

Nature and Biodiversity Considerations for the Tech Sector: Expert Q&A

techUK Q&A – 9th April 2024

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Biodiversity: life on earth



“The **variability** among **living organisms** from all sources including, inter alia, **terrestrial, marine** and other **aquatic** ecosystems and the ecological complexes of which they are part; this includes diversity **within species, between species** and of **ecosystems**”

Convention on Biological Diversity, 1992

'Nature' or 'Biodiversity'



'nature' refers to the living and non-living aspects of the natural world.

[WBCSD](#) uses the following definition "Nature comprises all living entities and their interactions with other living or non-living physical entities and processes."

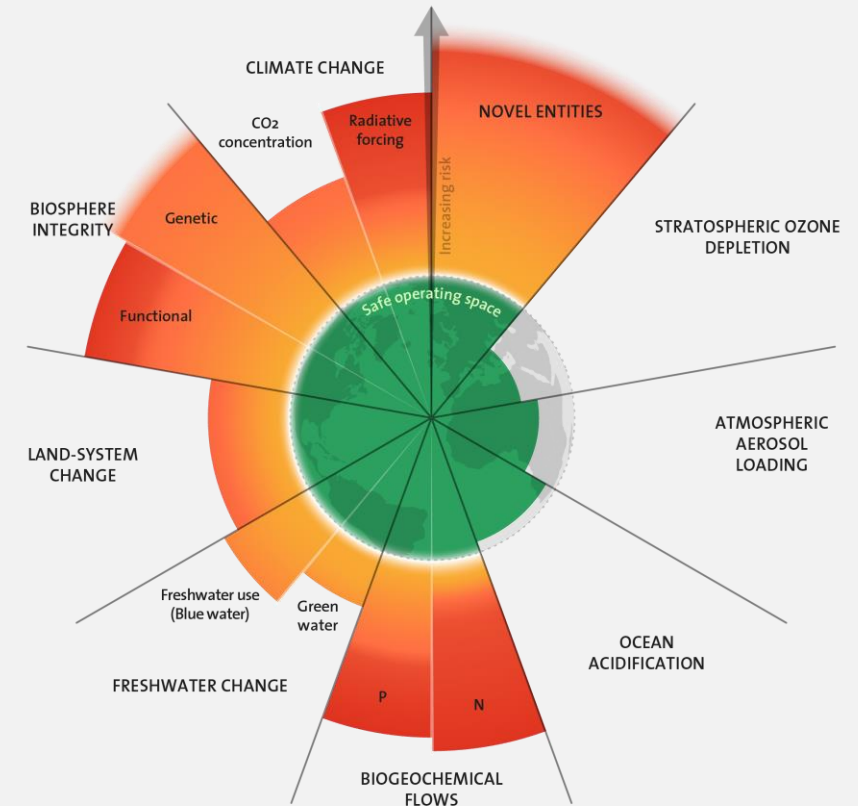
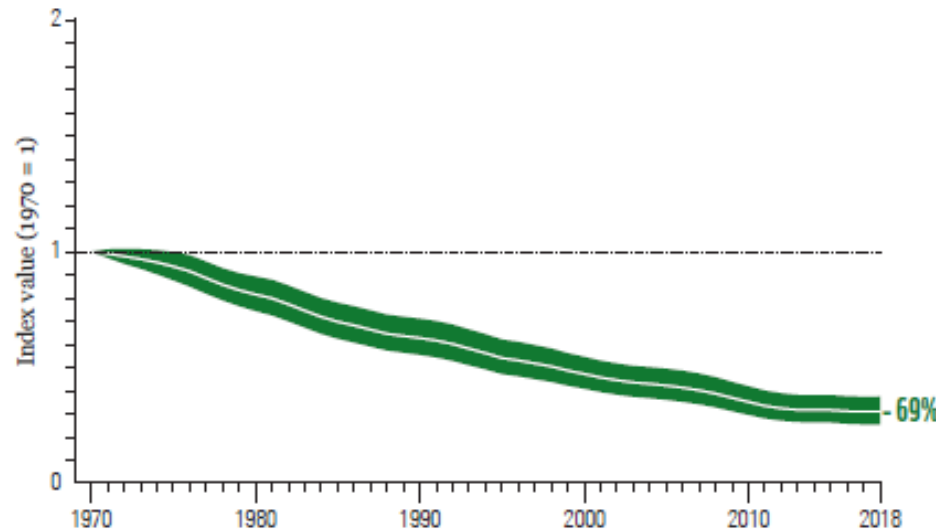
Nature crisis

The living world is in crisis. There was a [69% decline in monitored species](#) between 1970 and 2018 and over a million species are at risk of extinction today. The face of the planet has been changed so radically that only [3% of ecosystems remain ecologically intact](#).

