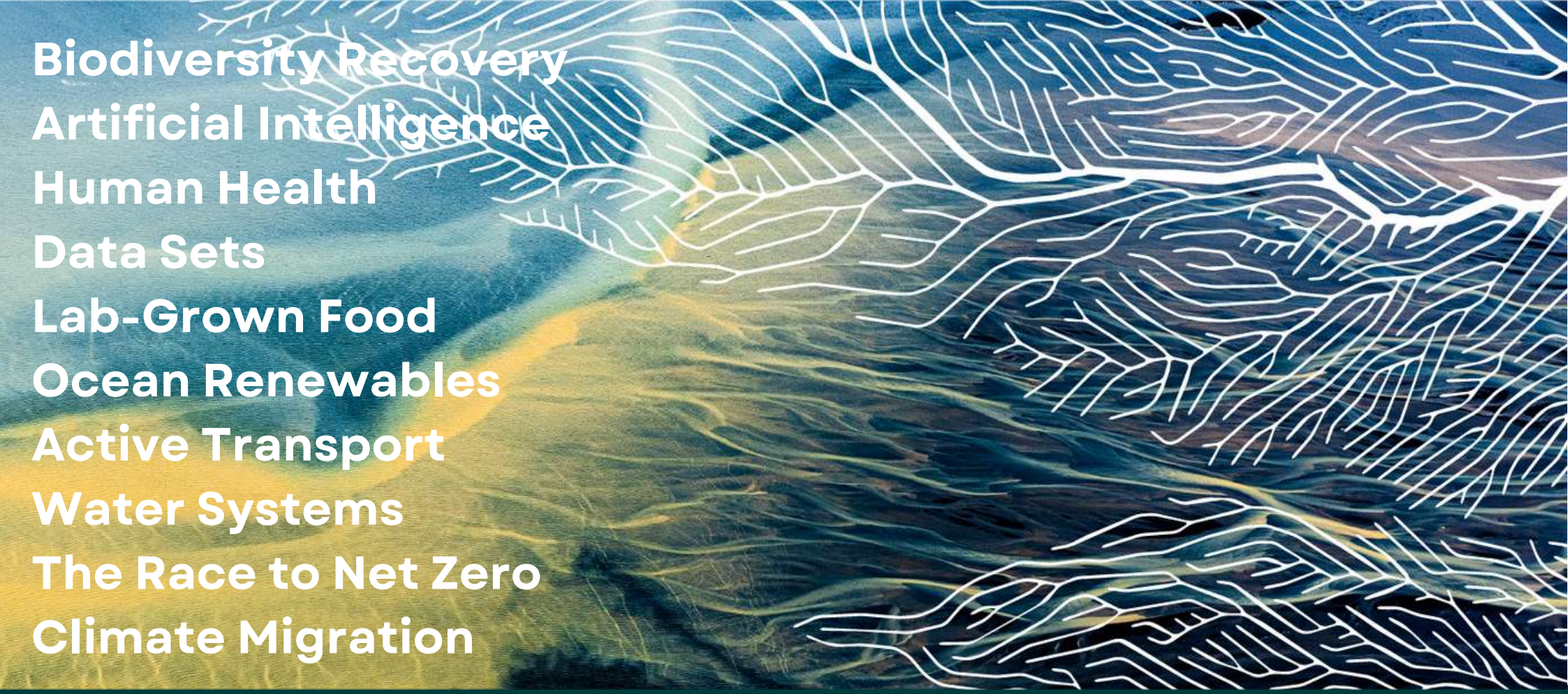

Future Forecasting

Questions that will define the next 10 years

University of Exeter | Environment and Sustainability Institute | Celebrating Ten Years | Green Futures Network

Biodiversity Recovery

Rapid implementation of landscape-scale biodiversity recovery generates concerns about the balance of natural and cultural benefits and interests, and the tension between managing for ecological restoration versus embracing novel ecosystems.

What happens when the demands of biodiversity restoration schemes conflict with other cultural and social needs?

