



CMIA

Climate Markets
& Investment
Association

**Climate investments as a new direction for
decarbonization of hydrocarbon energy**

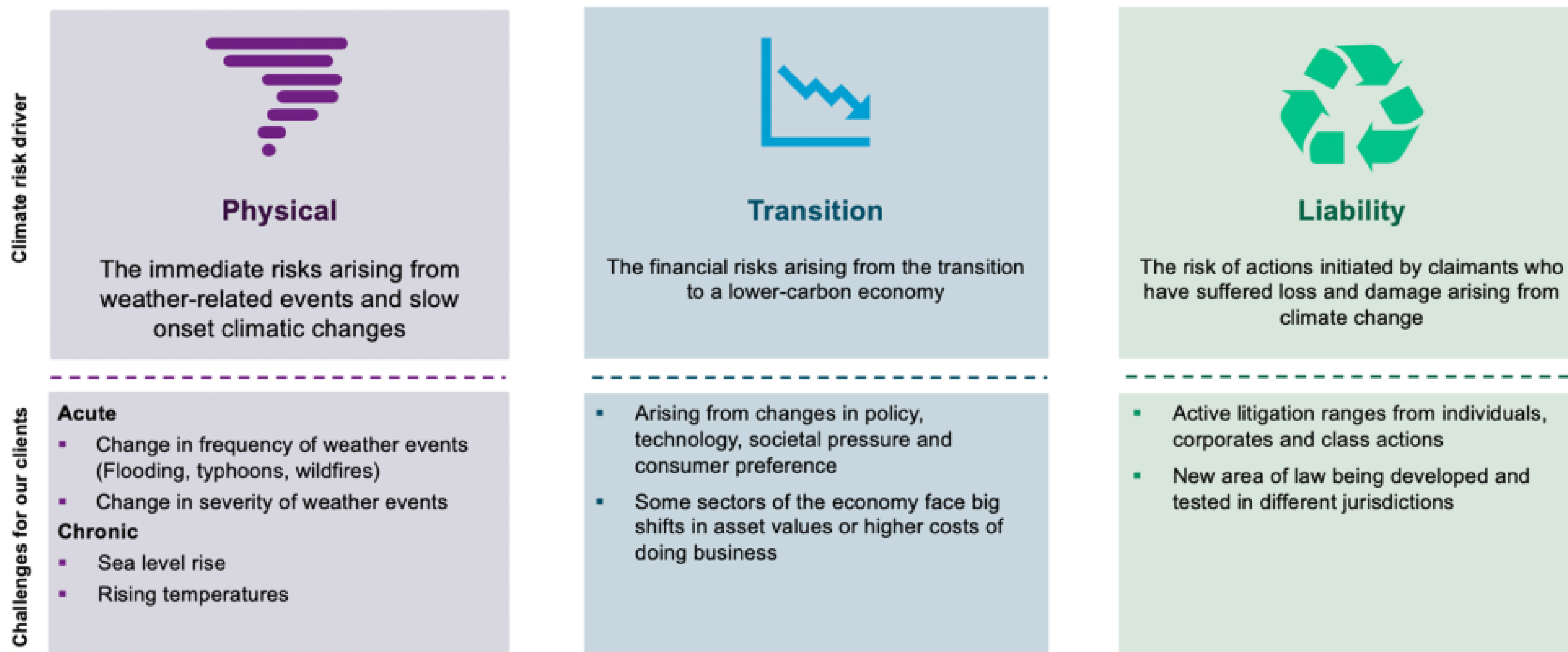
Margaret-Ann Splawn, Executive Director

Virtual, May 8, 2021

