upon their individual climate-risks.

Section 7: Direct costs and benefits to business calculations

41. For each option, we assume that proposed measures will apply from 2022 and costs are assessed over a 10-year appraisal period.
42. The costs under each option are only expected to differ in terms of the number of entities in scope. For the analysis below, we have assumed that the average cost of producing climate-related financial disclosures in line with TCFD recommendations will not vary by the company they apply to.
43. The Impact Assessment uses the 2020 ONS Annual Survey of Hours and Earnings (ASHE) data²³ for hourly and yearly gross wage costs and applies a 18% UK non-wage labour costs uplift²⁴ to reflect the total costs to business in scope.

One-Off Costs:

44. The only one-off cost we expect companies in scope to incur in the first year of incoming disclosure requirements is the cost of familiarisation. These costs are quantified below and rounded to the nearest £100.

Familiarisation Costs:

45. All companies in scope are expected to face familiarisation costs in understanding and interpreting the guidance provided by the regulator and assessing what compliance would mean for them in practice. We expect familiarisation costs to apply as one-off costs in the first year of implementation only. The estimates below are based on the time

²³ ONS ASHE Data, Table 14.5a & Table 14.7a, 2020, 75th Percentile.

²⁴ Eurostat, March 2020, [<https://ec.europa.eu/eurostat/documents/2995521/10624905/3-31032020-BP-EN.pdf/055df0e0-980d-27b9-a2a9-83b143d94d5b>]

spent by company staff to read the necessary guidance and prepare for the required financial disclosures. Estimates therefore use the hourly wage rate for Administrative Professionals, Corporate Managers and Directors and Senior Officials and Executives.

46. We assume that guidance will be 75 pages long, with each page taking 6 minutes to read and understand. This is based on existing, similar guidance that has been produced elsewhere such as The Climate Financial Risk Forum guidance on Climate-Related Financial Risk Management²⁵ and HMG's Streamlined Energy and Carbon and Greenhouse Gas Reporting.²⁶ We assume that, per company, this guidance will need to be read by 25 administrative level employees, 15 managerial level employees and 3 director level employees. **In total, we expect the cost of familiarisation with the incoming requirements to total £12,600 per entity in scope²⁷.**

Table 3: Expected Familiarisation Costs Per Company

Type of Staff	# of Employees Required to Read the Guidance	Familiarisation Time (Hrs/pp)	Wage (£/hr)	Total Cost Per Employee (£)
Chief Executives and Senior Officials	3	7.5	£68	£1,537
Corporate Managers	15	7.5	£42	£4,717
Administrative Professionals	25	7.5	£34	£6,394
Total cost per Company:				£12,600

Ongoing Costs

47. We have outlined below the costs we expect companies in scope to incur in each year only of the incoming disclosure requirements. This includes the following costs:

- i) Governance of climate related risks
- ii) Strategy
- iii) Risk Management
- iv) Metrics and Targets: This includes the cost of developing the framework and annual data gathering.
- v) Uploading and Signposting to the required disclosures location.

These costs are monetised in detail below and rounded to the nearest £100.

48. For all additional reporting costs, we have broken down the expected costs into three key areas to monetise the cost of disclosure:

- i) The time taken to collate and analyse necessary information, and implement any changes required to current processes.
- ii) The time taken to draft and re-draft the required reporting of processes and proofread documents.
- iii) The time taken for Director level discussion of reporting, reading of documentation and sign-off process.

²⁵ Climate Financial Risk Forum Guidance on Non-Financial Risk Reporting, 2020, [www.fca.org.uk/transparency/climate-financial-risk-forum]

²⁶ Environmental reporting guidelines: including Streamlined Energy and Carbon Reporting requirements, 2019, [https://www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance]

²⁷ Calculation: [(3 Senior level staff) * (7.5 hours to familiarise) * (£68.30 Senior Wage)] + [(15 Managerial Level Staff) * (7.5 hours to familiarise) * (£41.93 Manager Wage)] + [(25 Admin level staff) * (7.5 hours to familiarise) * (£34.10 Admin Wage)] = £12,600 to nearest £100.

