

SUSTAINABLE FUTURES CONFERENCE

Business transformation for
the era of climate disruption

BUSINESS TRANSFORMATION FOR THE ERA OF CLIMATE DISRUPTION

Dr Andrew Coburn

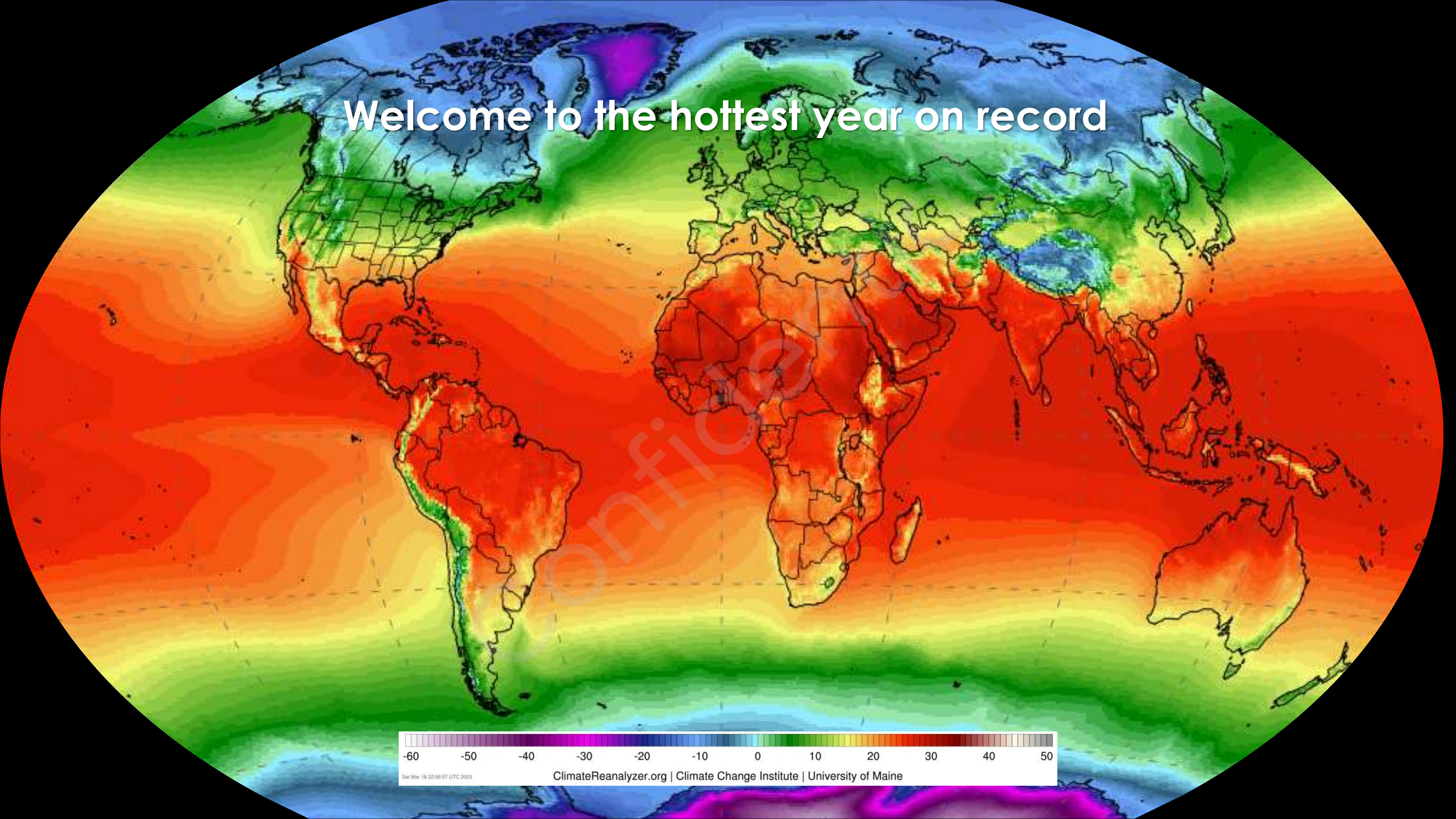
CEO, Resilience



Risilience Sustainable Futures Conference 12 October 2023



Welcome to the hottest year on record

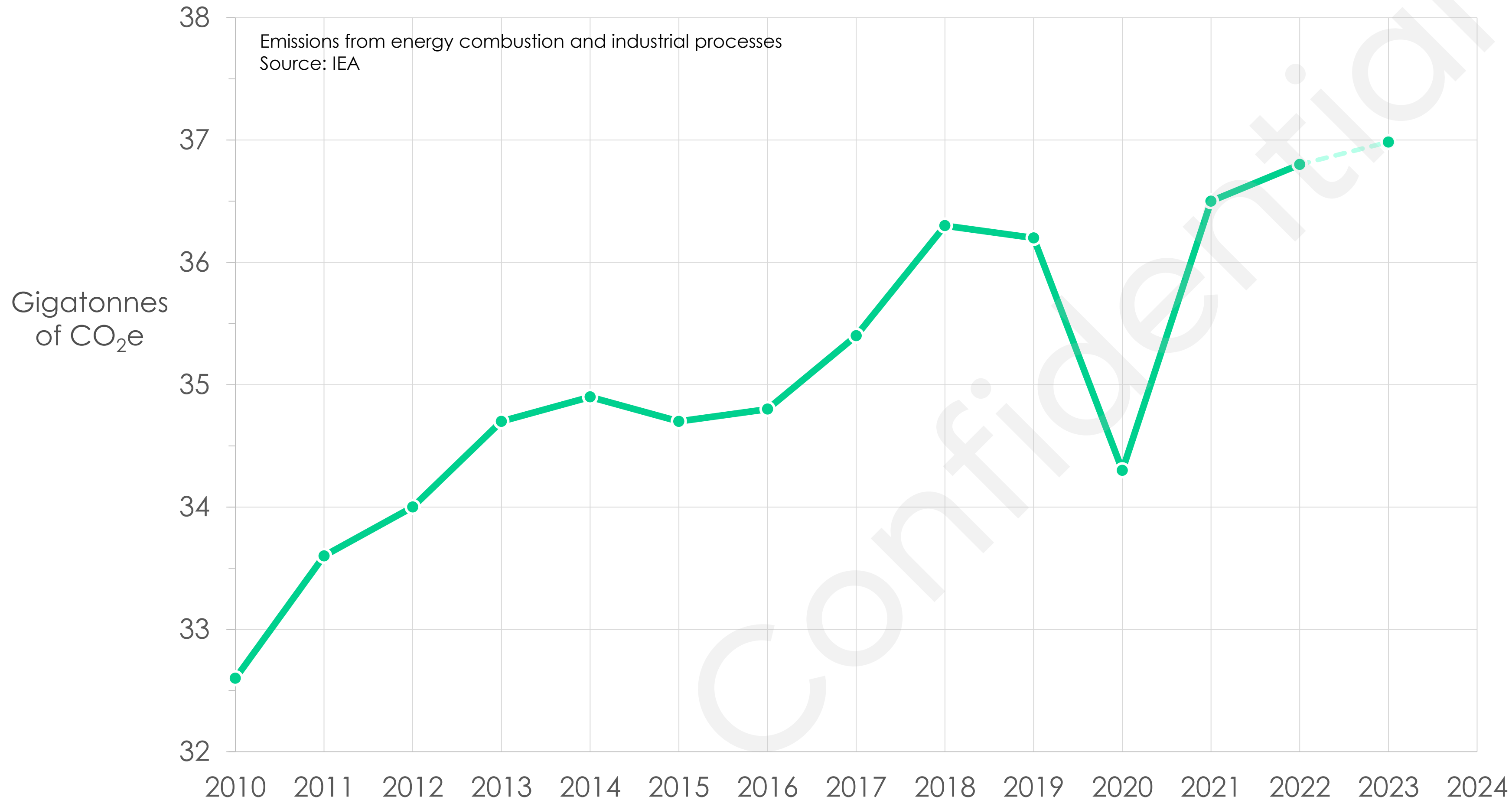




Climate-related catastrophes cost the global economy \$630 bn

But emissions are decelerating

Global emissions of GHG

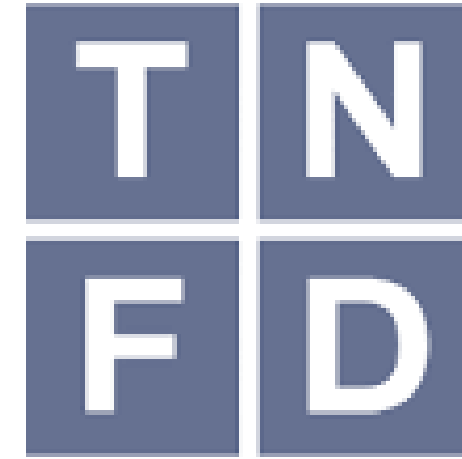


- **0.9%** increase in emissions in 2022
- But GDP growth was 3.2%
 - So emissions **intensity** has decreased
- Estimated 550 million tonnes of emissions were avoided by increased deployment of clean energy technologies
- Emissions in 2023 forecast to grow by 0.8%
- IEA predicts **peak in 2025**
- 20 countries have reduced emissions since 2000