Risk Management in Energy 2021

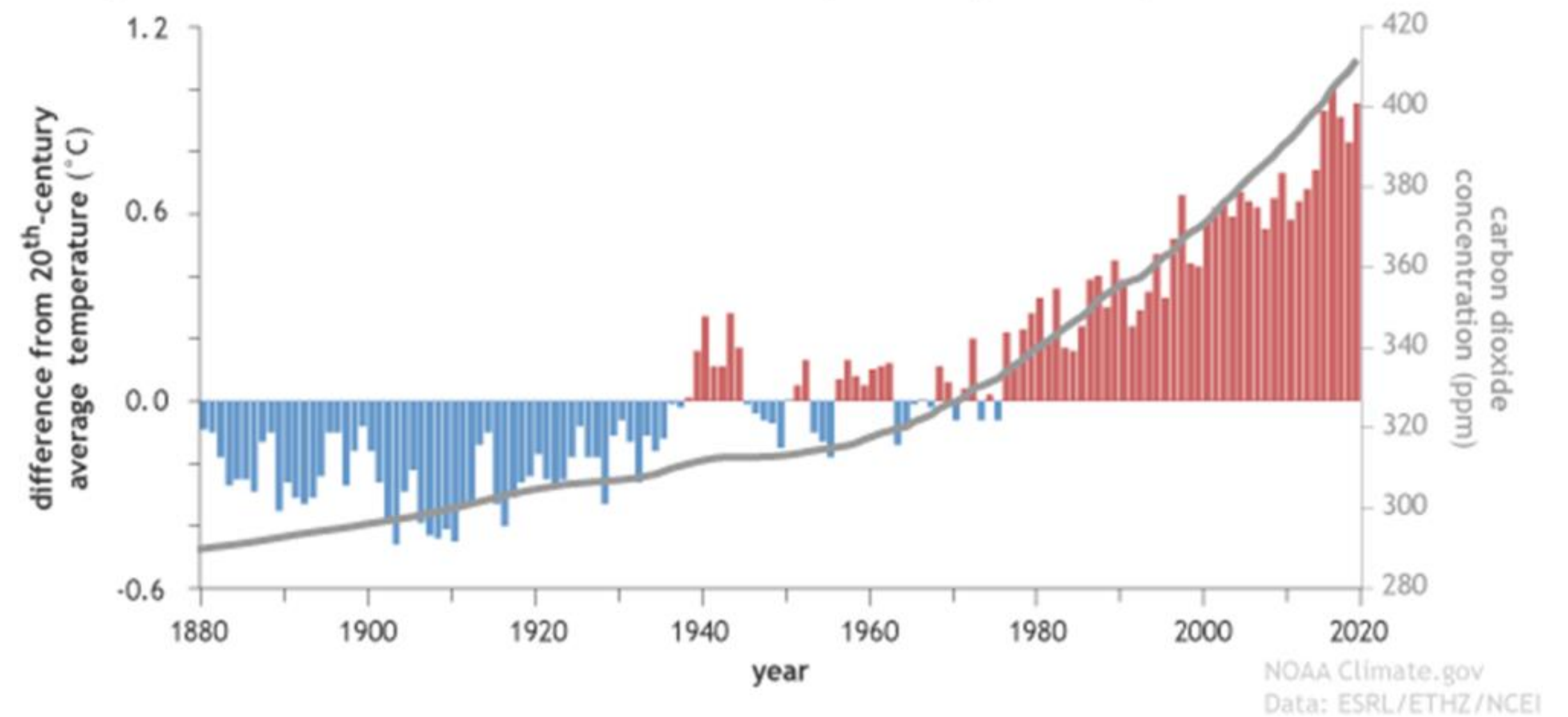
Russia Institute for Energy and Finance

Climate risks: physical, transition, and liability



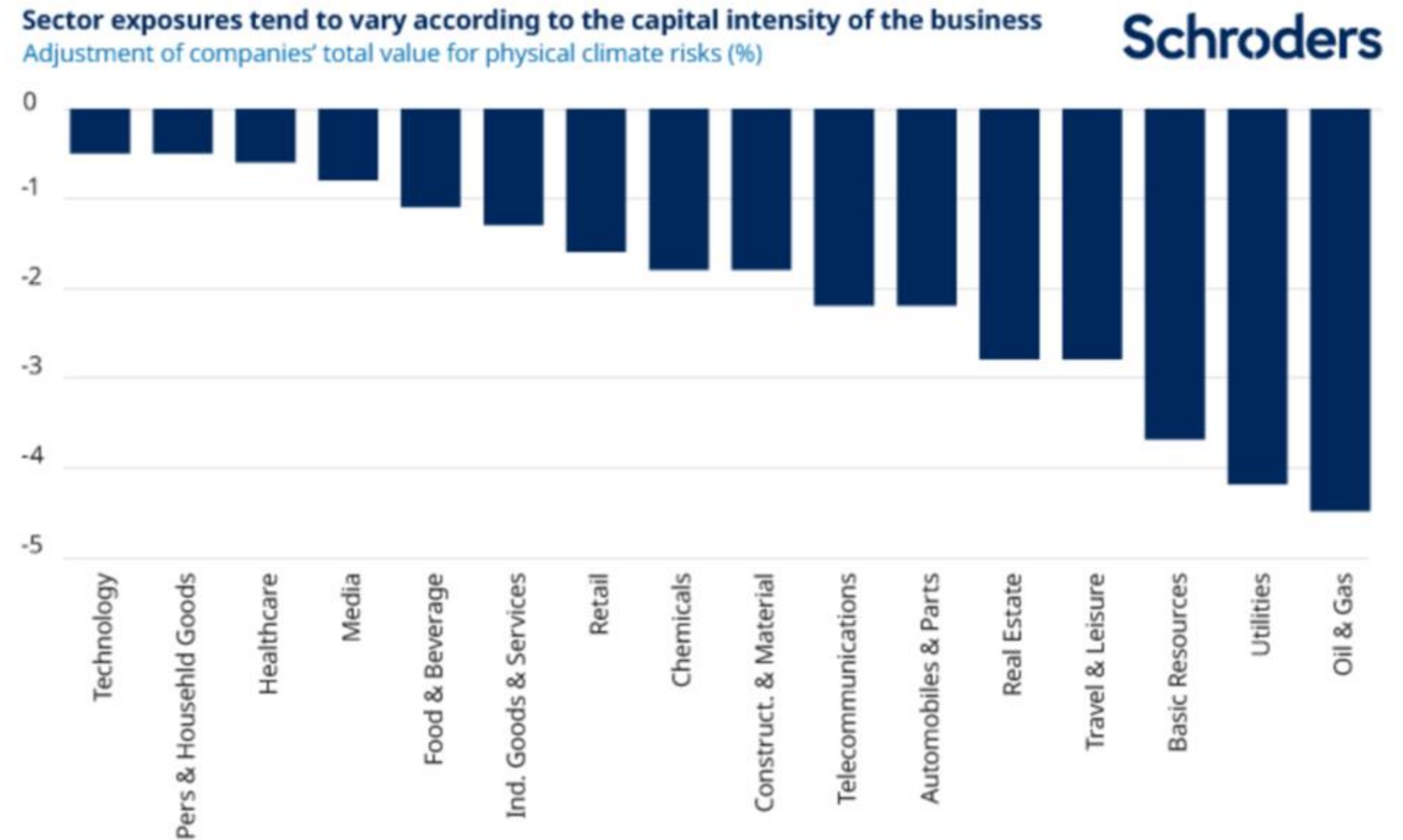
What Does the science say?

