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What is (or should be!) keeping responsible fixed income investors awake at night

Martijn de Vree, FIA, CFA

Lauren van Biljon, CFA

Catherine McLaughlin, CFA

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This session will explore

- What should keep investors awake at night?
- What about climate risk for fixed income?
- How to assess climate risk for government bonds?
- Focus on metrics or engagement?

What should keep investors awake?

- 01** Stagflation in the US
- 02** Russian military action against NATO
- 03** Chinese military action
- 04** Tightening by the Bank of Japan
- 05** Artificial Intelligence revolution
- 06** War on Korean peninsula
- 07** Waves of default in commercial real estate
- 08** Disruptive infrastructure attacks by Russia
- 09** Military strike against Iran
- 10** Civil unrest in developing nations

Source: Allspring, Market Risk Monitor June 2023.



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Our World is Transitioning

2025

No new sales of fossil fuel boilers

Key milestones in the pathway to net zero

Buildings

Transport

Industry

Electricity and Heat

2030

Universal energy access

All new buildings are zero-carbon-ready

60% of global car sales are electric

Most new clean technologies in heavy industry demonstrated at scale

1 020 GW annual solar and wind additions

Phase-out of unabated coal in advanced economies

2035

Most appliances and cooling systems sold are best in class

50% of heavy truck sales are electric

No new ICE car sales

All industrial electric motor sales are best in class

Overall net-zero emissions electricity in advanced economies

2040

50% of existing buildings retrofitted to zero-carbon-ready levels

50% of fuels used in aviation are low-emissions

Around 90% of existing capacity in heavy industries reaches end of investment cycle

Net-zero emissions electricity globally

Phase-out of all unabated coal and oil power plants

2050

More than 85% of buildings are zero-carbon-ready

More than 90% of heavy industrial production is low-emissions

Almost 70% of electricity generation globally from solar PV and wind

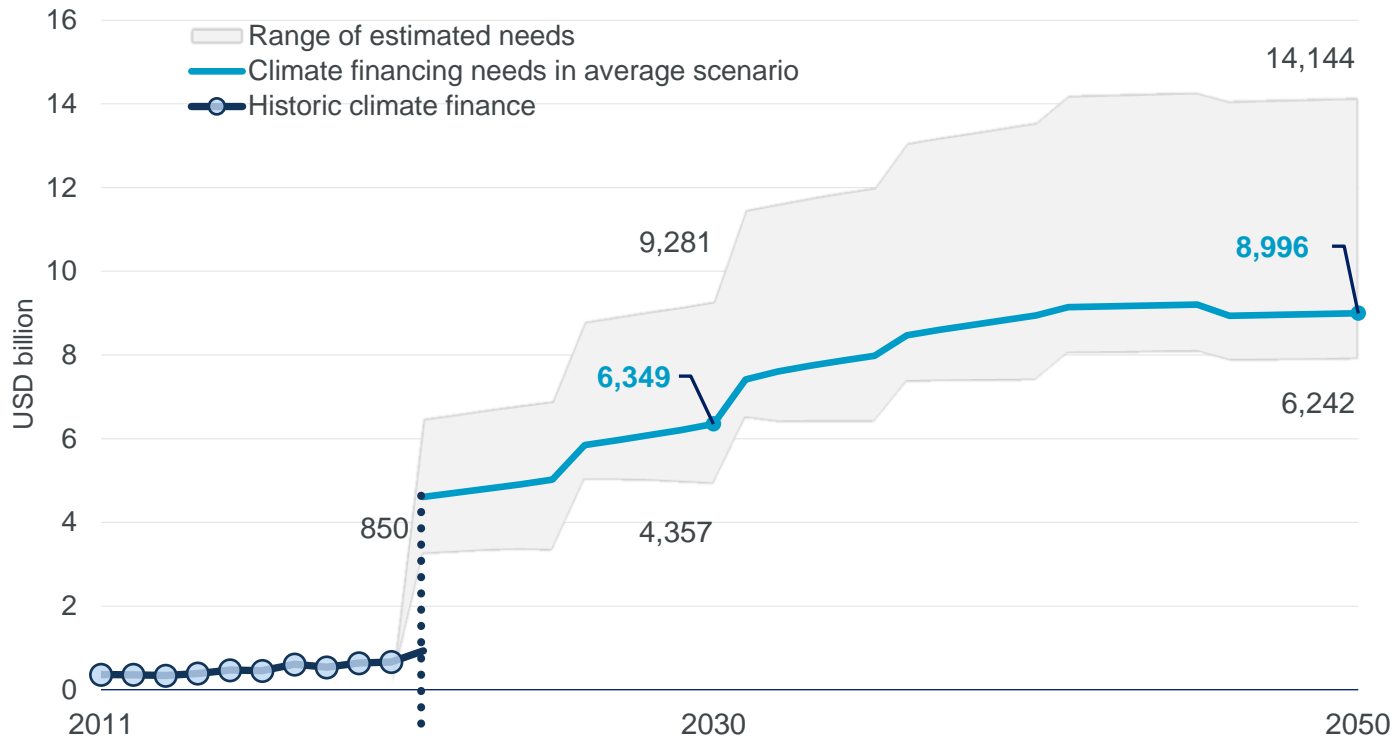
Source: Allspring and IEA. For illustrative purposes only.