 - France, Denmark, UK, Ireland, Ukraine, Hungary...

New rafts of climate and nature legislation



California Senate Bill
SB 253



Taskforce on
Nature-related
Financial Disclosures



SEC
Climate Disclosure
Rulings



European Union
Corporate Sustainability
Reporting Directive



International Sustainability
Standards Board
IFRS S1 and IFRS S2



Science Based Targets for
Nature

The global price of carbon is escalating

The price of carbon in the EU ETS exceeded **€100/tonne** in March 2023

US Federal Agencies are now imposing carbon costs on government suppliers at **\$190/tonne**

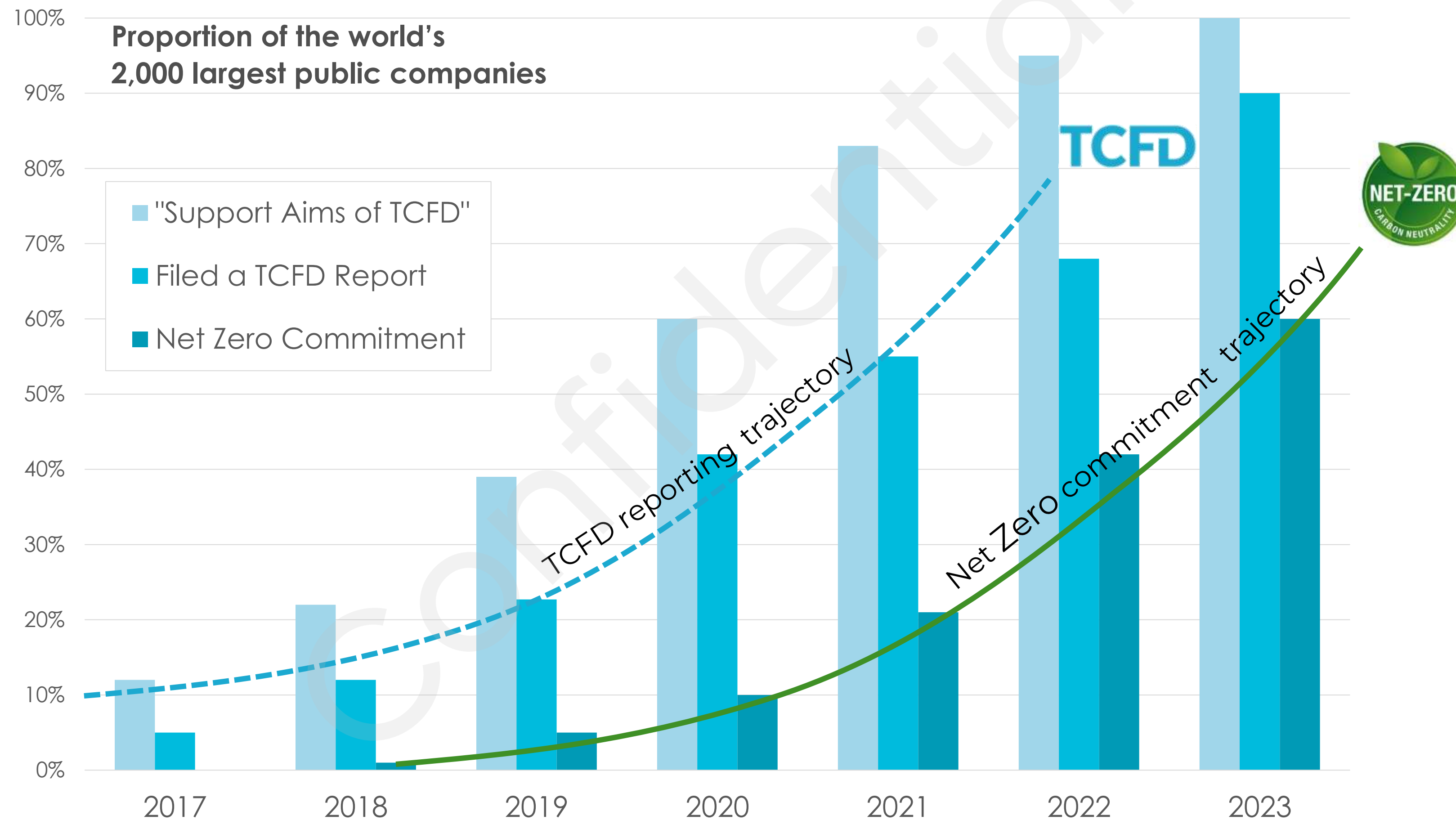
National carbon prices **increased** in most countries and by **more than 20%** in Luxemburg, Netherlands, Norway and Canada

The number of carbon-pricing schemes jumped from 68 to **73**
23% of global emissions are now within carbon pricing systems (up from 7% ten years ago)