Atmospheric carbon dioxide and Earth's surface temperature (1880-2019)



Climate change risks

Physical risks – sector exposures



Source: Schroders. Based on most recent data available in March 2018.

We have excluded financial sectors from this summary given the low direct exposure of their fixed assets understates the risk embedded in their assets or liabilities. SCH69706



About the Climate Markets & Investment Association

THE BIG PICTURE

We are all connected

The impacts of climate change are being felt in every part of the world and every sector with tremendous human costs.

Current levels of public funding committed under the Paris Agreement are far from sufficient to reach its objectives.

The private sector has a vital role to play in bridging this gap. CMIA is in a unique position to facilitate such action.

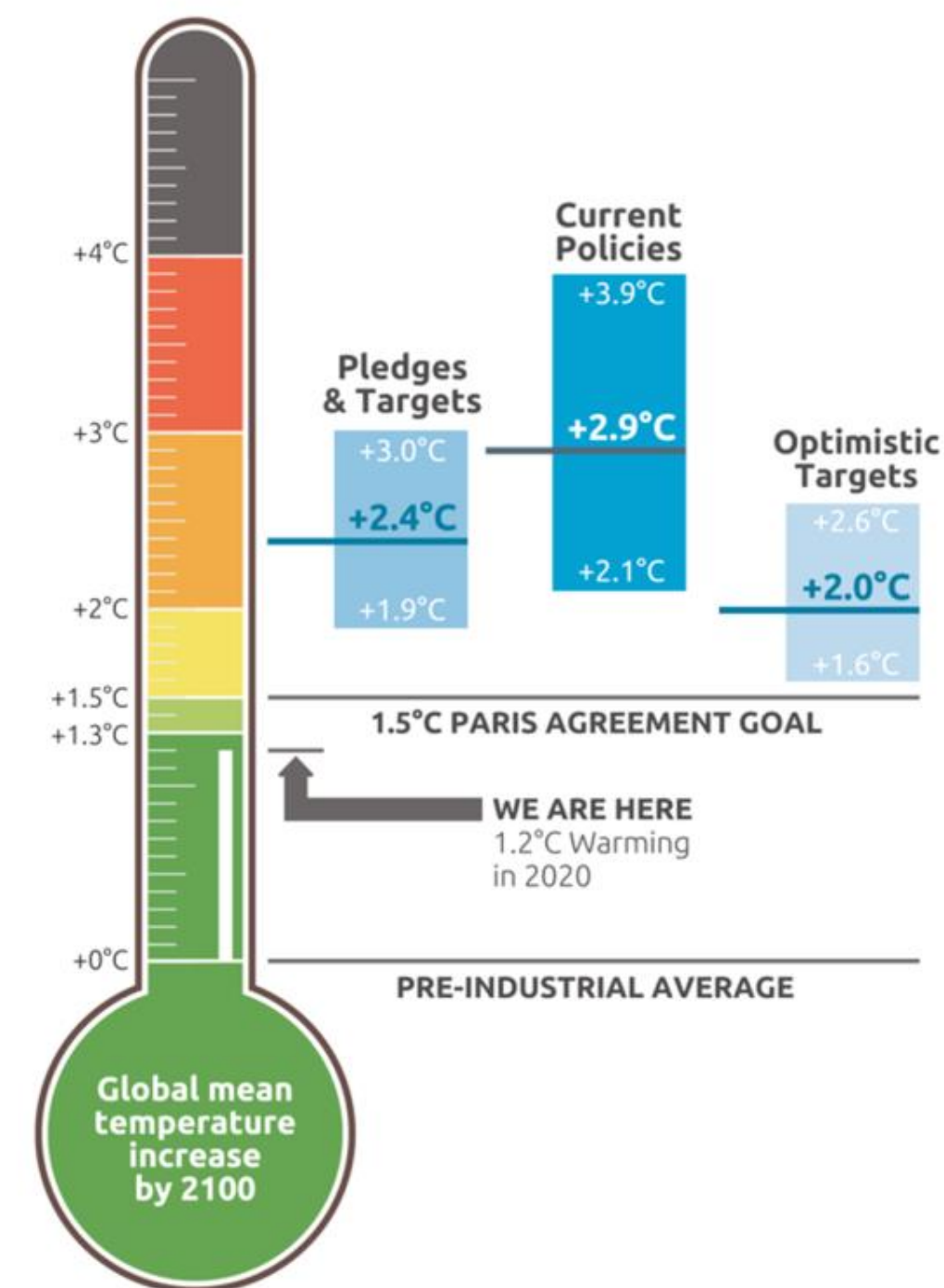
“There has never been a better time to invest in climate solutions... The historic Paris Agreement will help to open up nearly \$23 trillion in opportunities for climate-smart investments in certain emerging markets between now and 2030.”