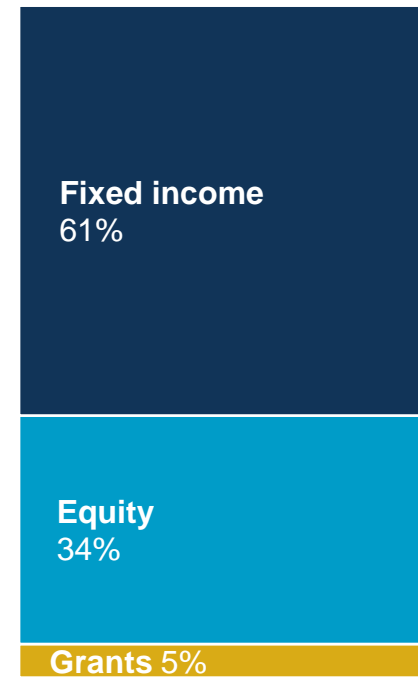
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Fixed income: Main instrument for climate finance

Global tracked climate finance flows and the average estimated annual climate investment need through 2050



Climate finance by instrument between 2011–2020

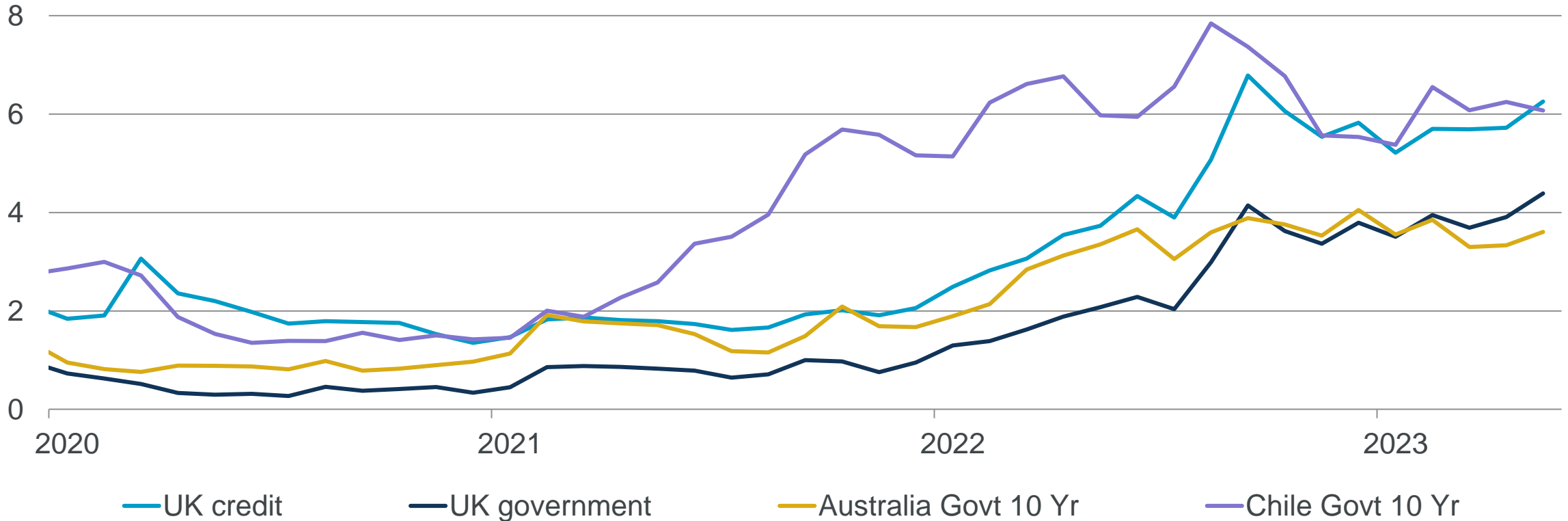


Source: Climate Policy Initiative, Global Landscape of Climate Finance. A Decade of Data: 2011-2020.