Figure 3: The global Living Planet Index (1970 to 2018)
The average change in relative abundance of 31,821 populations, representing 5,230 species monitored across the globe, was a decline of 69%. The white line shows the index values and the shaded areas represent the statistical certainty surrounding the trend (95% statistical certainty, range 63% to 75%).
Source: WWF/ZSL (2022)¹⁸⁴.

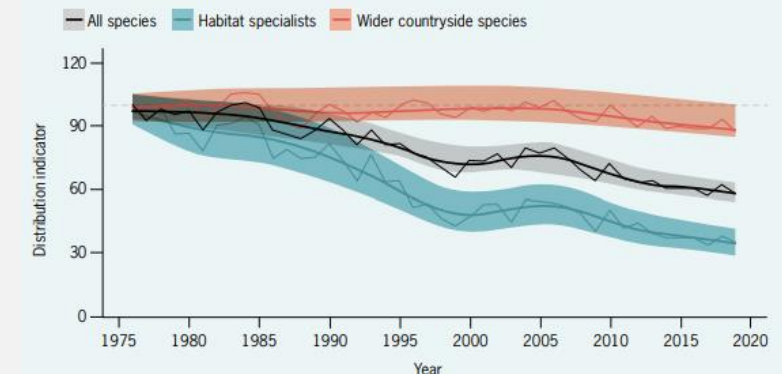
Key

- Global Living Planet Index
- Confidence limits



<https://www.stockholmresilience.org/research/research-news/2023-09-13-all-planetary-boundaries-mapped-out-for-the-first-time-six-of-nine-crossed.html>

UK butterfly distribution indicators for all species (black), habitat specialists (blue) and wider countryside species (red). Thick lines show the smoothed indicators with confidence intervals (shaded areas), thin lines show the raw (unsmoothed) values.



<https://butterfly-conservation.org/state-of-uk-butterflies-2022>

Why care? Nature underpins societies and economies



Global Risks Report 2024



Top 10 risks

Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period.

10 years

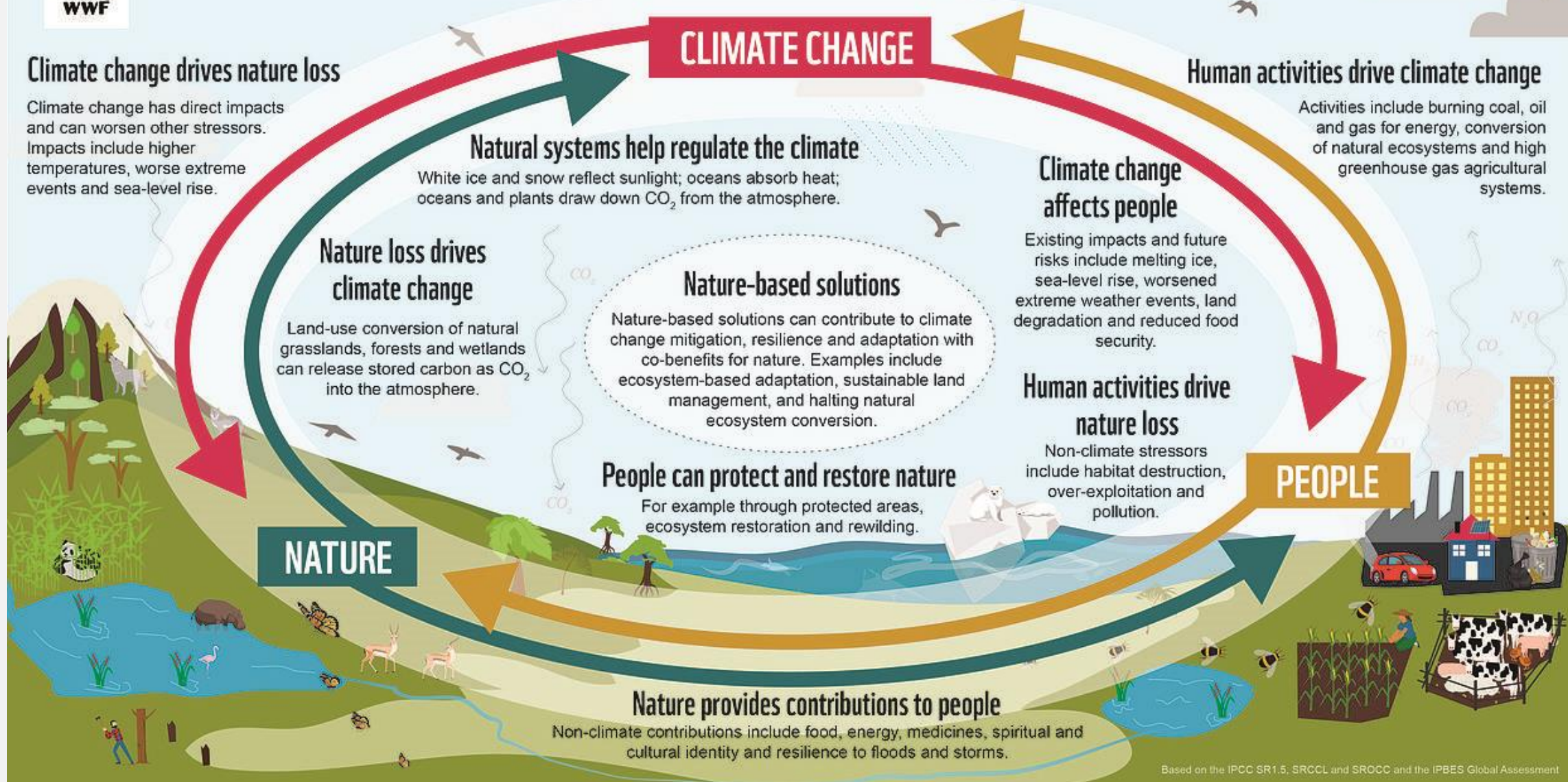
- 1st Extreme weather events
- 2nd Critical change to Earth systems
- 3rd Biodiversity loss and ecosystem collapse
- 4th Natural resource shortages
- 5th Misinformation and disinformation
- 6th Adverse outcomes of AI technologies
- 7th Involuntary migration
- 8th Cyber insecurity
- 9th Societal polarization
- 10th Pollution