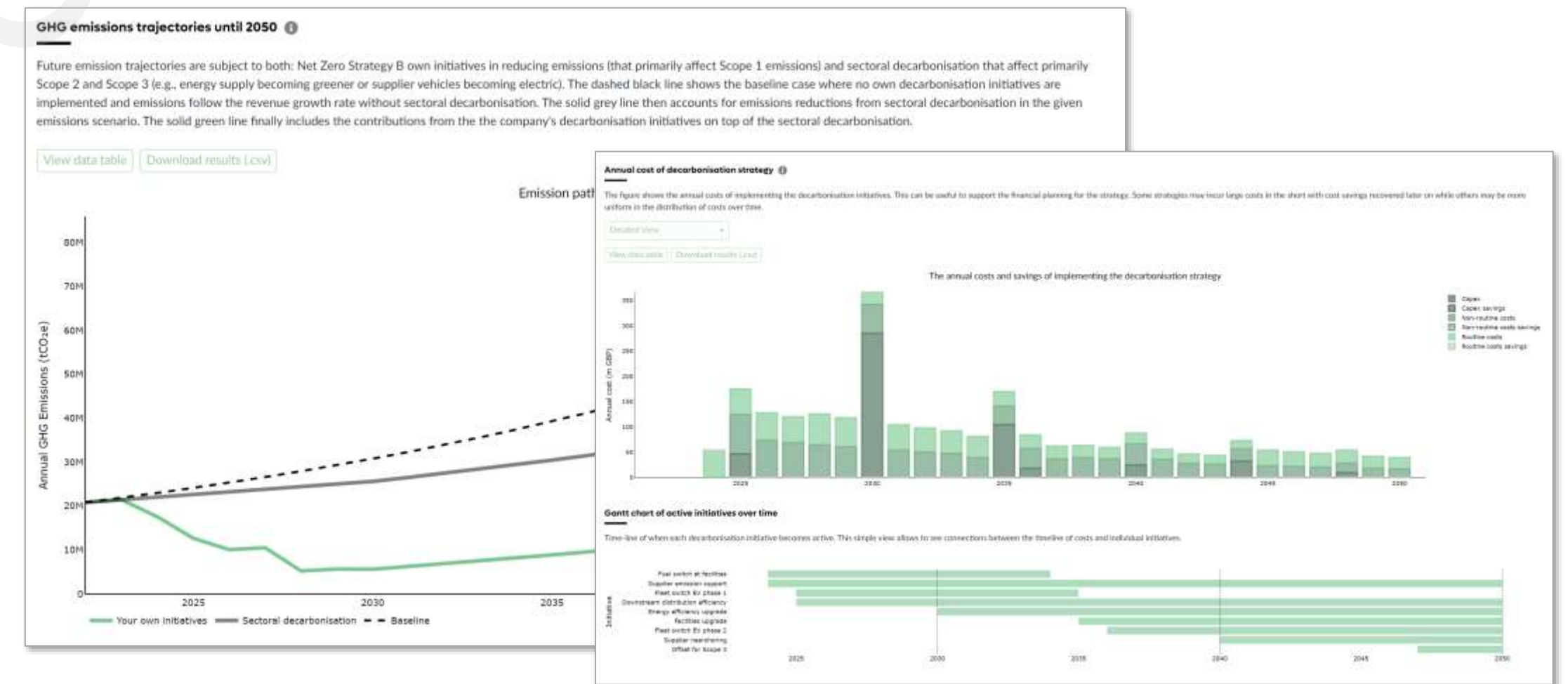
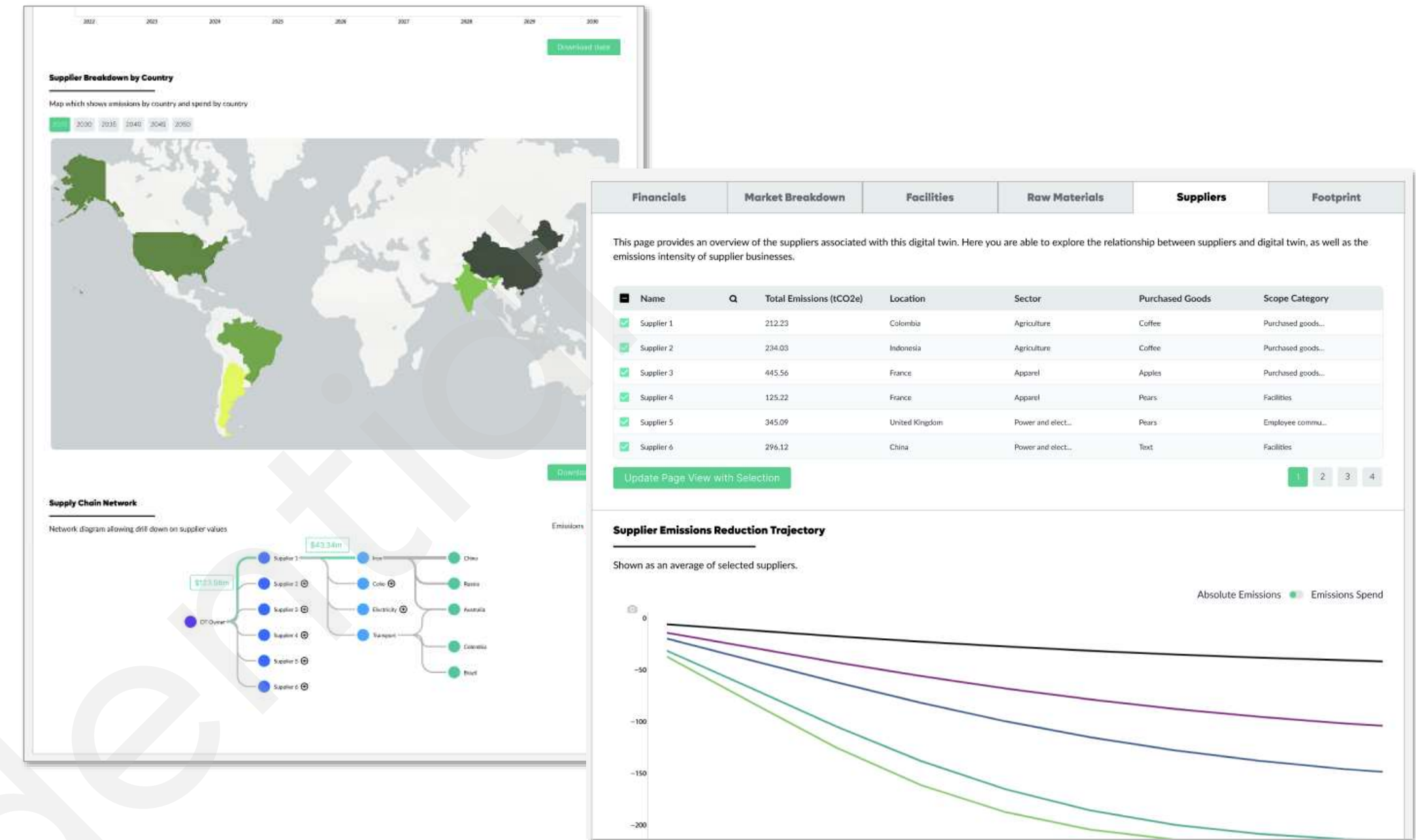
40% of major companies have now made a net-zero pledge