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Yield everywhere

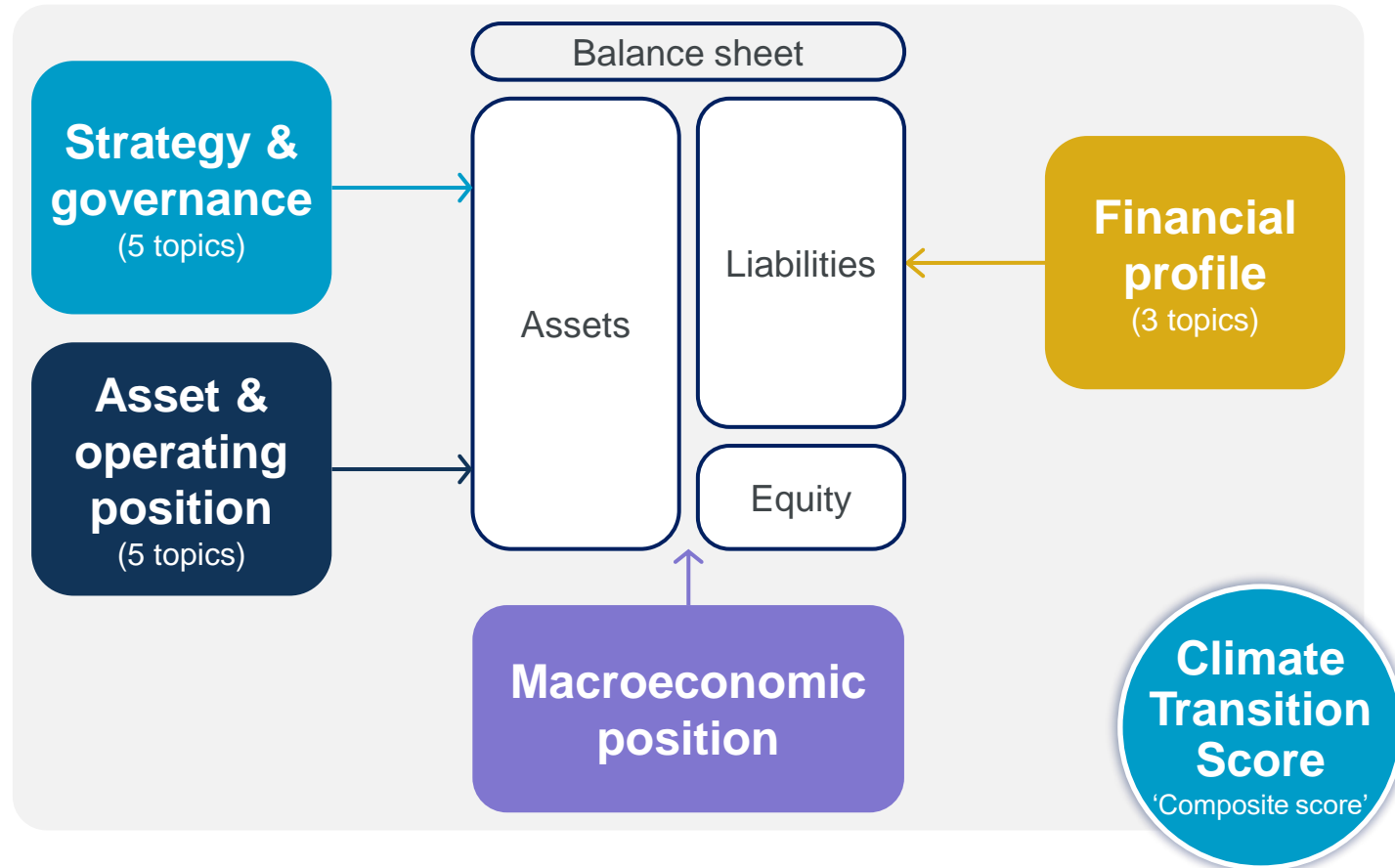


Source: Bloomberg as at 20 June 2023. UK credit (Bloomberg Sterling Corporate Bond Index), UK government (I02569GB Index), Australia government (Australia Govt 10 Year), and Chile Government (US168863CQ90 ISIN).



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Climate transition impact on corporate issuers



Source: Allspring. For illustrative purposes only.



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What about governments?