Climate Investment Opportunities in Emerging Markets, IFC, Nov 2016

Forward looking scenarios are needed

Assessing the impact of climate change risks & opportunities

- Lower temperature rise: expect to see higher transition risk but lower physical risk
- Higher temperature rise: expect to see lower transition risk but higher physical risk



CAT warming projections
Global temperature increase by 2100

May 2021 Update

Climate Finance

→ No global definition or agreement of what constitutes climate finance

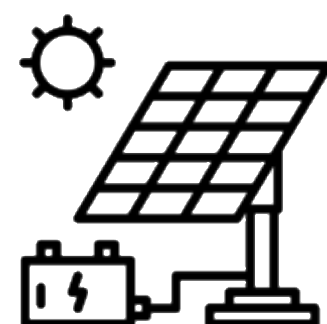
United Nations Framework Convention on Climate Change (UNFCCC) definition:

Climate finance refers to local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change.

The Convention, the Kyoto Protocol and the Paris Agreement call for financial assistance from the Parties with more financial resources to those that are less endowed and more vulnerable.

International Climate Finance – mobilizing \$100 billion by 2020

MITIGATION



ADAPTATION



➤ Climate finance must grow by US \$3-5 trillion per year globally*



The future is uncertain, but electric

Renewables are set to dominate the construction of new power infrastructure

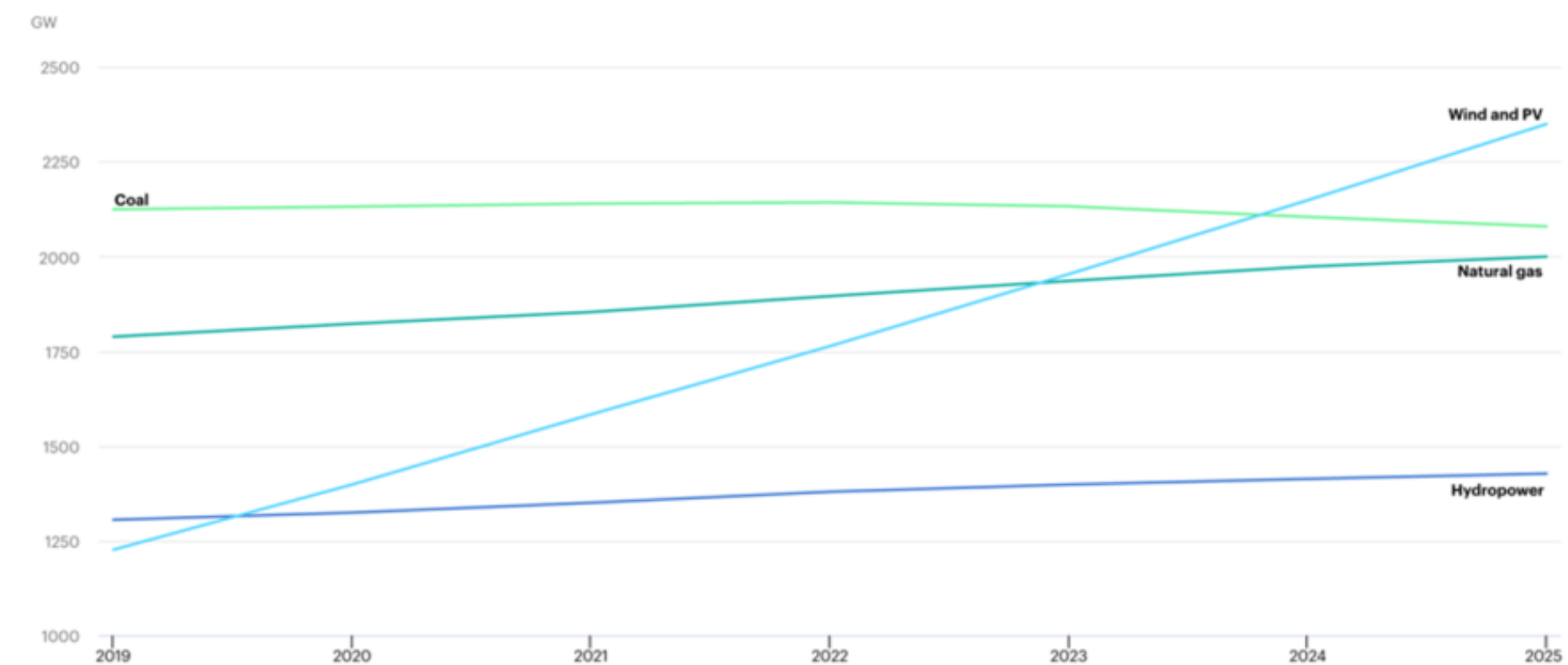
- Between 2010 – 2019 the global weighted-average levelized cost of electricity (LCOE) of renewable power projects *
- Solar PV down 82%
- Onshore wind down 39%
- Offshore wind down 29%