Costs of Disclosing Governance of Climate Related Risks:

49. Governance costs include the ongoing cost to those in scope to implement, document and disclose governance of their climate related risks and opportunities and to co-ordinate across internal business functions. We assume, based on existing TCFD disclosures, that the required Governance documentation will be 5 pages long. This is based on the TCFD supplemental guidance.²⁸ We assume that 3 administrative level employees and 3 managerial level employees will be involved with the collation of information and drafting, taking 5 hours per page each. We assume that 3 senior officials will be involved, taking 3 hours per page each. **In total, we expect the cost of reporting the governance of climate related risks, in line with the incoming requirements, to total £8,800 per entity in scope²⁹.**

Table 4: Expected Governance Costs Per Company

Type of Staff	# of Employees	# of Pages	Time per Page (Hrs)	Wage (£/hr)	Total Cost Per Employee (£)
Chief Executives and Senior Officials	3	5	3	£68	£3,073
Corporate Managers	3	5	5	£42	£3,107
Administrative Professionals	3	5	5	£34	£2,514
Total cost per Company:					£8,800

Strategy Costs:

50. Strategy costs are the ongoing reporting costs to those in scope of co-ordinating internally, documenting and disclosing climate-related risks and opportunities the company has identified, as well as reporting on the impact of these risks on the company's business, strategy, and financial planning. As with the costs of Governance reporting, we have broken this down into three components: 1) The time taken to collate and analyse relevant information, and implement any changes required to current processes, 2) The time taken to draft and re-draft the required reporting and proofread documents, 3) The time taken for Director level discussion of reporting, reading of documentation and sign-off process. We assume, based on existing TCFD disclosures, that the required Strategy documentation will be 5 pages long. We assume that 5 administrative level employees and 5 managerial level employees will be involved with the collation of information and drafting, taking 5 hours per page each. We assume that 3 senior officials will be involved for sign-off, taking 3 hours per page each. **In total, we expect the cost of reporting the company's strategy, in line with the incoming requirements, to total £12,600 per entity in scope³⁰.**

²⁸ *Implementing the Recommendations of the Task Force on Climate related Financial Disclosures*, June 2017, Page 14, [<https://assets.bbhub.io/company/sites/60/2020/10/FINAL-TCFD-Annex-Amended-121517.pdf>]

²⁹ Calculation: [(3 Senior level staff) * (3 hours to read, review & sign-off per page) * (£68.30 Senior Wage) * (5 pages)] + [(3 Managerial Level Staff) * (5 hours to collate, draft and proof per page) * (£41.93 Manager Wage) * (5 pages)] + [(3 Admin level staff) * (5 hours to collate and draft per page) * (£34.10 Admin Wage)] = £8,800 to nearest £100.

³⁰ Calculation: [(3 Senior level staff) * (3 hours to read, review & sign-off per page) * (£68.30 Senior Wage) * (5 pages)] + [(5 Managerial Level Staff) * (5 hours to collate, draft and proof per page) * (£41.93 Manager Wage) * (5 pages)] + [(5 Admin level staff) * (5 hours to collate and draft per page) * (£34.10 Admin Wage) * (5 pages)] = £12,600 to nearest £100.

Table 5: Expected Strategy Reporting Costs Per Company

Type of Staff	# of Employees	# of Pages	Time per Page (Hrs)	Wage (£/hr)	Total Cost Per Employee (£)
Chief Executives and Senior Officials	3	5	3	£68	£3,073
Corporate Managers	5	5	5	£42	£5,241
Administrative Professionals	5	5	5	£34	£4,263
Total cost per Company:					£12,600

Risk Management Costs:

51. Risk Management costs are the ongoing annual costs that fall on all entities in scope to disclose the company's management of climate-related risks, including the co-ordination across functions internally, identification and assessment of risks and their integration into the company's overarching risk-management strategy. This has been broken down into the same components as those listed above for Governance and Strategy to monetise the risk management component of disclosure. This also includes the time taken to identify and analyse major risk exposures in the context of their company strategy.