How can schemes be developed by communities, rather than being imposed on them by public bodies or businesses?

Who is defining the baselines of what is being restored and why?

How can we balance the need for urgency with the need for collaboration?

Who is designing and controlling AI systems?

What are the underlying biases of the AI and the data on which AI systems are based and trained?

How can these biases be accounted for and mitigated?

Who is regulating AI developments and its use, and how can regulation keep up with these developments?

Growing use of Artificial Intelligence impacts how we experience and respond to nature, how research takes place, and how policy decisions are made.

Artificial Intelligence

Human Health

Changes in pollution, antibiotic use, and food quality affect human health, necessitating changes in public health approaches as new risks and responses emerge.

What does responsible governance look like for pharmaceutical (including antimicrobial) use, at both a global scale as well as within individual countries?

Will personalised medicine and tailored diets be a potential solution?

How can we quantify the impacts of these issues on human health, environmental health and the economy?

How can storytelling communicate the links between the environment (including pollution), poor food quality and human health?

Data Sets

How much data do we need?

Do we need more satellites, and if so what are the territorial and power implications?

Is data ever really deleted? Who has access to the data? Who owns it?

What are the different carbon intensities of data storage held in different countries?

Is it better to host data on larger or smaller infrastructure?

Continuing investment in ever growing and overlapping data sets (e.g. satellite data and bioinformatics) fails to consider the environmental consequences of that data across its acquisition, storage, and life cycle.

Lab-Grown Food

A boom in lab-grown food impacts the way that food is owned, distributed, and consumed, with significant concerns about public health and the future of agriculture.

What counts as a lab?

Why are there not more chefs promoting lab-based food, or asking questions publicly?

How will labelling work, what will the choice look like in practice? Are we consumers or citizens in this process?

How will political views impact our perspective of decision and rule making around these technologies?

Ocean Renewables

How do we make equitable decisions, including the economy, social and cultural concerns, and the environment, while acknowledging that these are all intrinsically linked?

How do the economic impacts manifest through the infrastructure of renewables, as well as the supply chains, and the skills needed to build and maintain them?

What are the different degrees of impact of the lifecycle effects on wildlife?

Significant investment in ocean renewables sees a rise in floating offshore wind and other technologies. The lifecycle of these technologies impacts on ecological systems, biodiversity, and the use of critical minerals.

Active Transport

The multifaceted benefits of public transport and active travel lead to a dramatic increase in incentivisation from employers and governments, impacting on local and national trends in the role of journeys in our lives.

Where will the money come from? Increased taxes, or corporate interests? Could investment generate local funds?

What would be the difference between a gradual change and a strong push towards a new transport system?

Should there be context-specific strategies in place?

What would be the impact on economic and social productivity?

Who does, and should, own water? Is it a commodity, or a right?

How do the local and global patterns of supply intersect?

What are the relative geopolitics of water ownership, quality, and access? What are the potential conflicts that may arise as a result?

Who defines the goals and targets of how water is used?

Our water system reaches a tipping point, dramatically impacting availability of water, and increasing the potential for desertification, flooding, and desalination, with associated health and ecosystem impacts.

Water Systems

The Race to Net Zero

The rush for net zero has unintended consequences in relation to resources, community well-being and ecosystems, and raises questions about its achievability.

If Net Zero targets are seen as impossible, where will accountability sit for perceived failure?

How can the use of carbon credits or carbon removal technologies be assessed and legislated with regard to decreasing inequity?

What happens when achieving carbon targets jeopardises our ecological targets, or the need to large-scale adaptation to climate impacts?

Should we be anticipating de-commitments as the targets draw nearer?

Climate Migration

What does it mean to migrate because of the climate? Is it the same as being a refugee? Why not?

When will international law recognise the environmentally displaced as refugees, therefore granting rights to claim asylum?

How will mass ecological displacement from climate change intersect with the rise in authoritarian regimes and populist right-wing governments?

Can we predict when regions will become inhospitable for human life?

Forced climate migration leads to new immigration laws, changes in global co-ordination and an increase in authoritarianism.