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# Climate-related Financial Disclosure

## Opportunities for Actuaries?

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## 2017 Risk Alert

All actuaries should consider how climate - related risks affect the advice they are providing.





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# Agenda

- Quick review of FSB TCFD recommendations
- Opportunities for actuaries in implementation
- Financial services
- Wider fields



# Existing mandatory UK climate related disclosures

Name	Scope	Location	Climate requirements
EU directive 2014/95	> 500 employees	Financial report or link to it	Land, water, materials and energy use. GHG emissions
Companies Act 2006 & regulations	Quoted	Strategy report and Directors report	Main factors effecting business, including environmental, GHG emissions.
FRC Standards	All	Financial statements	Asset impairments if material?
PRA	Insurers	Returns to Regulator	Stress testing impacts for general insurers, asset concentration risks
Pensions Act 2004	Trustees	Statement of Investment Principles	Extent, if at all, account is taken of social, environmental or ethical considerations when taking investment decisions

# Many existing voluntary disclosures e.g.

Name	Scope	Types of climate data
Asset owners disclosure project	Pension funds, insurers with > US\$2 billion	Engagement, climate investment policies, risk mitigation and emissions intensity
CDP	All	Climate risk management, energy use and GHG emissions
IIGCC	Fossil fuel, car and electricity suppliers	GHG emissions and clean technology data
PRI	All investors	Investment policies
GRI	All	Materials, water, energy, biodiversity and waste, environmental compliance
CDSB	All	Governance, impact, strategy and GHG emissions
<i>and Greenwash</i>	<i>?</i>	<i>Suspect?</i>

## BACKGROUND

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FSB established the Task Force on Climate-related Financial Disclosures (TCFD) to develop recommendations for more effective climate-related disclosures that:

- could “promote more informed investment, credit, and insurance underwriting decisions” and,
- in turn, “would enable stakeholders to understand better the concentrations of carbon-related assets in the **financial sector and the financial system’s** exposures to climate-related risks.”



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# The FSB Task Force published its final report in June 2017

	Pages
• Overview	16
• Main report	74
• Implementation	85
• Scenario analysis	42

Heavy stuff – but it is guidance covering all aspects and a wide range of industries

Recommendations have received widespread support from governments (including UK), business and investors, voluntary now.....

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



# DISCLOSURE RECOMMENDATIONS

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.



# DISCLOSURE RECOMMENDATIONS *(CONTINUED)*

The four recommendations are supported by **specific disclosures** organizations should include in financial filings or other reports to provide decision-useful information to investors and others.

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.

# KEY ELEMENTS OF DISCLOSURE RECOMMENDATIONS *(CONTINUED)*

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## Principle of Materiality

- The disclosures related to the **Strategy, & Metrics and Targets recommendations** are subject to materiality.
- The disclosures related to the **Governance & Risk Management recommendations** are *not* subject to materiality and should always be provided

## Scenario Analysis

- Organizations to describe the resilience of their strategies, taking into consideration different climate-related scenarios, including **a 2°C or lower scenario**.

### **2°C Scenario**

*Provides a common reference point that is generally aligned with the objectives of the Paris Agreement.*

### **Scenario Analysis Threshold**

*Organizations with more than US \$1 billion in annual revenue in the energy, transportation, materials and building, agriculture and food sectors should consider conducting more robust scenario analysis.*

## SUPPLEMENTAL GUIDANCE

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In addition to guidance for all sectors, the Task Force developed **supplemental guidance** for financial and non-financial organizations to assist those organizations in implementing the recommended disclosures.

### Financial Industries

- Banks
- Insurance Companies
- Asset Managers
- Asset Owners

### Non-Financial Groups

- Energy
  - Transportation
  - Materials and Buildings
  - Agriculture, Food, and Forest Products
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# Asset Owners (pension funds, insurers own funds, foundations) additional disclosures

## Strategy

Asset owners should describe how climate-related risks and opportunities are factored into relevant investment strategies. This could be described from the perspective of the total fund or investment strategy or individual investment strategies for various asset classes.

Asset owners that perform scenario analysis should consider providing a discussion of how climate-related scenarios are used, such as to inform investments in specific assets.



# Asset Owners (pension funds, insurers own funds, foundations) additional disclosures....

## Risk management

Asset owners should describe, where appropriate, engagement activity with investee companies to encourage better disclosure and practices related to climate-related risks to improve data availability and asset owners' ability to assess climate-related risks.

Asset owners should describe how they consider the positioning of their total portfolio with respect to the transition to a lower-carbon energy supply, production, and use. This could include explaining how asset owners actively manage their portfolios' positioning in relation to this transition.



# Asset Owners (pension funds, insurers own funds, foundations) additional disclosures....

## Metrics and Targets

Asset owners should describe metrics used to assess climate-related risks and opportunities in each fund or investment strategy. Where relevant, asset owners should also describe how these metrics have changed over time.

Where appropriate, asset owners should provide metrics considered in investment decisions and monitoring.

Asset owners should provide the weighted average carbon intensity, where data are available or can be reasonably estimated, for each fund or investment strategy.