Risk categories | Economic | Environmental | Geopolitical | Societal | Technological

Source: World Economic Forum Global Risks Perception Survey 2023-2024.



INTERACTIONS BETWEEN CLIMATE CHANGE, PEOPLE AND NATURE



The technology value chain: biodiversity risks and impacts

Role of the technology industry in the nature crisis

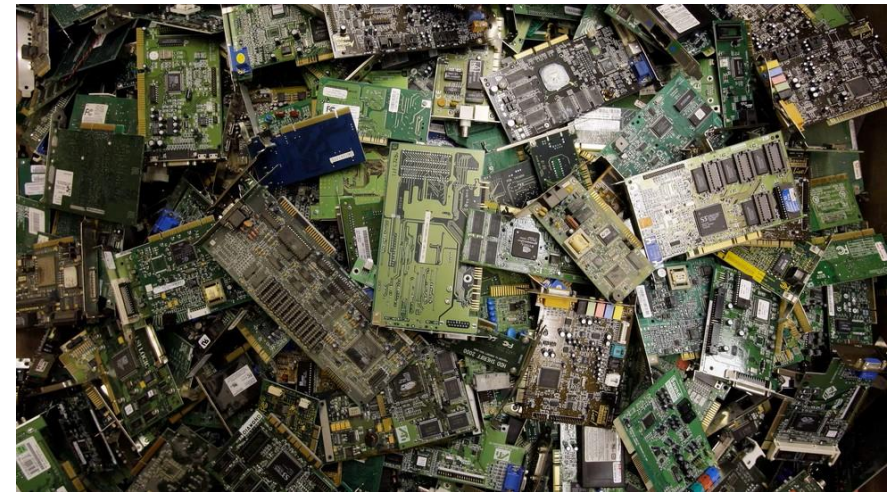
Complex value chain with multiple impacts and dependencies on nature from upstream to downstream



Land use
& resource extraction



Manufacturing
& production



Michael Conroy / AP

End of life
& pollution

Energy consumption and waste management: impacts on biodiversity



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Changing regulatory environment