*Source IRENA 2019

Total installed wind and solar PV capacity is on course to surpass natural gas in 2023 and coal in 2024

Total installed power capacity by fuel and technology 2019-2025, main case

Open ↗



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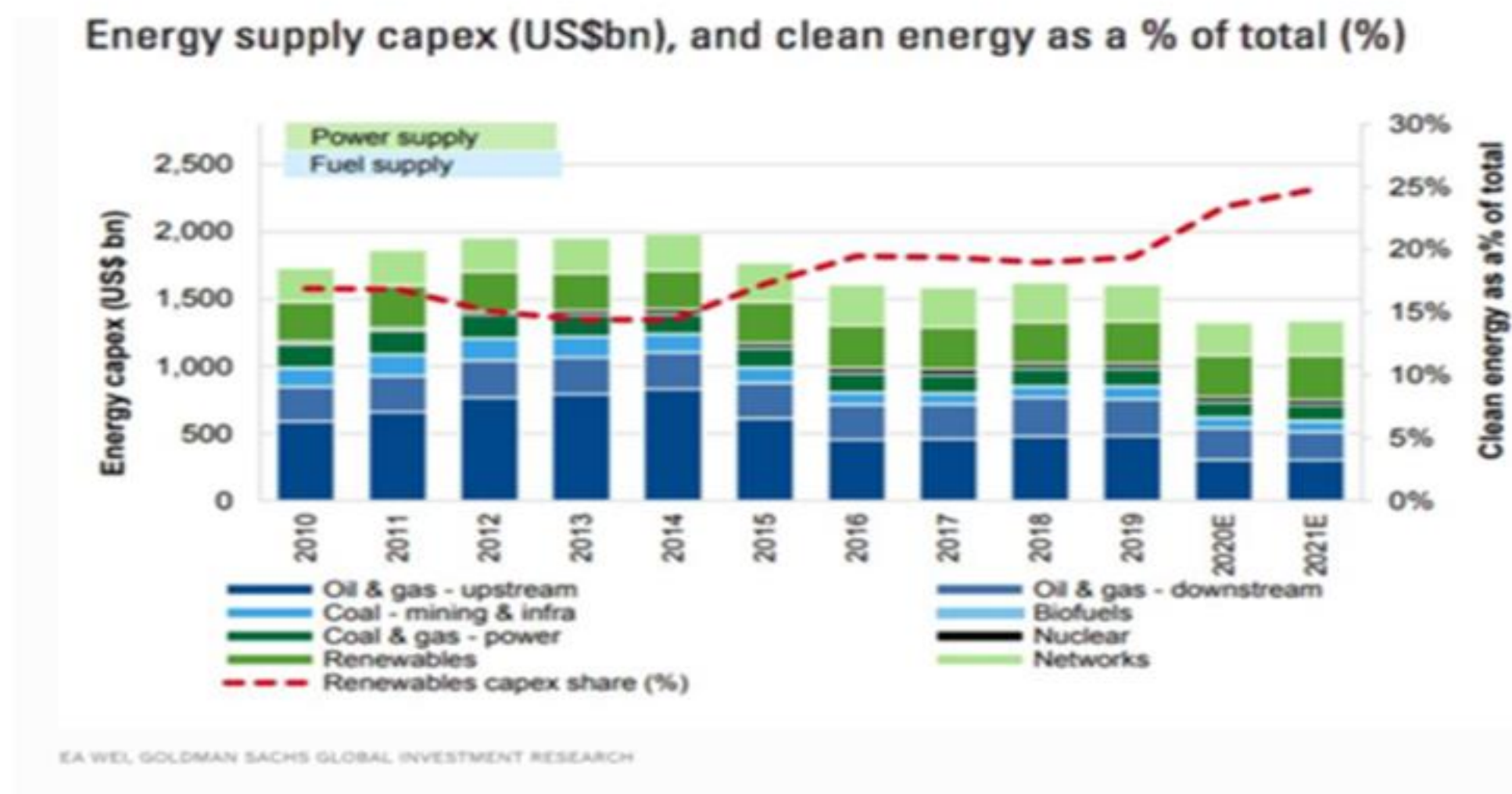
● Wind and PV ● Hydropower ● Coal ● Natural gas

Renewable energy spending is set to surpass upstream oil & gas in 2021

Cost led revolution in renewables: the rise of clean tech infrastructure

Fig 2: A new era for green infrastructure

- New era of electrification
- Clean energy sector projected to reach **\$16 trillion by 2030**
- Main driver is **diverging cost of capital**
- **Two-speed decarbonisation** is a risk as green infrastructure accelerates, but clean tech innovation may slow e.g. Carbon Capture & Storage