Doubled since last year



Transformer Risilience

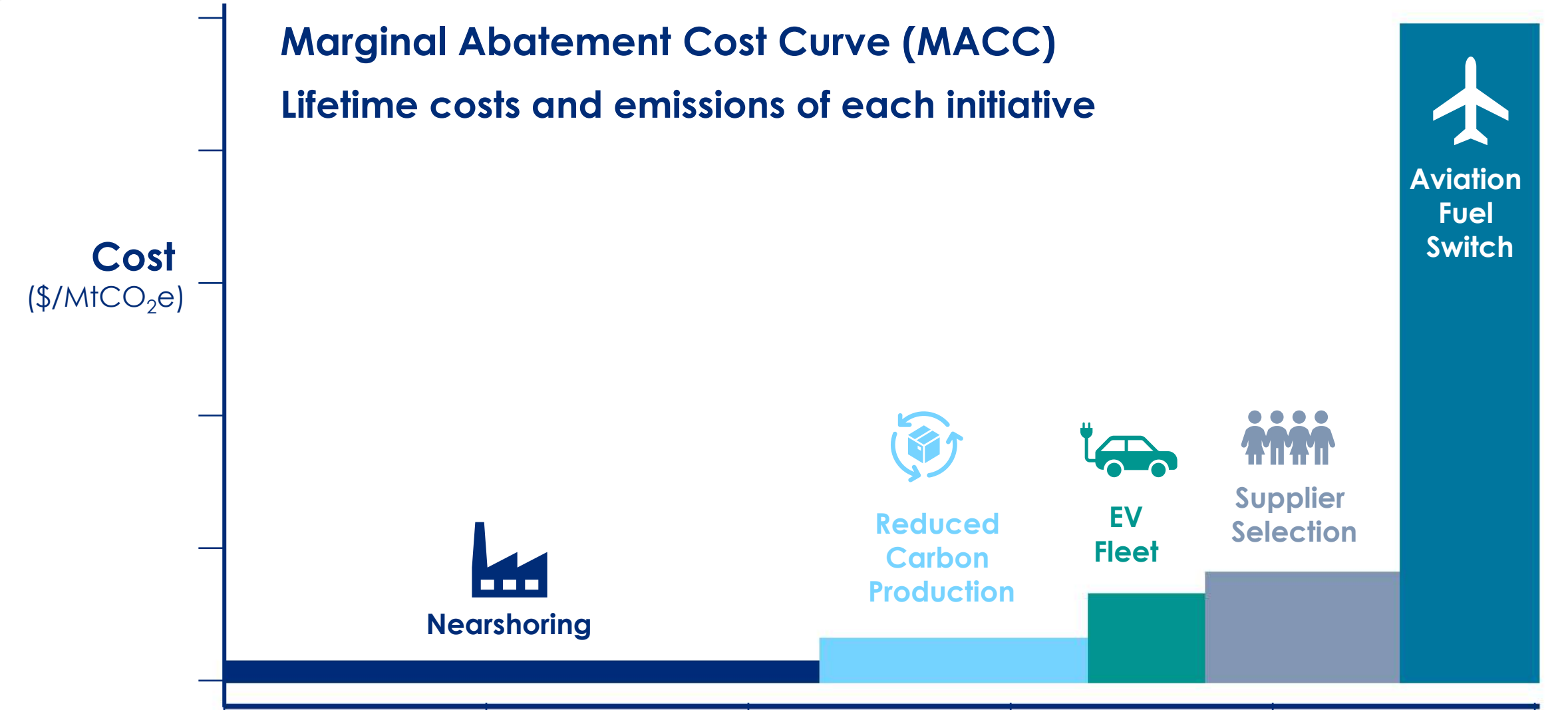
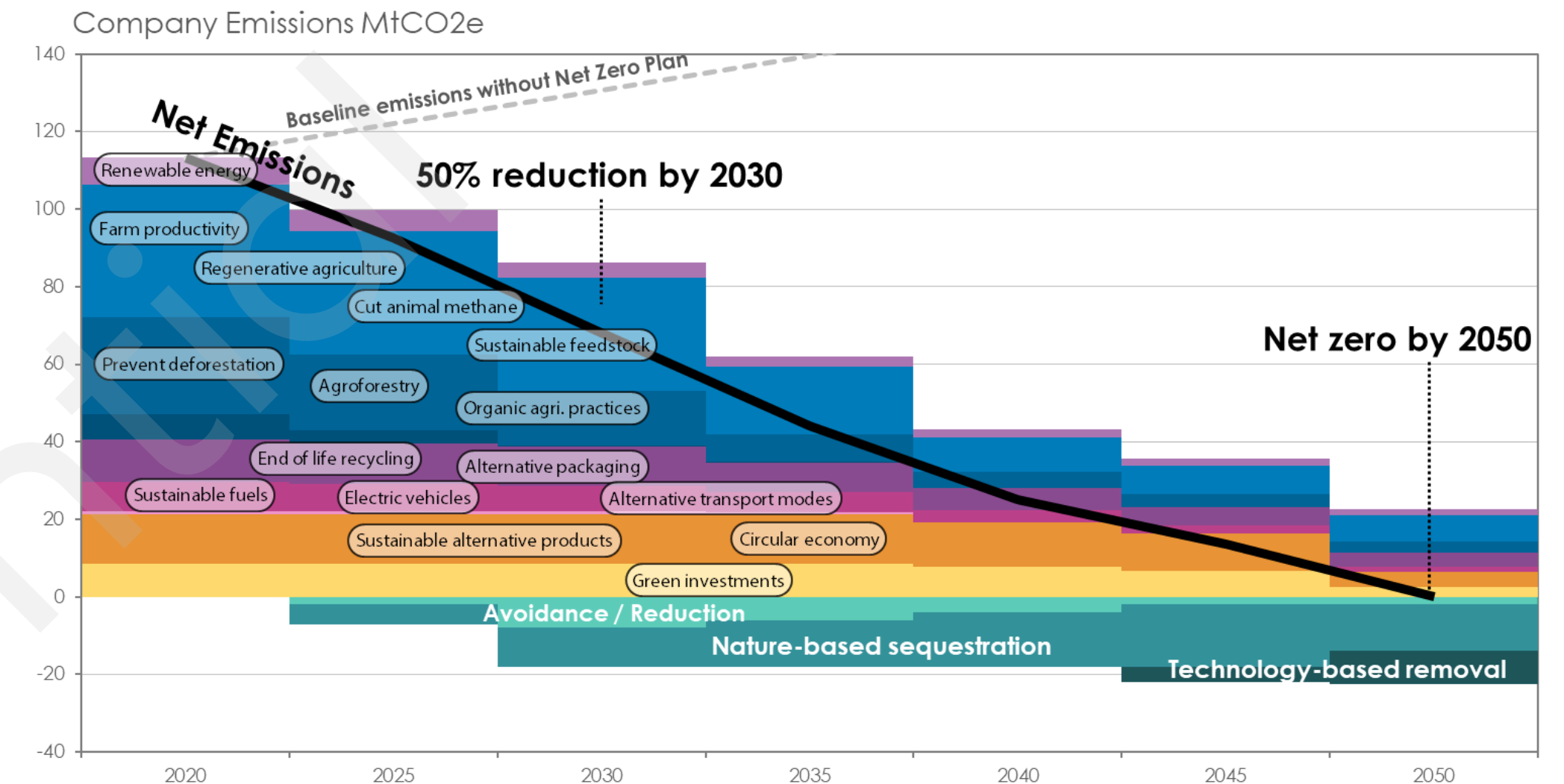
- A software platform to build, assess, and implement your net-zero GHG emissions reduction plan
- Complete toolkit for designing and testing initiatives for decarbonisation
- Quantifies financial benefits from implementing sustainability plans
- Provides tools for tackling Scope 3 - one of the hardest problems for our clients



Transformer Risilience

Net Zero Planner

- Decarbonization strategies
- Glide Path Analysis
- Risk reduction
- Marginal Abatement Cost Curves
- Risk Adjusted Cost of Capital