- Currently, there is a distinct lack of consensus on how to assess sovereign debt from a climate change perspective.
- **ASCOR** (Assessing Sovereign Climate-related Opportunities and Risks) was designed to address this gap.
- As the first tool of its kind, ASCOR can help investors **assess sovereign exposure** to climate risk and engender **greater transparency** between issuers, financial institutions, and relevant stakeholders.
- 3 framework pillars
 - Emissions Pathways
 - Climate Policies
 - Climate Finance

Clarity

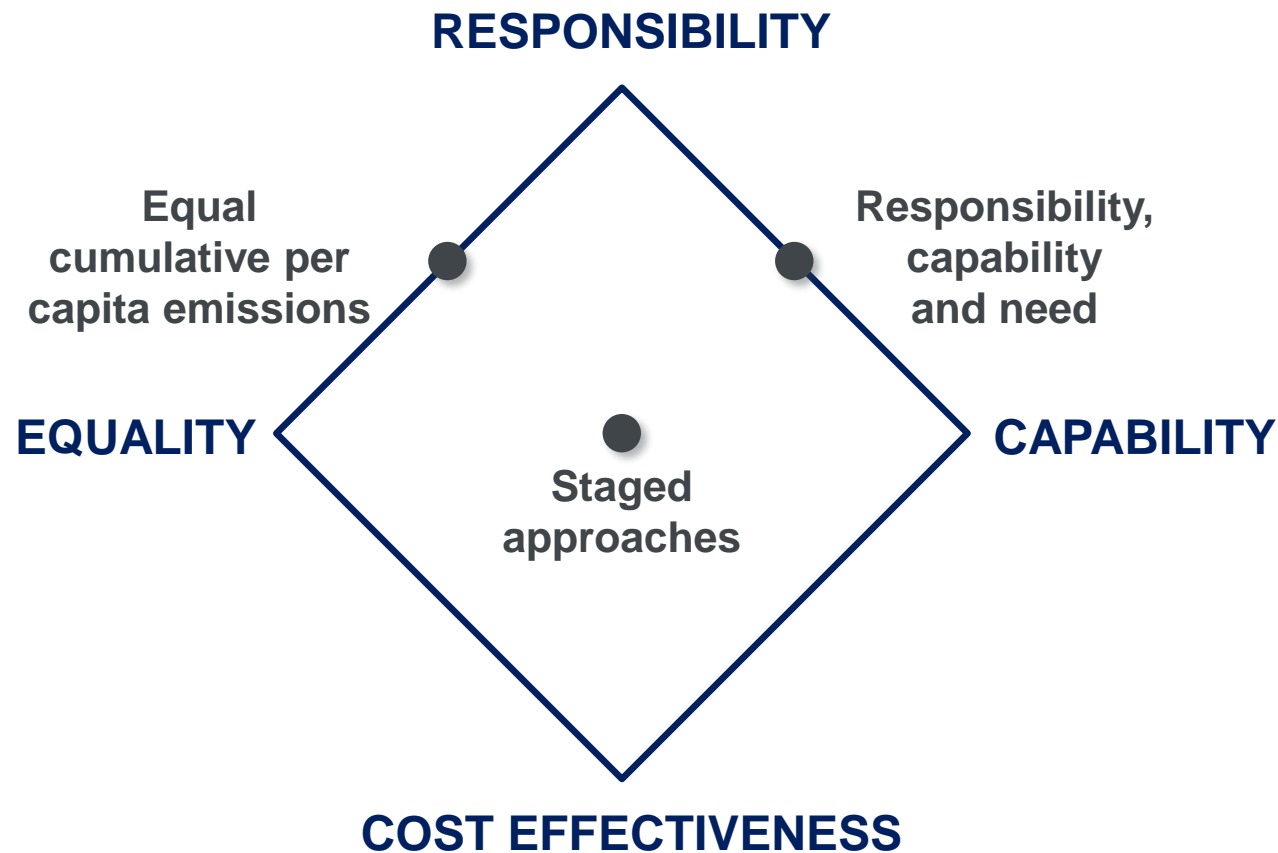