52. We assume, based on existing TCFD disclosures, that the required risk management documentation will be 5 pages long. We assume that 5 administrative level employees and 3 managerial level employees will be involved with the collation of information, drafting and proofing taking 5 hours per page each. We assume that 3 senior officials will be involved, taking 3 hours per page each. **In total, we expect the cost of reporting the risk management of climate related risks, in line with the incoming requirements, to total £10,500 per entity in scope³¹.**

Table 6: Expected Risk Management Costs Per Company

Type of Staff	# of Employees	# of Pages	Time per Page (Hrs)	Wage (£/hr)	Total Cost Per Employee (£)
Chief Executives and Senior Officials	3	5	3	£68	£3,073
Corporate Managers	3	5	5	£42	£3,107
Administrative Professionals	5	5	5	£34	£4,190
Total cost per Company:					£10,500

Metrics & Target Costs:

53. These are the ongoing annual costs to those in scope of developing and disclosing the metrics and targets used to assess and manage climate related risks. We have monetised the expected costs in two components:

- i) Annual Data Gathering: This is the cost of collecting data on an annual basis to report against the relevant metrics and targets. We assume that this requires one professional level FTE in the first year to develop the appropriate framework and relevant metrics and targets. We expect this cost to decrease by 25% in the second year onwards given that the necessary reporting framework will have been established in year 1 of implementation. **Total costs in the first year are**

³¹ Calculation: [(3 Senior level staff) * (3 hours to read, review & sign-off per page) * (£68.30 Senior Wage) * (5 pages)] + [(3 Managerial Level Staff) * (5 hours to collate, draft and proof per page) * (£41.93 Manager Wage) * (5 pages)] + [(5 Admin level staff) * (5 hours to collate and draft per page) * (£34.10 Admin Wage) * (5 pages)] = £10,500 to nearest £100

therefore expected to be £67,200³², decreasing to £50,400 from year 2 of implementation onwards³³.

- ii) Costs of reporting: We have broken down the reporting costs in the same way as those listed above for governance, strategy, and risk. We assume, based on existing TCFD disclosures, that the required documentation will be 3 pages long. We assume that 5 administrative level employees and 3 managerial level employees will be involved with the collation of information, proofing and drafting, taking 5 hours per page each. We assume that 3 senior officials will be involved for sign-off, taking 3 hours per page each. **In total, we expect the cost of reporting against the relevant metrics and targets, in line with the incoming requirements, to total £6,300 per entity in scope³⁴.**

Table 7: Expected Metrics & Target Reporting Costs Per Company

Type of Staff	# of Employees	# of Pages	Time per Page (Hrs)	Wage (£/hr)	Total Cost (£)
Chief Executives and Senior Officials	3	3	3	£68	£1,844
Corporate Managers	3	3	5	£42	£1,887
Administrative Professionals	5	3	5	£34	£2,558
Total cost per Company:					£6,300

Uploading and signposting to TCFD report

54. There is an additional annual cost to those in scope to upload the required reporting documentation and signposting to this documentation within their annual report. **We assume that this takes 2 hours per year by one administrative level professional, totalling £100 a year per entity in scope³⁵.**

Summary of costs per company:

55. The below table provides an overview of the total costs we expect entities in scope to incur:

Table 8: Summary of Total Expected Costs per Company

	Costs in Year 1	Annual Costs from Year 2
Familiarisation Costs	£12,600	£0
Governance Costs	£8,800	£8,800
Strategy Costs	£12,600	£12,600
Risk-Management	£10,500	£10,500
Metrics and Targets	£73,500	£56,700
Signposting	£100	£100
Total Annual Cost per Company	£118,100	£88,700

Costs Associated with Preferred Options:

56. The costs monetised above reflect the **annual expected costs per company** under each of the core pillars of the incoming recommended disclosure requirements. We have

³² ONS ASHE Data, Table 14.7a - Annual pay - Gross (£), 2019, 75th Percentile with a non-wage uplift of 18%.