Managing the energy transition

New developments and new challenges

DEVELOPMENTS

- Possible pathways to a low-emissions future
 - Improving efficiency and saving energy
 - Reducing emissions from power generation
 - Deploying alternative low-emission options in end-use sectors

CHALLENGES

- Changes in the global energy mix creates risk management challenges for the renewables industry
 - Improving efficiency and saving energy
 - Overcoming barriers for scale
 - Increasing regulatory scrutiny arising from climate change
 - Supply chain decarbonisation

Climate change risks

Transition - the pathway to net zero emissions is accelerating

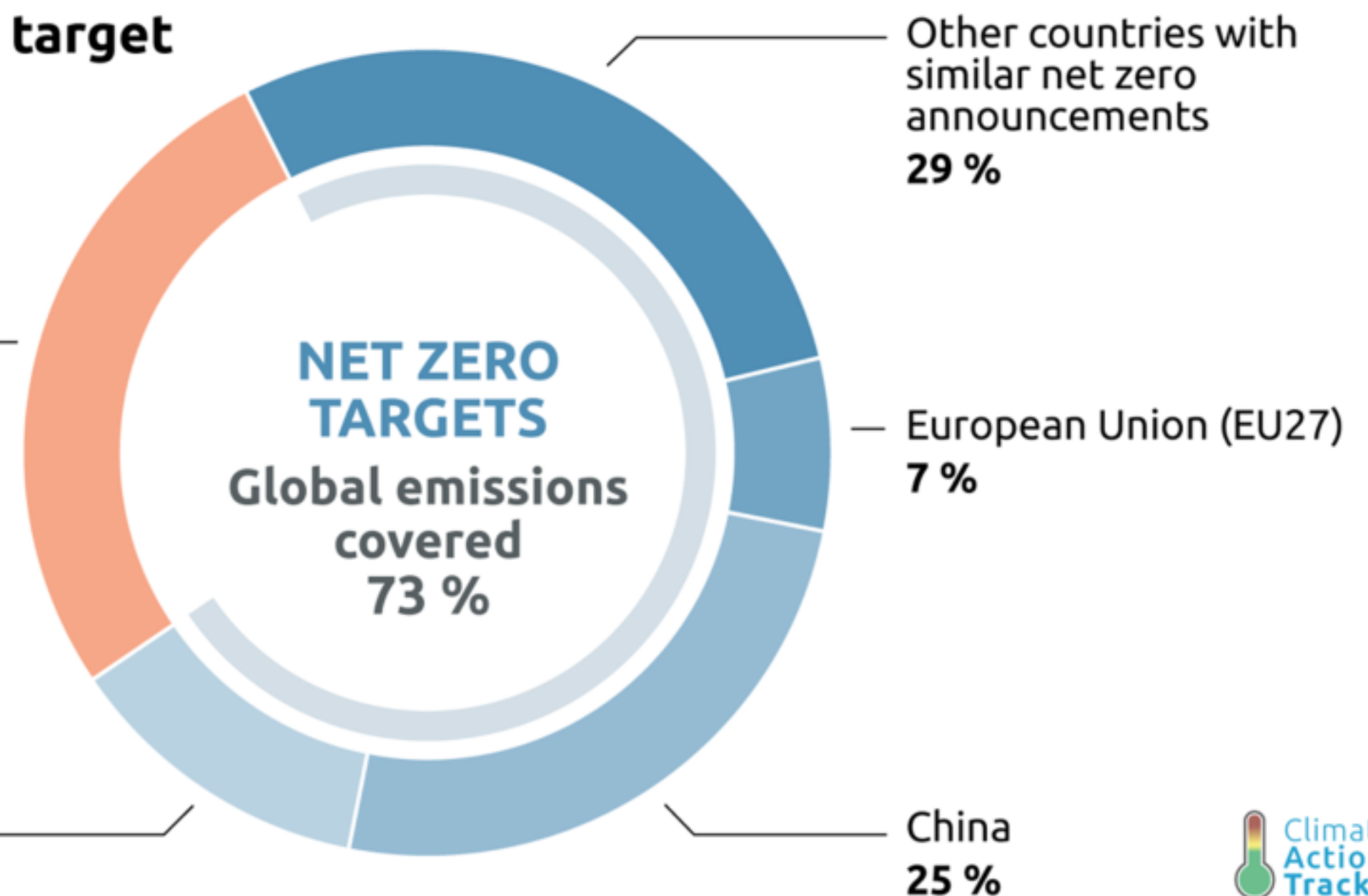
- Climate regulation on the rise - Europe leads the way
- EU €1 trillion Green Deal 2020
- EU Taxonomy for sustainable activities
- EU Carbon Border Adjustment Mechanism
- US Administration change
- US Securities and Exchange Commission - climate change and ESG disclosure