Transparency

Dialogue

Action

Source: ASCOR, <https://www.ascorproject.org/>

Understanding decarbonisation needs & expectations



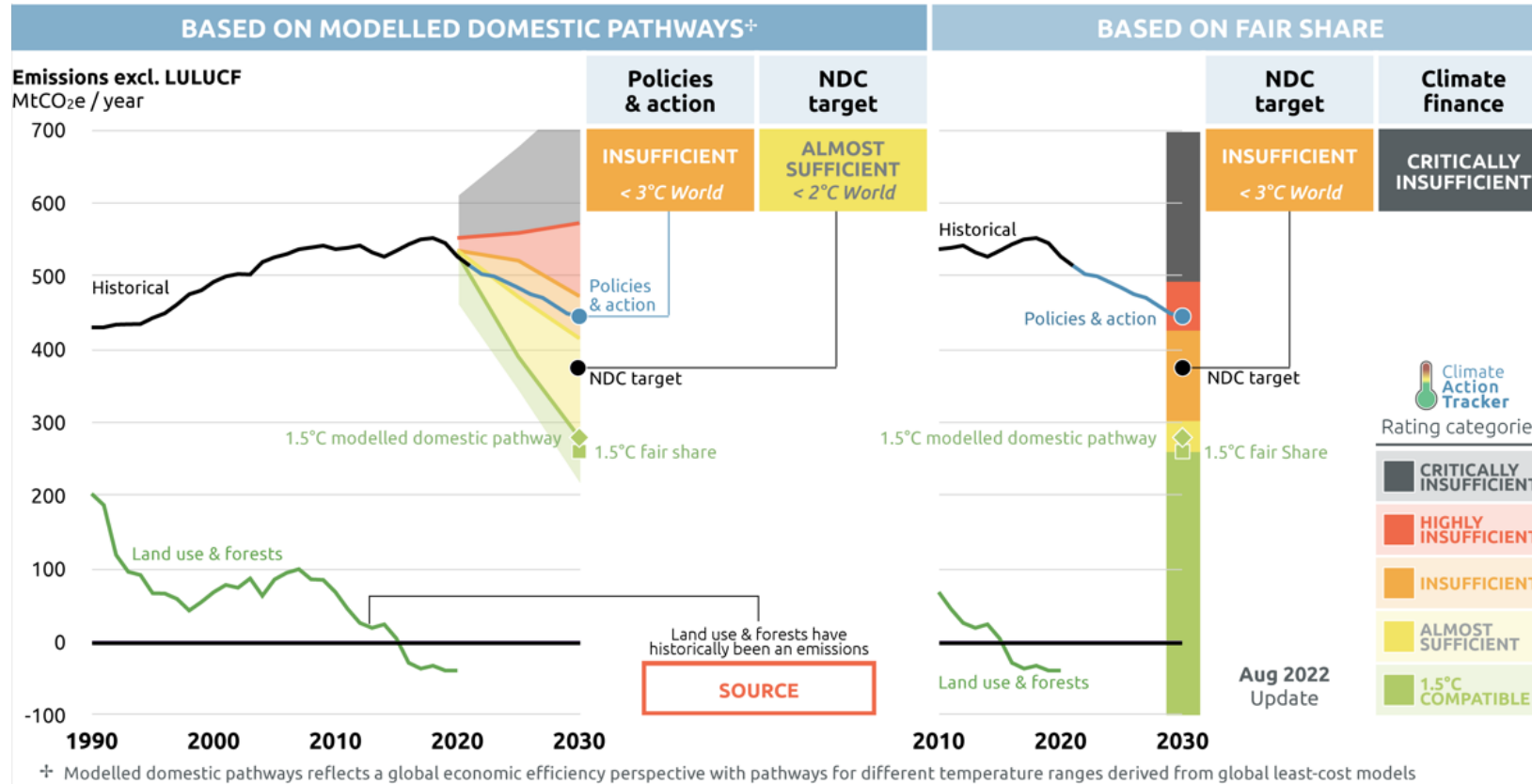
Helpful resources

- ASCOR project (Assessing Sovereign Climate-Related Opportunities and Risks)
- Climate Action Watch
- Climate Action Tracker (CAT)
- Nationally Determined Contribution Partnership
- International Climate Initiative
- Regional GHG reduction targets based on effort sharing: a comparison of studies; Hohne, den Elzen and Escalante

Source: Hohne, den Elzen and Escalante.