[www.ons.gov.uk/file?uri=%2femploymentandlabourmarket%2fpeopleinwork%2fearningsandworkinghours%2fdatasets%2foccupation4digitsoc2010ashtable14%2f2020provisional/table142020provisional.zip]

³³ Calculation: (£67,222 FTE Wage) * (75% to reflect 25% decrease in costs in year 2 of implementation) = £50,400 to nearest £100.

³⁴ Calculation: [(3 Senior level staff) * (3 hours to read, review & sign-off per page) * (£68.30 Senior Wage) * (3 pages)] + [(3 Managerial Level Staff) * (5 hours to collate, draft and proof per page) * (£41.93 Manager Wage) * (3 pages)] + [(5 Admin level staff) * (5 hours to collate and draft per page) * (£34.10 Admin Wage) * (3 pages)] = £6,300 to nearest £100

³⁵ Calculation: (1 admin level staff) * (2 hours) * (£34.10 admin level wage) = £100 to nearest £100.

applied these costs to the expected number of entities that will fall within scope under the options outlined in Section 5.

57. We assume that each entity in scope of the incoming disclosure requirements will face equivalent average costs. The difference in costs for each of identified options is therefore driven only by the number of entities that fall within the thresholds outlined. We have outlined the expected Present Value Costs (PVC) and Equivalent Annual Net Direct Cost to Businesses (EANDCB) under each option below.

58. **Option 2a (Preferred Option): We estimate the PVC of this option to be £1.15bn over the 10-year appraisal period. The EANDCB is estimated to be £133m.**

59. **Option 2b: We estimate the PVC of this option to be £1.45bn over the 10-year appraisal period. The EANDCB is estimated to be £169m.**

60. **Option 2c: We estimate the PVC of this option to be £1.88bn over the 10-year appraisal period. The EANDCB is estimated to be £218m.**

Table 9: Summary of Short-Listed Options

	Number of Entities in Scope (to nearest 100)	Present Value Costs (£bn, 2019 prices)	Direct impact on business (Equivalent Annual) £m
Option 2a	1,600	1.14	133
Option 2b	2,000	1.45	169
Option 2c	2,600	1.88	218

Benefits:

61. We are unable to reasonably and proportionately estimate the direct benefits associated with mandatory TCFD implementation. This is outlined in Section 6, where we have qualitatively outlined expected benefits. To further this, we have provided a high-level estimate of the minimum net benefit required, to justify the costs of intervention.

62. The expected costs over the ten-year appraisal period for our preferred option are £1.15bn. Given that most of the entities in scope of incoming requirements will be private companies, we are unable to reliably assess their market value. However, the total market capitalisation of the premium and standard listed companies that fall within scope of our preferred option is £1.9 trillion³⁶. We expect the total value of all companies within scope will significantly exceed this. The total cost for our preferred option is therefore small relative to the listed companies' market capitalisation, at 0.08%. We expect that even a small reduction in average costs of capital because of reduced uncertainty and improved management of climate risks within companies will significantly offset the expected costs of this intervention.

Section 8: Assumptions, Risks and Uncertainties:

Key Assumptions used within Appraisal:

63. We have outlined the key assumptions used within our appraisal below:

- The number of entities in scope of the new requirements is expected to remain broadly stable over the appraisal period of 10 years. We will conduct a post-

³⁶ FAME, Market capitalisation – stock: Last avail. year [Accessed 14/01/21]

implementation review, as set out in the TCFD roadmap which will for example re-evaluate the expected number of companies within scope.