In addition, asset owners should provide other metrics they believe are useful for decision making along with a description of the methodology used. See [Table 2](#) (p. 43) for common carbon footprinting and exposure metrics, including weighted average carbon intensity.



# Asset managers additional disclosures

## Strategy

Asset managers should describe how climate-related risks and opportunities are factored into relevant products or investment strategies.

Asset managers should also describe how each product or investment strategy might be affected by the transition to a lower-carbon economy.



# Asset managers additional disclosures....

## Risk management

Asset managers should describe, where appropriate, engagement activity with investee companies to encourage better disclosure and practices related to climate-related risks in order to improve data availability and asset managers' ability to assess climate-related risks.

Asset managers should also describe how they identify and assess material climate-related risks for each product or investment strategy. This might include a description of the resources and tools used in the process.

Asset managers should describe how they manage material climate-related risks for each product or investment strategy.



# Asset managers additional disclosures....

## Metrics and Targets

Asset managers should provide the weighted average carbon intensity, where data are available or can be reasonably estimated, for each product or investment strategy.

In addition, asset managers should provide other metrics they believe are useful for decision making along with a description of the methodology used. See Table 2 (p. 43) for common carbon footprinting and exposure metrics, including weighted average carbon intensity.

**Note:** TCFD recommendations are aligned with those from:

- PRI
- AODB



# Insurance company additional disclosures – mainly impacting GI

## Business strategy

Insurance companies should describe the potential impacts of climate-related risks and opportunities, as well as provide supporting quantitative information where available, on their core businesses, products, and services, including:

- information at the business division, sector, or geography levels;
- how the potential impacts influence client, cedent, or broker selection; and
- whether specific climate-related products or competencies are under development, such as insurance of green infrastructure, specialty climate-related risk advisory services, and climate-related client engagement.



# Insurance Company additional disclosures – mainly impacting GI....

## Business strategy continued

Insurance companies that perform climate-related scenario analysis on their underwriting activities should provide the following information:

- description of the climate-related scenarios used, including the critical input parameters, assumptions and considerations, and analytical choices. In addition to a 2°C scenario, insurance companies with substantial exposure to weather-related perils should consider using a greater than 2°C scenario to account for physical effects of climate change and
- time frames used for the climate-related scenarios, including short-, medium-, and long-term milestones.



# Insurance Company additional disclosures – mainly impacting GI....

## Risk management

Insurance companies should describe the processes for identifying and assessing climate-related risks on re-/insurance portfolios by geography, business division, or product segments, including the following risks:

- physical risks from changing frequencies and intensities of weather-related perils,
- transition risks resulting from a reduction in insurable interest due to a decline in value, changing energy costs, or implementation of carbon regulation, and
- liability risks that could intensify due to a possible increase in litigation.

Organizations should describe how their processes for identifying, assessing, and managing climate-related risks are integrated into their overall risk management.





# Insurance Company additional disclosures – mainly impacting GI....

## Metrics and Targets

Insurance companies should provide aggregated risk exposure to weather-related catastrophes of their property business (i.e., annual aggregated expected losses from weather-related catastrophes) by relevant jurisdiction.

### Note

TCFD recommendations are aligned with those from:

- Climatewise
- SASB
- UNEP FI Principles of Sustainable Insurance



# Comparison of global scenarios

2° C



4° C



# Comparison of global scenarios

## 2° C

- Physical climate impacts mitigated to some extent?
- Increasing and substantial economic impacts from decarbonisation
- Lower growth?
- Still increasing migration, resource and trade conflict?

## 4° C

- Increasingly unpredictable, and possibly existential climate impacts long term
- Decarbonisation mainly deferred but then much more draconian
- Growth BAU short term.....?
- Eventually high level of economic and social disruption and conflict

# Work on scenarios

- Need standard scenarios to facilitate inter-company comparisons
- Including climate impacts for a given temperature rise, taking account of uncertainty
- And how decarbonisation will play out in terms of carbon pricing, carbon trading, renewable subsidies, fossil fuel restrictions, lifestyle changes, supply chains, technology etc
- It's not easy, but work has already started: see TCFD/Bank of England November 2017 conference: <https://www.fsb-tcfd.org/event/tcfd-boe-conference-climate-scenarios-financial-risk-strategic-planning/>
- And a great new resource: TCFD Hub <https://tcfdhub.org/>

# What can actuaries do?

- **The financial sector has a crucial role in driving climate change strategies in business and the disclosure thereof**
- **It's up to asset owners and asset managers – as advised by actuaries?**
- **It's a business opportunity!**
- **And start with your own firm – who is responsible for climate change strategy?**
- **Opportunities in risk management outside the financial sector.....**

# Opportunities with utilities?

- **Characteristics: long term capital investments, regulated markets, highly impacted by climate change and mitigation thereof**
  - **Actuarial consultancies already involved in asset valuations, risk management and energy market projections**
  - **Also working for BEIS and other Government agencies**
  - **Competition from accounting firms (with actuaries), specialist consultants**
  - **See also IFoA work with civil engineers:**  
<https://www.actuaries.org.uk/practice-areas/risk-management/collaborating-other-bodies/actuaries-and-civil-engineers>
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# Grasping the wider business opportunities arising from TCFD

## Requirements

- Market knowledge
- Risk management
- Scenario analysis
- Stochastic modelling?