A practical example: Australia versus Chile

AUSTRALIA



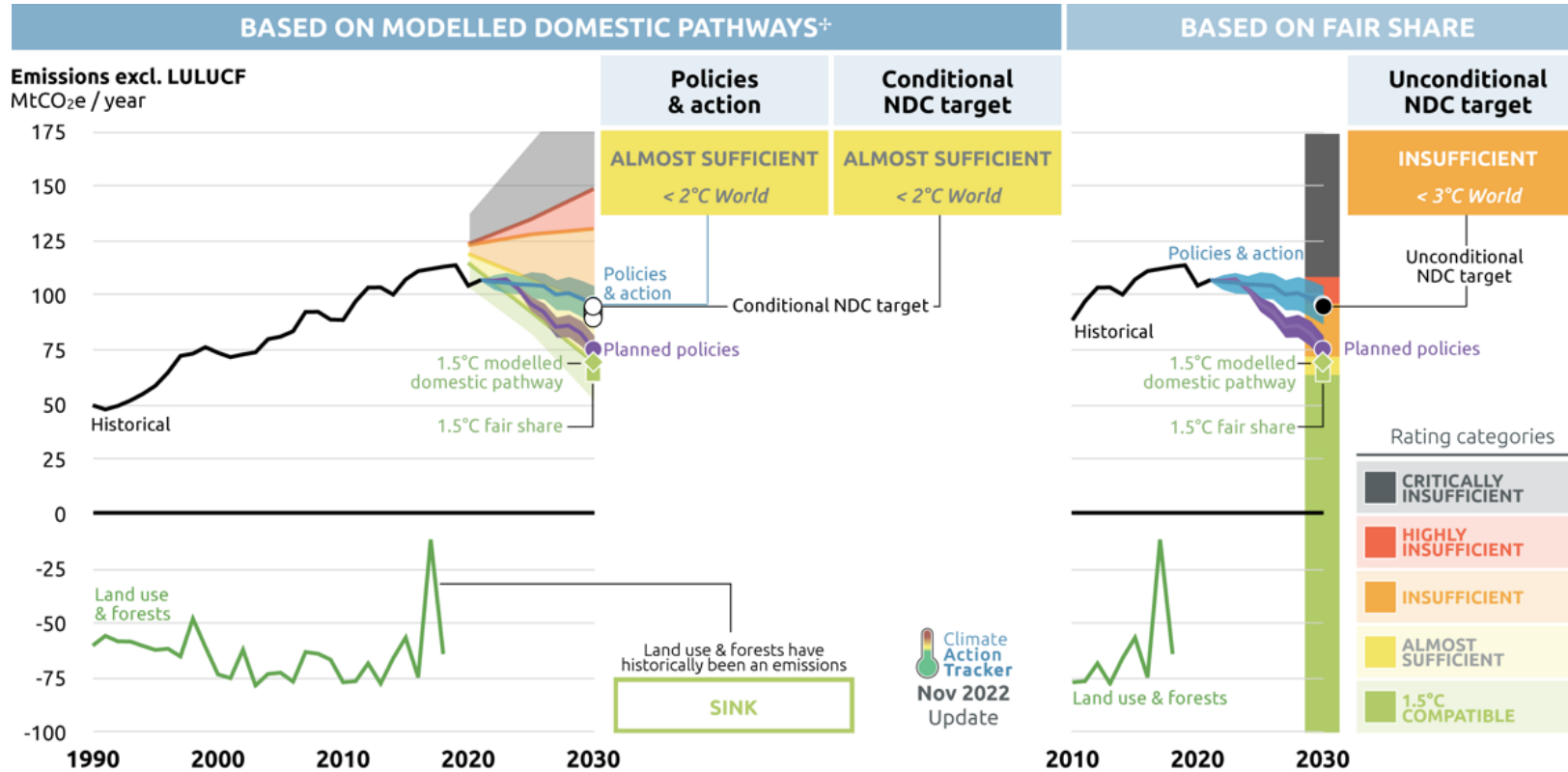
Source: Climate Action Tracker.



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A practical example: Australia versus Chile

CHILE



⁺ Modelled domestic pathways reflects a global economic efficiency perspective with pathways for different temperature ranges derived from global least-cost models

Source: Climate Action Tracker.