- The average cost to each company in scope is expected to be equal. In practice this is unlikely to be the case, depending on - for instance - the complexity of the business structure and supply chain, prior general reporting requirements and prior level of internal climate risk understanding and compliance with TCFD recommendations and disclosures. We would welcome feedback on this point.
- We assume that there will be a 25% decrease in the cost of developing and reporting against metrics and targets after the first year of implementation. This mirrors the approach from the Impact Assessment from the Department for Work and Pensions on Climate Change Risk – Governance and Disclosure (TCFD).³⁷
- We have excluded the costs to companies of conducting scenario analysis given that it will not be required from those in scope.
- Whilst the regulations will be applied at group level, we have included subsidiaries within the analysis for our central scenario as we expect that some burden will fall on subsidiaries to provide the relevant information to the group level. However, at this stage we are unable to reliably estimate what the additional costs to subsidiaries will be because of incoming regulations. Our central scenario should therefore be considered as an upper bound for expected costs as it assumes that subsidiaries face the same reporting burden as those at the group level. We have explored the impact of not including subsidiaries within our analysis in Section 9. The table below illustrates the expected number of companies in scope, at the group level.

Table 10: Summary Statistics of Options (excluding subsidiaries):

Option Under Consideration:	# of Entities in Scope (to nearest 100)	Employees (mill)	Turnover (£trn)
Option 2a (Preferred)	1,300	12.7	3.3
Option 2b	1,700	12.7	3.3
Option 2c	2,000	19.2	3.6

- We have used ONS Annual Survey of Hours and Earnings³⁸ data for hourly wage estimates for each of the relevant staff levels in the appropriate sector. We have applied a wage uplift of 18%³⁹ to these figures to reflect any additional costs to the employer from the staff. These wage bands are outlined in the table below:

Table 11: Hourly Wage Data

Standard Occupational Classification	Hourly Wage (2020 £)	Uplift for non-wage costs	Total wage cost per hour (2020 £)
Chief Executives and Senior officials	£57.88	1.2	£68.30
Corporate Managers and Directors	£35.53	1.2	£41.93
Business, research, and administrative professionals	£28.90	1.2	£34.10

³⁷ Department for Work and Pensions, Climate Change Risk – Governance and Disclosure, August 2020, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/912195/impact-assessment-consultation-climate-change_risk.pdf]

³⁸ ONS ASHE Data, Table 14, 2020, 75th Percentile

³⁹ Eurostat, March 2020, [https://ec.europa.eu/eurostat/documents/2995521/10624905/3-31032020-BP-EN.pdf/055df0e0-980d-27b9-a2a9-83b143d94d5b]

- Familiarisation costs: We expect the total guidance produced that those in scope are required to read will likely be 75 pages and assumed a reading time of 6 minutes per page. We have tested upper and lower bounds of the page count for the guidance further within our sensitivity analysis.

Risks, Uncertainties and Unintended Consequences:

64. We have outlined the key risks to the analysis contained within this IA below:

- A key uncertainty is determining the extent to which the costs estimated within this IA are likely to be additional, since some of the companies in scope are expected to already be complying with TCFD recommendations to some degree. We will refine this further within our full stage Impact Assessment.
- A further uncertainty is that the guidance itself, or the companies' interpretation of the guidance, may require more extensive analysis and reporting than anticipated to comply with TCFD.
- There may be significant variations in the time that the companies in scope take to produce the required disclosures.
- This IA assumes that all components of disclosure are completed in-house. In practice, we expect that this may not be the case for some companies in scope who may need to outsource expertise or resource from external sources, especially in the first year of the disclosure requirements coming into force. We would expect companies in scope to incur higher costs if contracting external support.
- This Impact Assessment assumes that the companies that fall within scope will fully comply with incoming requirements. The aim will be to minimise non-compliance by making scope thresholds and the associated guidance clear and strictly enforced.
- An unintended impact of the measure may be an increased likelihood of de-listing from the UK. To mitigate for this, regulations will apply to both listed and private UK companies. There is also a possibility that the companies which fall within scope may look to restructure to avoid the costs of disclosure associated with the new regulations. We view this to be unlikely given that the costs of restructuring to avoid compliance will likely be higher than the costs of disclosure.