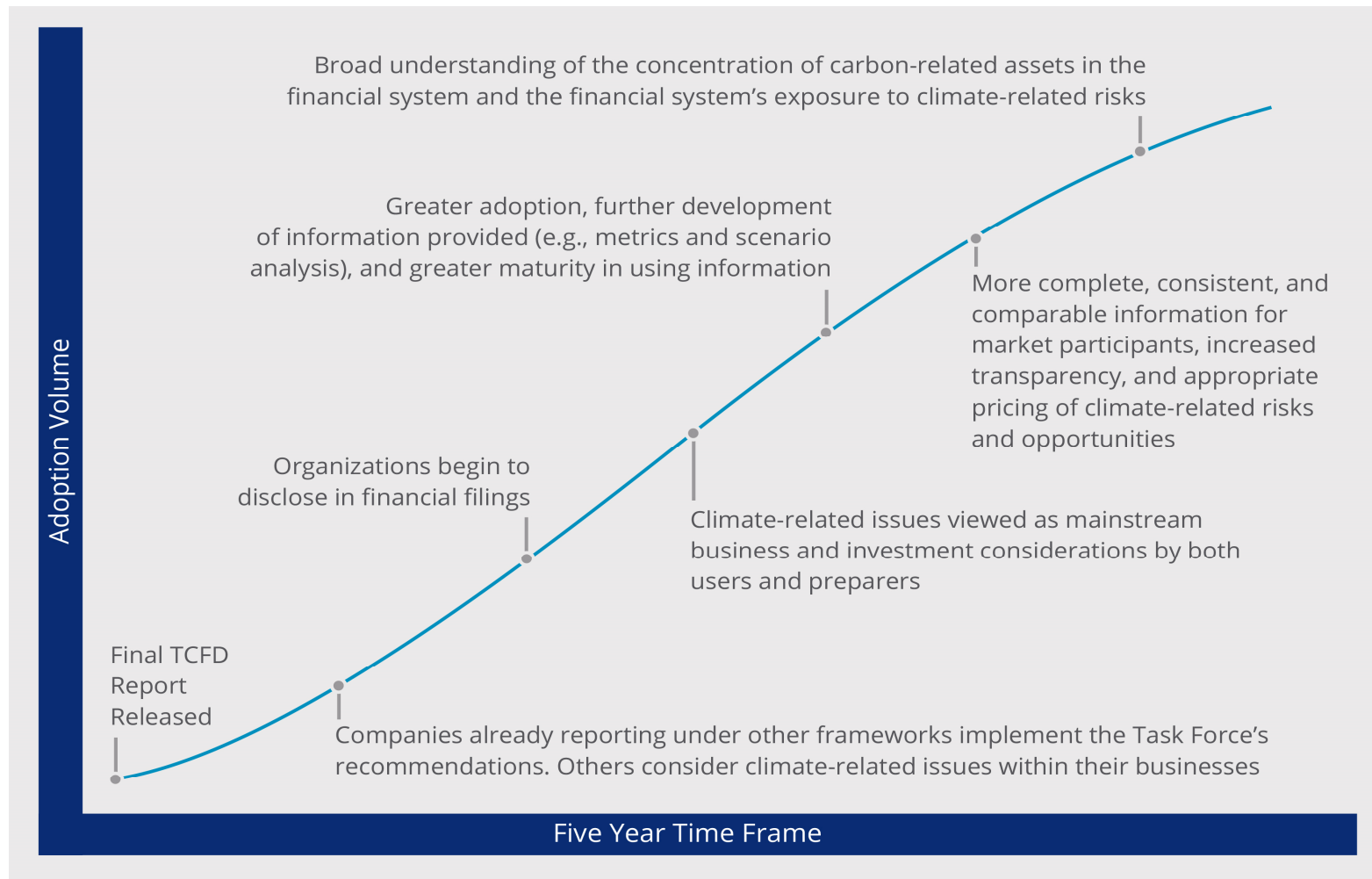
## Possible strategies

- Recruit experience
- Look for partners
- Research the issues, market needs, potential clients and competition



# ILLUSTRATIVE IMPLEMENTATION PATH

The TCFD expects that **reporting of climate-related risks and opportunities will evolve** over time as organizations, investors, and others contribute to the quality and consistency of the information disclosed.





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## Next Steps....

- Review the TCFD guidance
- Set up working parties to progress long term action in your firm, including business opportunities
- Review the reports from the November 2017 TCFD/BoE seminar and the new TCFD hub  
<https://tcfdhub.org/>
- Read the IFoA practical guides for pensions actuaries and watch out for those for GI, Life and F&I
- Join the R&E Member Interest Group



# Questions



# Comments

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