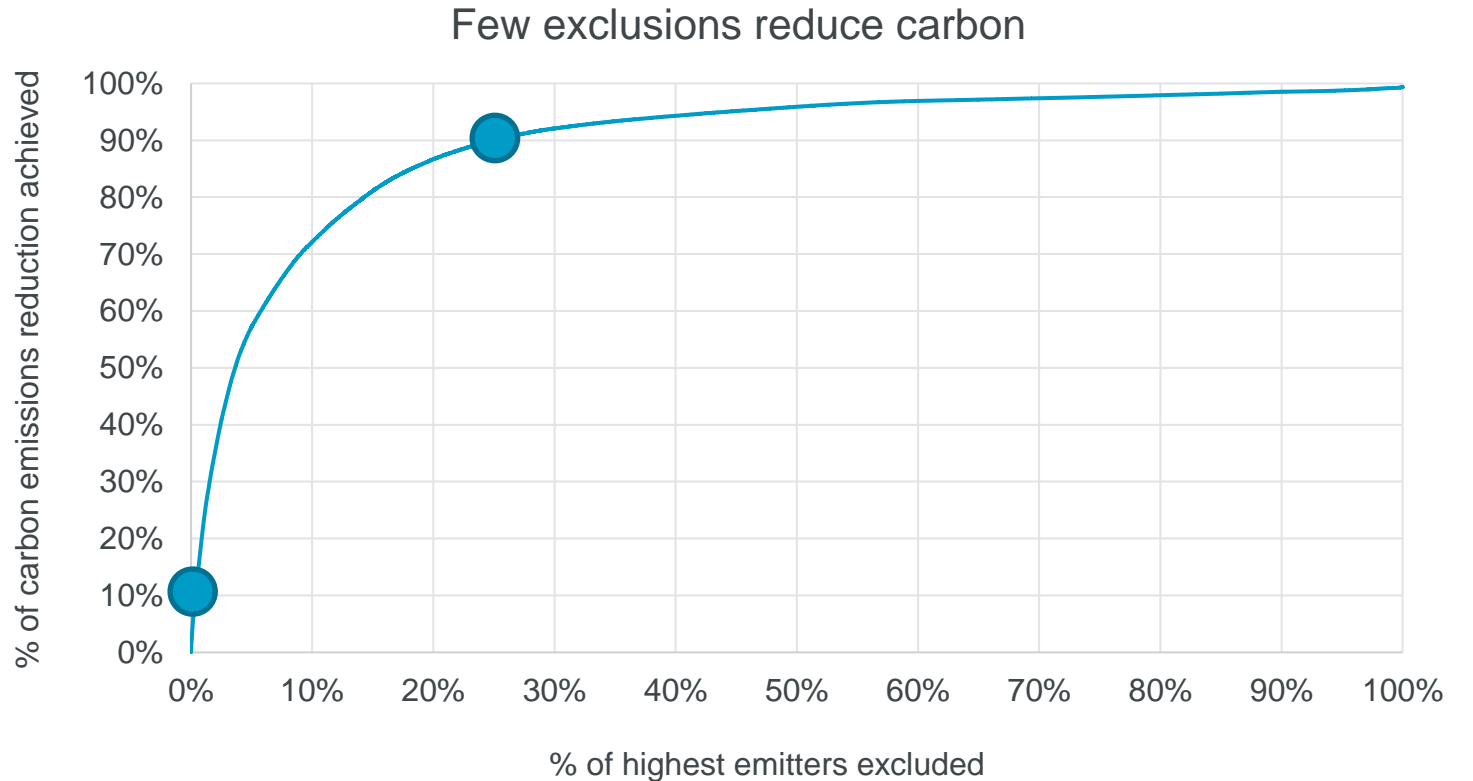


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Measuring climate risks

Climate metrics

- Carbon intensity
- Carbon footprint
- Temperature alignment
- Climate VaR
- Climate Transition Score



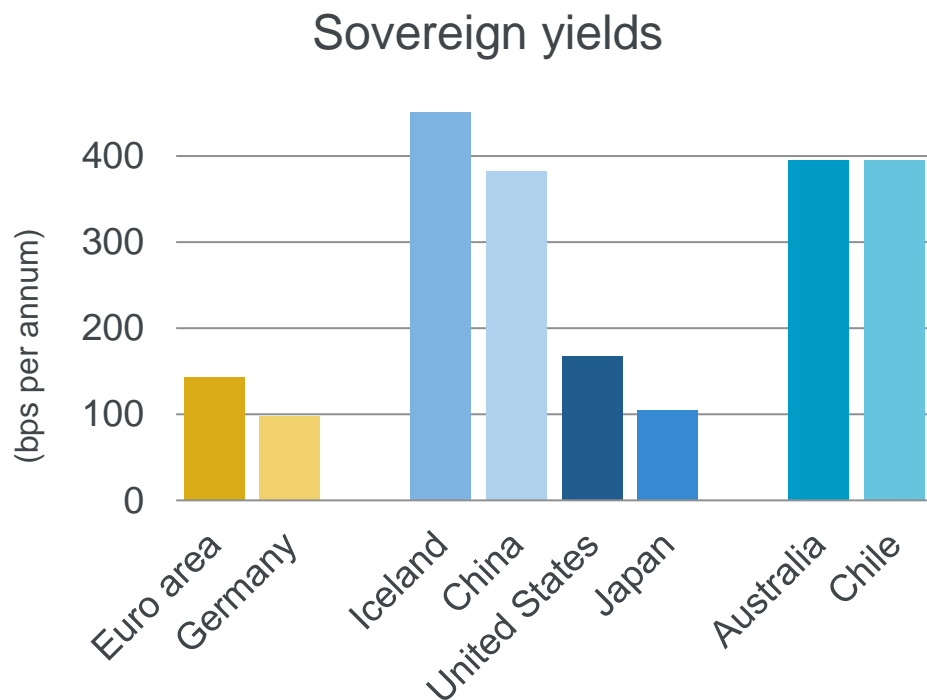
Source: Allspring and S&P Trucost, data to 31 March 2023.



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How does EIOPA do it?

“IORPs have a non-negligible exposure to transition risks, especially in the form of investments in climate-relevant sectors”



Sources: EIOPA 2022 IORP Climate Stress Test, Euro area pension fund statistics: fourth quarter of 2022.