Section 9: Sensitivity Analysis:

65. Given the extent of uncertainty around our assumptions, sensitivity analysis has been carried out on our preferred option (Option 2a), to understand the extent of the impact on the costs to business and the Present Value Cost (PVC) if specific parameters or assumptions were to change.

Sensitivity Analysis: Excluding subsidiaries from our analysis:

66. Our central scenario assumes that, whilst the regulations will be applied at group level, subsidiaries will face an equivalent burden in the costs they face. In practice, we do not expect this to be the case, but we are currently unable to reliably monetise the increased reporting burden on subsidiaries. As a result, we have conducted analysis that assumes that subsidiaries will not face any additional costs from the incoming regulations.

Table 12: Sensitivity Analysis – Impact of Removing Subsidiaries

(2019 prices)	Including Subsidiaries			Excluding Subsidiaries		
	# of Entities in Scope (to nearest 100)	PVC (£m, 2019 prices)	EANDCB (£m)	# of Entities in Scope (to nearest 100)	PVC (£m, 2019 prices)	EANDCB (£m)
Option 2a (Preferred)	1,600	1,145	133	1,300	921	107
Option 2b	2,000	1,450	169	1,700	1,211	141
Option 2c	2,600	1,876	218	2,000	1,477	172

67. The table above illustrates the impact on the PVC and EANDCB under each short-listed option if subsidiaries are removed from analysis. If we assume that there is no additional reporting burden on subsidiaries, the PVC for our preferred option falls from £1.15bn to £0.92bn and the EANDCB falls from £133m to £107m.

Sensitivity Analysis: Additionality

68. As discussed in Section 2, we expect some of the companies in scope to already analyse their climate risk and disclose in line with TCFD recommendations to some degree. The Financial Conduct Authority's Cost Benefit Analysis on the Proposals to Enhance Climate Related Disclosures⁴⁰, accounted for this by applying an adjustment to reflect the number of issuers that are already complying with incoming requirements. We do not have sufficient evidence to robustly account for this within our central scenario. We have therefore conducted sensitivity analysis to understand the impact on our preferred option if a proportion of those in scope already comply with incoming regulations.

Table 13: Sensitivity Analysis – Impact of Amending Additionality

Proportion of Companies In scope that already Comply with Incoming Regulations	PVC (£m)	Direct Impact on Businesses (Equivalent Annual) £m
Central Scenario - 0%	1,145	133
5%	1,087	126
10%	1,030	120
15%	973	113
20%	916	106

69. Given that the analysis in this IA assumes that the average cost to each company in scope is expected to be the same, the sole driver of the difference in costs between options identified is the number of companies that are expected to fall in scope. As a result, if we assume that 10% of companies within scope are already complying to the required degree with TCFD recommendations⁴¹, then the present value cost of the option will also reduce by 10% compared to the central scenario. This illustrates that by assuming a 0% baseline, our analysis within this IA should be treated as an upper bound in this respect, as we expect that some of the companies within scope of our preferred option will disclose to some degree. We are gathering evidence on this specific point in the coming months to feed into our final stage Impact Assessment and to refine our current estimates.

⁴⁰ The Financial Conduct Authority's Cost Benefit Analysis on the Proposals to Enhance Climate Related Disclosures, March 2020, [https://www.fca.org.uk/publication/consultation/cp20-3.pdf]

⁴¹ Task Force on Climate-related Financial Disclosures, 2020 Status Report, October 2020, [https://www.fsb.org/wp-content/uploads/P291020-1.pdf]

Sensitivity Analysis: Reduction of Annual Costs from Year 2:

70. In our central scenario, we currently assume that the annual collection of data decreases by 25% after the first year of implementation. We have tested the impact of a steeper reduction in costs (50% reduction in the second year), in addition to a shallower cost reduction (10% reduction in the second year).