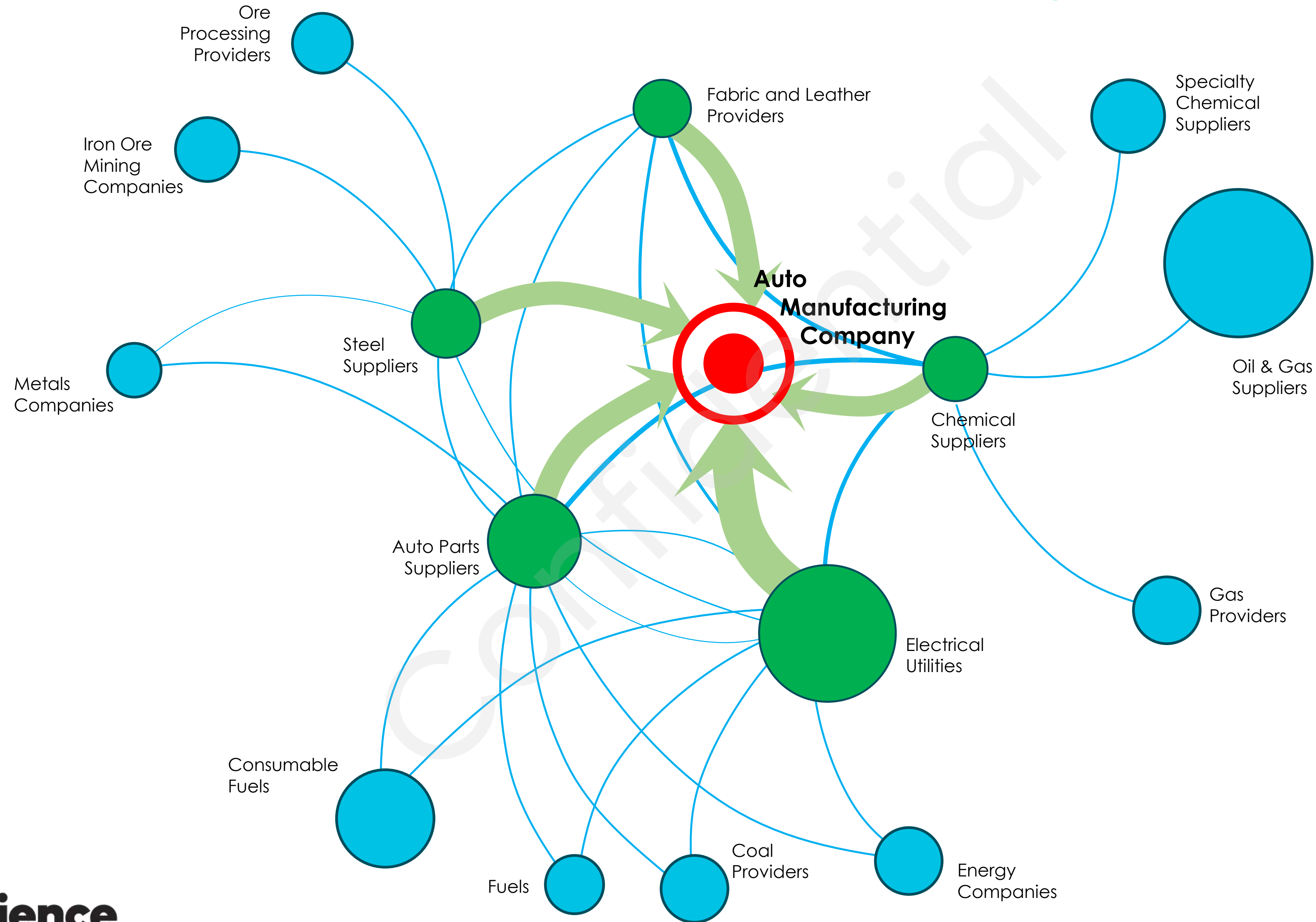
Transformer Risilience

Scope 3 Supplier Manager

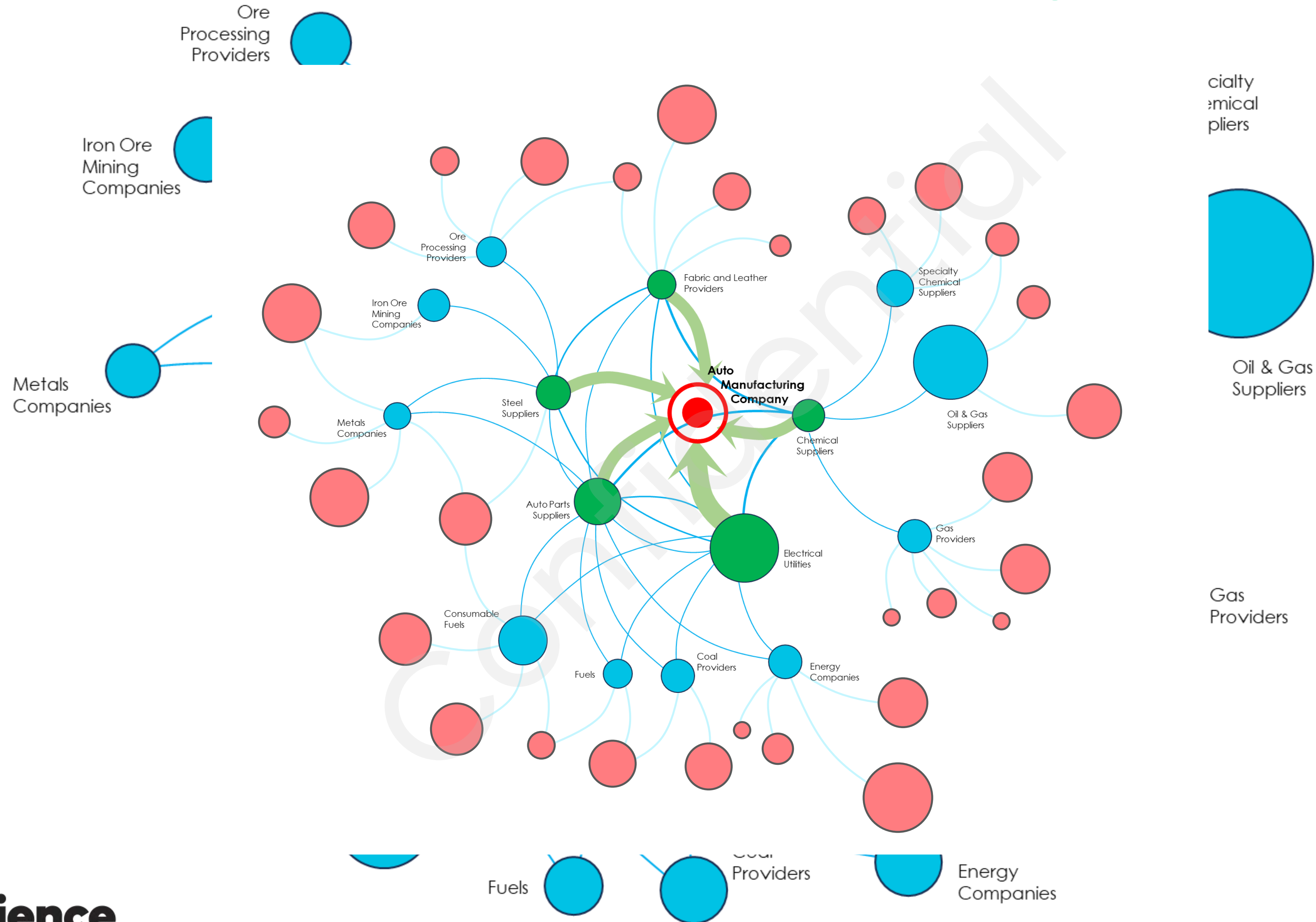
- Scope 3 Upstream (emissions from supply chain) represents 70-90% of many companies' emissions
- It is one of the hardest problems for our clients
- Scope 3 is controversial and widely variable
- In this release we provide an ability to measure and manage supply chain emissions accurately
- Supplier Register to manage detailed data on your individual suppliers
- Fill in missing data on supply chains and provide estimates of total emissions, from minimal data
- Quantify future reduction of suppliers' emissions