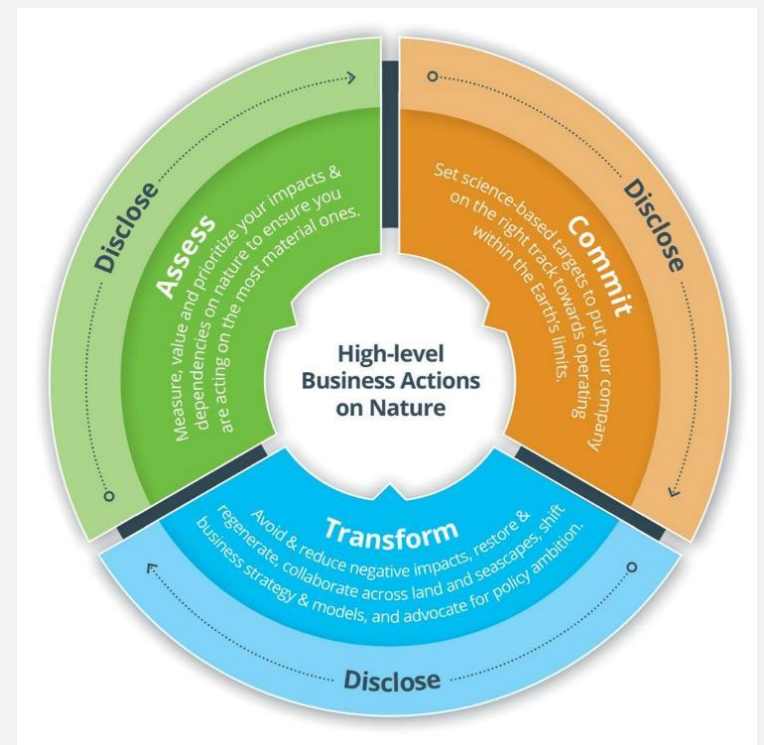
- Regulatory situation changing in many ways. Though much is still emerging.
- In the UK, the environment act and potential laws on imported deforestation, potential increased regulation of disclosure
- Overall, regulation on corporate impacts on nature is set to grow, and become more stringent.
- **Better to start now, and be ready**



What can companies do to?

The main global initiatives are aligned on what companies can do to support a nature positive future.

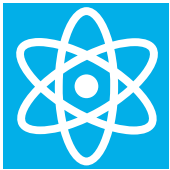
- **Get ready** – understand what the issue is, what are a company's drivers for action, agree a level of ambition & goal collating and preparing data.
- **Understand** – know what a company's impacts and dependencies on nature are.
- **Set targets and actions** – set targets to reduce impacts and dependencies against the baseline. Prepare an action plan to meet the targets.
- **Implement, monitor and report** – carry out the actions, and monitor. Adapt where necessary.



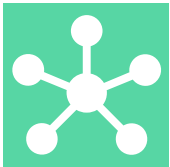
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The Biodiversity Consultancy helps clients understand and measure their impact on nature and design strategies that deliver nature positive outcomes for biodiversity.

If you are interested in discovering how to better manage biodiversity risk in your value chain or make biodiversity action part of your sustainability model, please get in touch.



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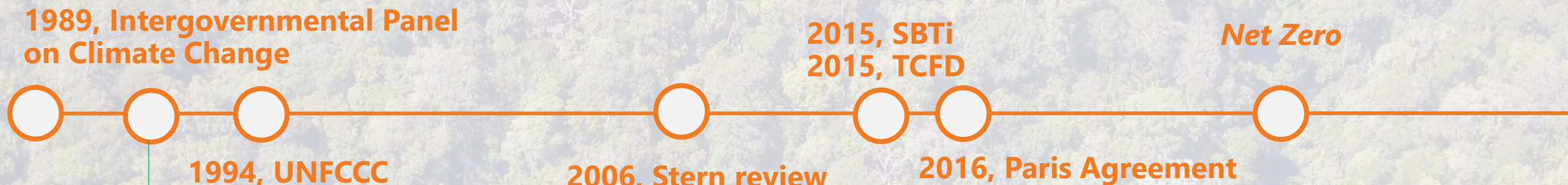
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History of international action on climate and biodiversity

Timeline on climate



Timeline on biodiversity



Global Biodiversity Framework

A new UN global treaty to address biodiversity loss was agreed in December 2022. The [Kunming-Montreal Global Biodiversity Framework](#) (GBF) is an intergovernmental framework that sets goals and targets for halting and reversing the loss of biodiversity.

One ground-breaking aspect of the GBF is that for the first time it is explicit about the role of the private sector in meeting the goals. For example:

- Target 15 is dedicated to business disclosing and acting on impacts
- Target 19 on finance for example is clear that business play a part in funding biodiversity conservation



Global Biodiversity Framework

- Target 21 calls for data, information and knowledge to be made available to society, including by strengthening modes of communication and education.
- This is taken further with a whole section of the GBF (section K) dedicated to “Communication, education, awareness and uptake”. Paragraph 40, part (e) states:

40. Enhancing communication, education, and awareness on biodiversity and the uptake of this framework by all actors is essential to achieve its effective implementation and behavioural change, promote sustainable lifestyles and biodiversity values, including by:

(e) Promoting or developing platforms, partnerships and action agendas, including with media, civil society and educational institutions, including academia, to share information on successes, lessons learned and experiences and to allow for adaptive learning and participation in acting for biodiversity;