Corporate bond spreads

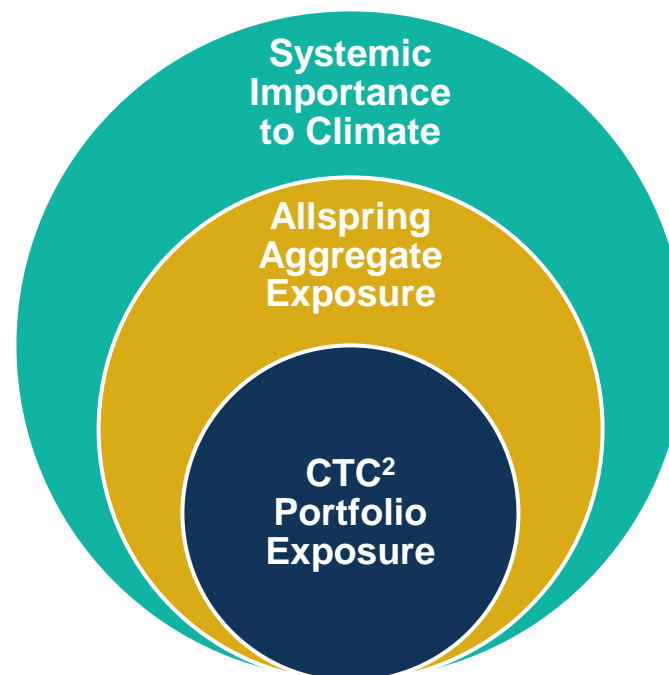
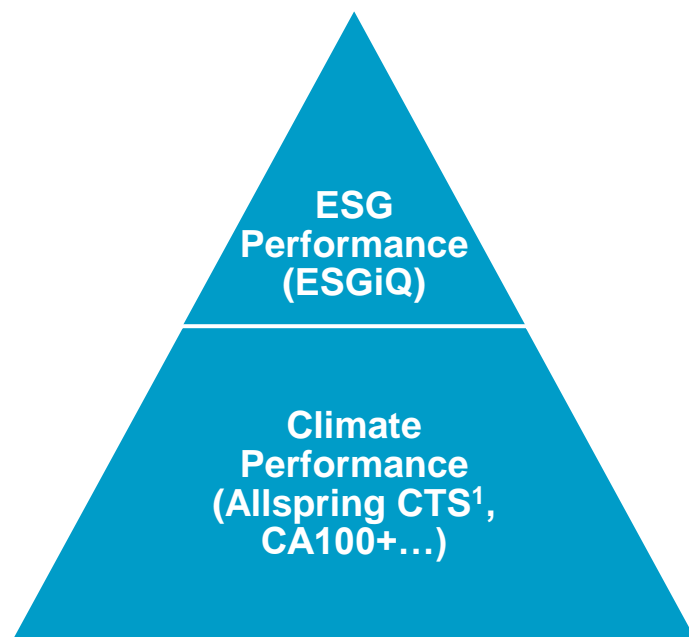
NACE industrial sectors	NACE industrial sector description	Spread shock
A01	Crop and animal production, hunting and related service activities	143
A02-03	Forestry and logging; Fishing and aquaculture	146
B	Mining and quarrying	467
C10-12	Manufacture of food products	152
C13-18	Manufacture of textiles	134
C19	Manufacture of coke and refined petroleum products	397
C20	Manufacture of chemicals and chemical products	157
C21-22	Manufacture of basic pharmaceutical products and pharmaceutical preparations	137
C23	Manufacture of other non-metallic mineral products	252
C24-25	Manufacture of basic metals	189
C26-28	Manufacture of computer, electronic and optical products	138
C29-30	Manufacture of motor vehicles, trailers and semi-trailers	139
C31-33	Manufacture of furniture	121
D	Electricity, gas, steam and air conditioning supply	284
E36-39	Water supply; sewerage; waste management and remediation activities	162
F	Construction	143
G45-47	Wholesale and retail trade; repair of motor vehicles and motorcycles	165
H49	Land transport and transport via pipelines	279
H50	Water transport	157
H51	Air transport	176
H52-53	Warehousing and support activities for transportation	133
L	Real estate activities	148
XXX	Other activities	177

Engagement over exclusion

Broad range of potential triggers for engagement

Prioritise engagement based on importance

Determine goal of engagement



Improve/impel climate performance of investee companies

Broaden the universe of qualified companies

Address other material ESG issues beyond climate

Sources: 1. CTS—Climate Transition Score, 2. CTC—Climate Transition Credit.

Key takeaways

- Markets are turbulent, enough to keep investors awake at night!
- Geopolitical risk, inflation and climate risks are interconnected
- Fixed income investors have a key role to play in climate
- Assessing climate for corporate and government bonds is nuanced
- Metrics such as EIOPA stress test or carbon intensity can be useful
- Most important engage to make a real world impact beyond decarbonisation

Q&A

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



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