Net zero emissions target announcements

agreed in law, as part of an initiative, or under discussion

Countries with no net zero target
27 %

United States
12 %



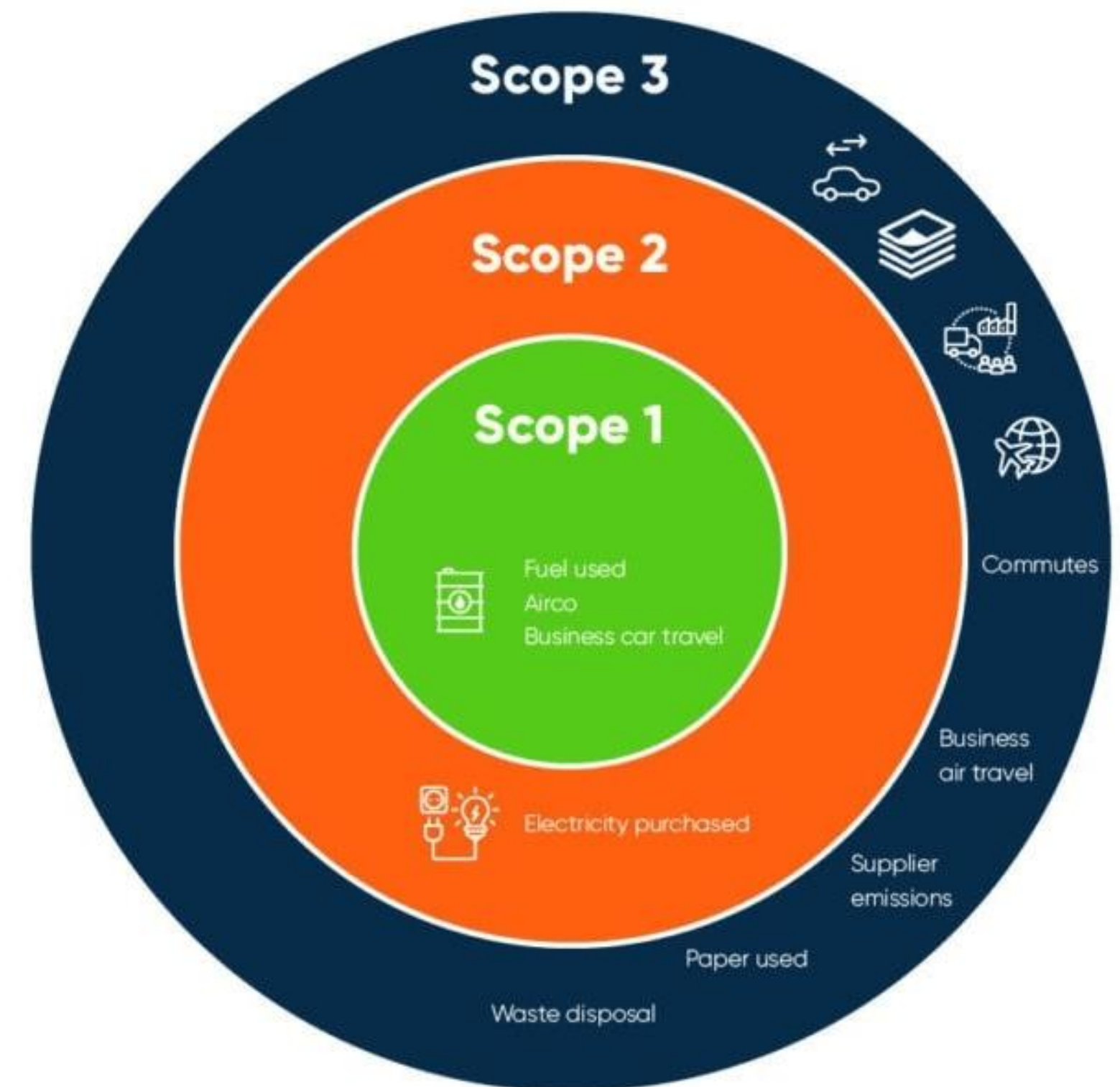
Climate risks

Liability

➤ Global trends in climate litigation

- Over **1800 climate change laws and policies**
- Some claims seek to attribute **Scope 3 emissions**, which are indirect emissions within your value chain, including upstream (suppliers) and downstream (customers)
- **New litigation** cases are using **science to quantify** and show the relationship between emissions to particular place-based companies
- Climate-related disclosure is mandatory in EU, **carbon intensive assets hold direct and indirect litigation risk**

Scope 1, 2, and 3 emissions



Rise of climate investments

Why does this matter? Because the money will follow it!