Supply-chain emissions tracing



Supply-chain emissions tracing

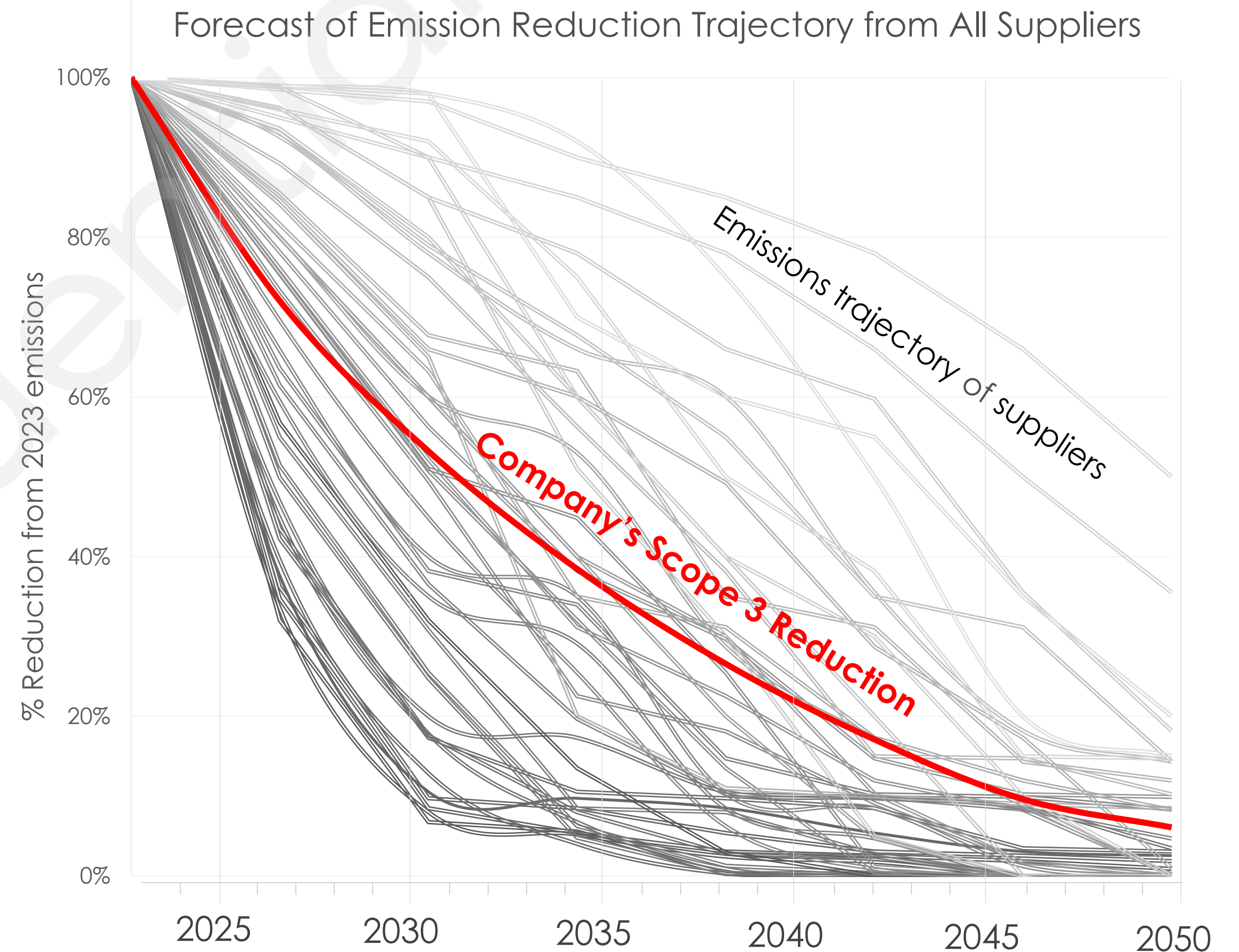


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Supply Chain Emission Forecaster



- Tests supplier plans against SBTi targets
- Estimates how suppliers' emissions will reduce due to renewable power supply trends and decarbonization in their sector
- Tests how supplier selection could improve your net zero planning
 - Switching to better suppliers can improve net zero target attainment by 5 years
- Quantifies how supplier incentives or penalties could reduce Scope 3 emissions
 - Sharing costs of supplier decarbonization can incentivize faster target attainment



Nature Risk

- We have added the management of **Nature Risk** to the Resilience platform
- This enables your **same digital twin** to be used for developing nature-positive sustainability strategies
- Provides **double-materiality assessments** required for new nature-based risk reporting TNFD, CSRD, SBTN, ISSB
- Nature Risk module is available today featuring **Environmental Screening** to quantify a company's revenue-dependency related to critical habitat
- i.e. locations where a company's activities may be contributing to the depletion of natural resources, such as
 - **Water**
 - **Soil**
 - **Biodiversity**