Table 14: Sensitivity Analysis - Impact of Changes in Costs in Year 2 of Implementation

(2019 Prices)	PVC (£m)	Direct Impact on Businesses (Equivalent Annual) £m
10% Reduction	1,255	146
25% Reduction (Central Scenario)	1,145	133
50% Reduction	960	111

71. The above table illustrates that if the cost of producing and disclosing under the Metrics and Targets Pillar were to reduce more steeply in the second year of implementation, by 50%, we would see a decrease in the PVC and EANDCB of 16%, compared to our central scenario.

Section 10: Wider Economic and Societal Impacts

Small and Micro Business Assessment:

72. The proposals included within this Impact Assessment are targeted at large businesses, listed firms and companies classed as Public Interest Entities. Our preferred option includes a 500-employee threshold for all private companies, AIM listed companies, premium and standard listed companies and Public Interest Entities. Small and Micro businesses will therefore not be captured.

73. Where small or micro businesses do fall into scope of the proposed new requirements, under option 2b for example, we would not expect there to be a disproportionate burden on these businesses given that we expect the costs discussed to at least partially align with the size and scale of the company in scope. Furthermore, since these small or micro businesses have (by definition) an ownership structure whereby they are premium or standard listed, they are likely to have in place internal resource and capacity to enable them to comply with the higher reporting and disclosure requirements that listed businesses already face. However, we expect that small and micro businesses would experience equivalent familiarisation costs to large business, and small and micro businesses may have less capability to absorb these costs.

74. Competition Impact Test: We do not expect a significant impact on competition from the measures outlined within this Impact Assessment. Companies that are in scope of the proposed regulations will incur costs but may be at an advantage given the increase in transparency and management of climate risk. Companies not in scope are also able to voluntarily disclose.

75. Trade Impacts: We expect there to be impacts on trade as investors respond to the incoming disclosures and increased transparency of firm's vulnerability to climate risks. At this stage we are unable to robustly estimate the impact on UK trade and investment.

76. Equalities Impact Test: We do not consider the proposals within this IA to be applicable as they do not concern any of the nine protected characteristics⁴².
77. Justice Impact test: The justice system would be impacted in the case of non-compliance with incoming regulations. We do not expect a significant impact given that this would only occur in very few circumstances.
78. Human Rights Impact Test: We do not consider the proposals within this IA to be applicable as they do not concern human rights.
79. Rural Proofing Impact Test: We do not consider the proposals within this IA to be applicable.
80. Environmental Impacts: We do not consider the proposals within this IA to have any negative environmental impacts. Positive environmental outcomes have been discussed qualitatively in Section 6.

Section 11: Monitoring and Evaluation

81. We expect the Financial Reporting Council (FRC) to be responsible for the monitoring and enforcement of the proposed disclosure requirements outlined within this Impact Assessment.
82. We expect to use the information collected by the FRC with regards to monitoring and evaluation of the proposals included within this IA to conduct a Post-Implementation Review (PIR) in line with statutory requirements set out in The Small Business, Enterprise and Employment Act in 2015. We will set out a full monitoring and evaluation plan in line with these requirements in the full stage impact assessment.
83. The PIR will consider whether:
- a. The overall level of disclosure across the economy has increased. BEIS is planning to undertake research to determine an appropriate baseline. This research project will determine current levels of disclosures in line with the TCFD recommendations across key sectors of the economy we plan to bring into scope. This will make evaluation of this policy intervention more feasible at a later date.
 - b. What the costs of compliance are and how these have changed across the implementation period.
 - c. Whether users have found increased disclosures useful and relevant.
 - d. This has translated into changes in investment behaviour or the management of climate change risks.
84. We will set out a full monitoring and evaluation plan in line with these requirements in the full stage Impact Assessment.

Summary:

85. The analysis contained within this IA is tentative and will evolve as policy work continues and because of consultation responses. The Department would be grateful for any comments on this IA, including those related to assumptions, sources of relevant data and the costs and benefits that have been identified and assessed.

⁴² The Equality Act, 2010, [<https://www.equalityhumanrights.com/en/equality-act/equality-act-2010>]