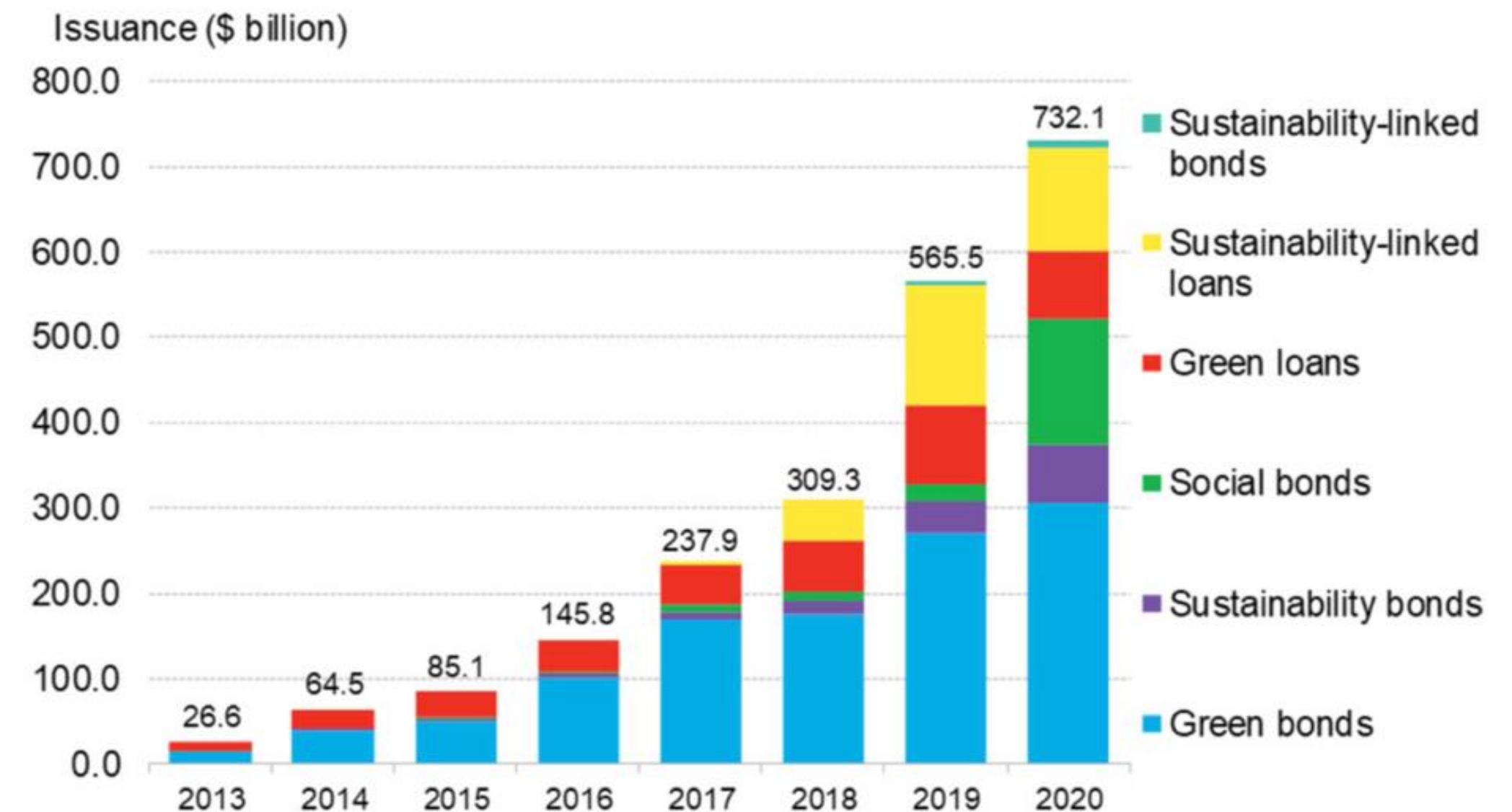
- Pandemic is revealing future materiality of a company is tied to its resilience
- During Covid-19, rise in focus Environmental, Social, and Governance (ESG) investing/ More focus on the 'S' but not detracting from climate, which remains firmly in the 'E'
- 'G' is increasingly linking corporate remuneration to environmental KPI's
- ESG / Sustainable Investing seen as a safe haven for investors
 - Global sustainable investment funds captured **\$51.1 billion of net new money from investors** in 2020, the 5th consecutive annual record*
 - ESG already prominent in Europe
 - Top 100 asset managers having ESG products, dedicated ESG labelled funds or funds focusing on sustainable investing: **UK 80%, Europe 73%**

* Morningstar 11 Feb 2021

Total sustainable debt issuance reaches \$732 billion – Social and sustainability bonds enjoying spectacular growth

- New record
- Growth represents a 29% increase from 2019 levels
- Covid-19 reality

Figure 1: Global sustainable debt annual issuance, 2013-2020



Source: BloombergNEF, Bloomberg L.P.

Prudent risk management is critical for the energy market!

New developments and new challenges add complexity to the transition – there is no single pathway to a low-emissions future

- Our future is electric – we are transitioning from carbon-based energy system to electron-based energy system
- Overcoming climate risks
 - Physical, transition, and liability
- Net-zero targets
 - Climate risk regulation, disclosure and reporting is on the rise so get ready + supply chain transparency
- Rise in climate-smart investments
 - It's where the money is but navigating the landscape isn't straightforward
- Final thoughts: take action!
 - Be prepared & share information
 - Creating a net zero pathway is complex and requires collaboration so work with other relevant stakeholders and governments to find solutions for the transition to a zero-carbon economy



Thank you!

Q&A

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