Taskforce on Nature-related Financial Disclosures



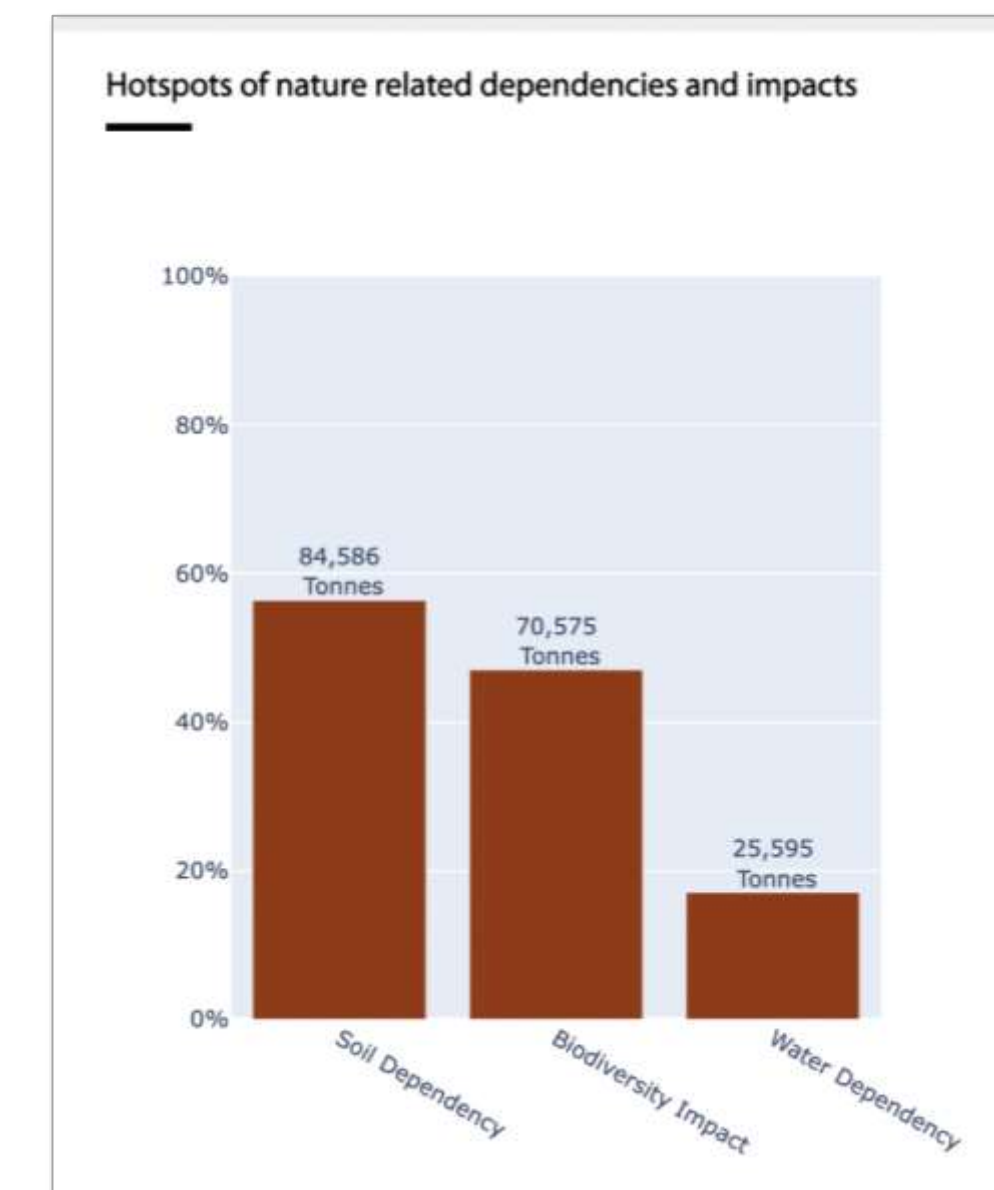
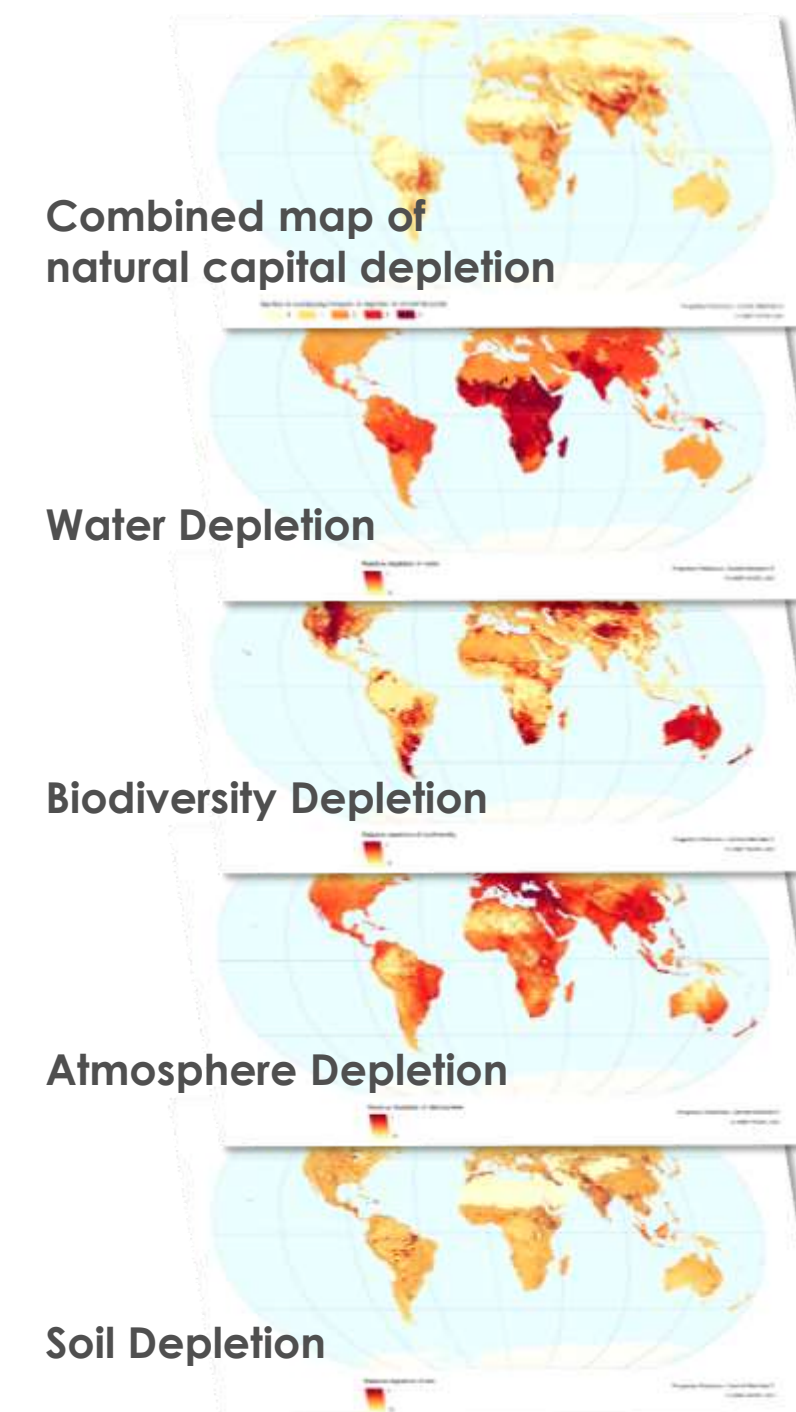
European Union Corporate Sustainability Reporting Directive



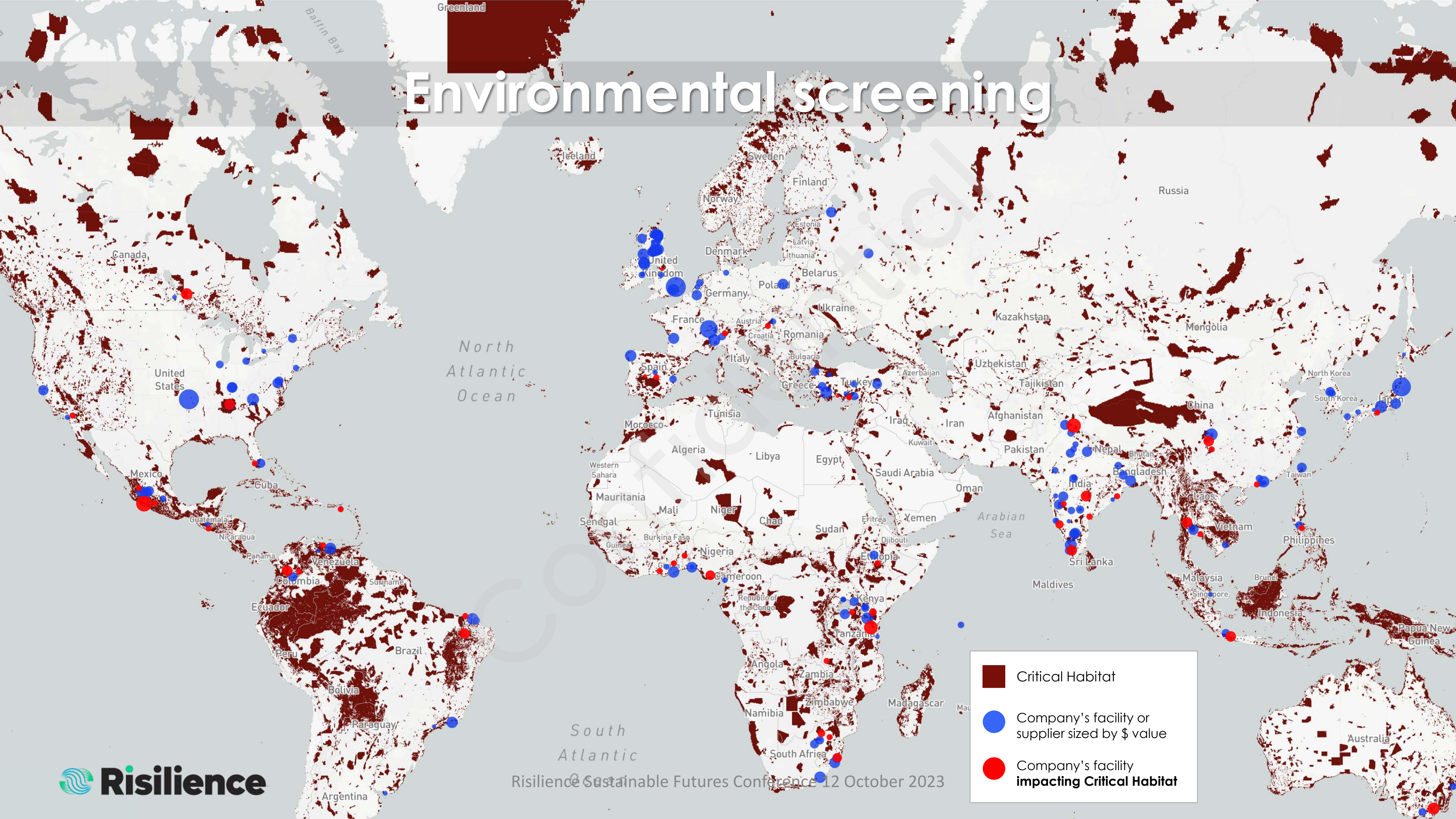
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Science Based Targets for Nature

Resilience Atlas of natural capital depletion



Environmental screening



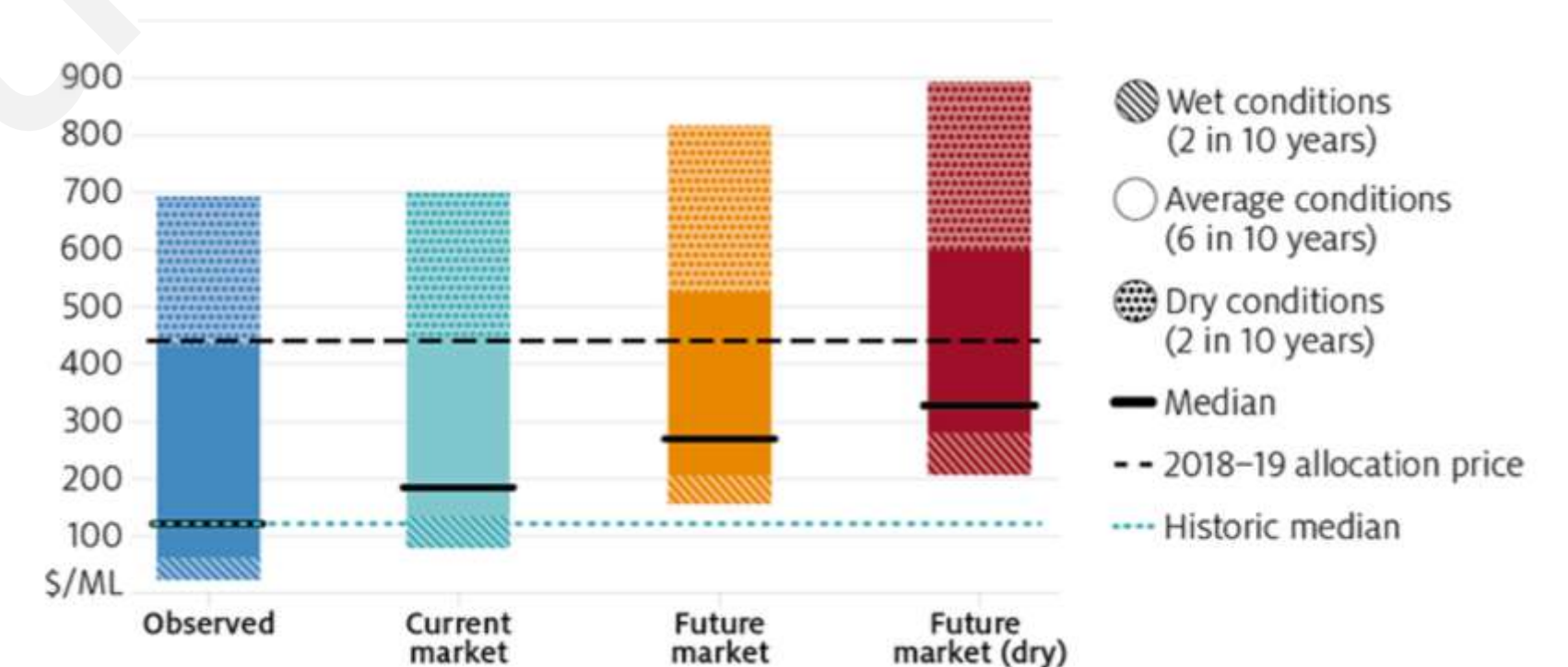
Why is Nature Risk important to business?

- Nature will increasingly impact your bottom line
- Businesses need to plan for nature transition risk
 - Not just the reporting regulation of TNFD & CSRD
- Sustainability increasingly drives consumer demand
- Natural resources will increasingly become regulated and priced
 - Will follow the precedent of carbon pricing
- Your impacts on nature and natural capital assets will become balance sheet items
- Understanding the quantification of nature risk in financial terms will be critical

Clients can expect their global water costs to double

e.g.:

In the Australian Murray-Darling Basin, water shortages are pushing industrial and agricultural water costs close to **\$900 a MegaLitre**



Clients will face costed-land use in many areas of the world

e.g.

The UK is introducing 'Statutory Biodiversity Credit Prices' for land use change levies in 2024 to protect critical habitats for Biodiversity Net Gain (BNG)

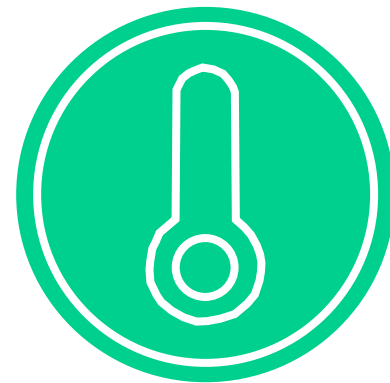
Prices per hectare range from

\$50,000 (Grassland)

to

\$800,000 (Critical habitats e.g. peat lakes)

Aligning climate and nature – a holistic view



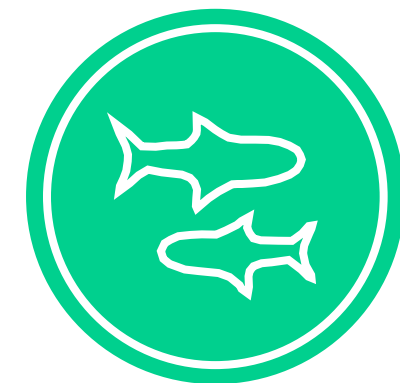
Climate Change

CSRD: ESRS E1
TNFD: (TCFD)



Pollution

ESRS E2
C2



Water & Marine Resources

ESRS E3
C2 & C3



Biodiversity & Ecosystems

ESRS E4
C1, C4, C5



Resource Use & Circular Economy

ESRS E5
C3

Sustainability Intelligence

Policy



Regulation



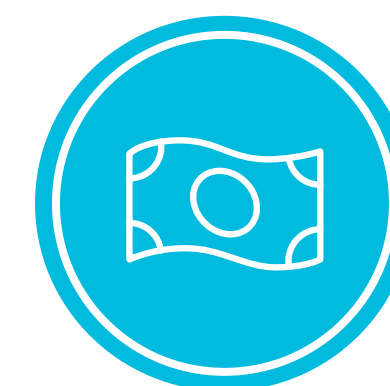
Environmental pricing



Extreme weather



Economy



Business impact



THANK YOU

Confidential



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Centre for
Risk Studies