



IEEMA Practitioner Standard

Learning Outcome 1

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Watts Sustainability works with clients helping them understand what their **sustainability risks and opportunities** are, helping them **listen to and engage their staff, clients and communities** and making the most of opportunities presented by working more sustainably.

Who we work with



IEEMA Practitioner standard

- What is an IEEMA Practitioner?
- An overview of LO1?
- A flavour of the type of material that will be covered
- Q&A



What is an IEMA Practitioner?

What is an IEMA Practitioner?

The benchmark for environment and sustainability professionals with sleeves rolled up; membership for the working experts who are driving change.

Practitioner membership puts you at the heart of our global community. It recognises everything you're doing to help make your business future-proof, while giving you the practical support you need.

The IEMA logo consists of the letters 'IEMA' in a bold, black, sans-serif font. The letters are closely spaced and have a slightly irregular, hand-drawn appearance.

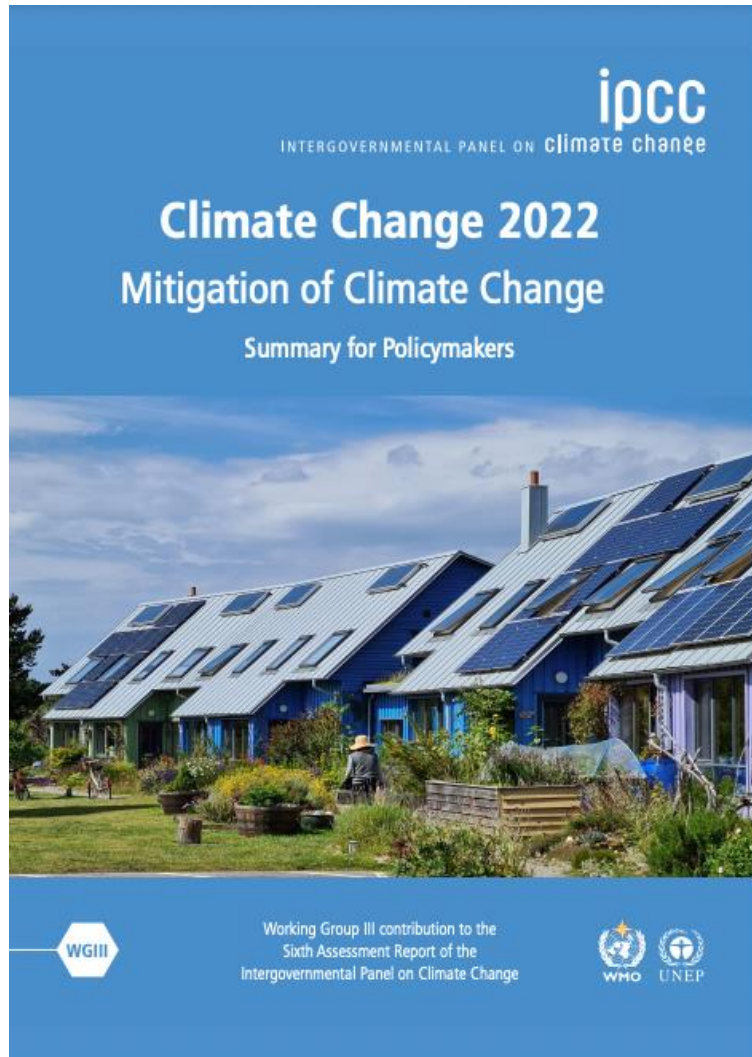
Transforming the world
to sustainability

- **Practitioner (PIEMA)**
- **Registered PIEMA (REnvP)**



Why we need Practitioners...

Climate change, we have the solutions we need to implement them



Final warning: Greenhouse gas emissions must **peak by 2025**

Investment in the shift to a low-carbon world is **about six times lower** than it needs to be.

The final cost of doing so will be minimal (a few percent of global GDP by mid-century) though it will require a **massive effort** by governments, businesses and individuals.

All sectors of the global economy, from energy and transport to buildings and food, must change **dramatically and rapidly**

Why we need Practitioners...

Meaningful net-zero

Historic low standards for transparency among net-zero targets can create **haven for greenwashing**

64%

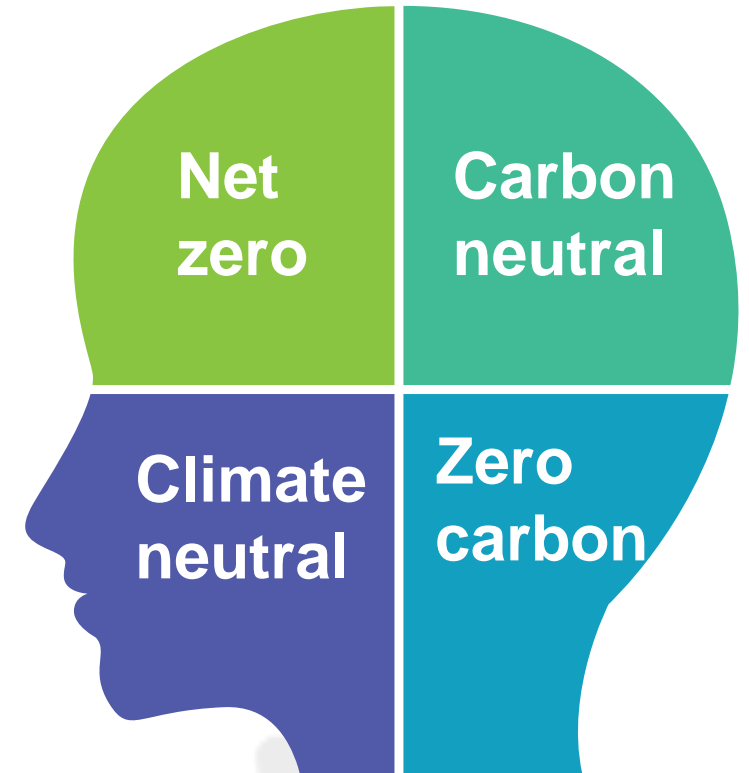
Proportion of the UK public unaware of the concept of 'net zero'

Only 12% are informed* on it

BEIS, March 2021:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/884028/BEIS_PAT_W33 - Key findings Final .pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/884028/BEIS_PAT_W33_-_Key_findings_Final_.pdf)

*informed = know a lot/a fair amount about it



Why we need Practitioners...

– 60% of the world's Christmas decorations...

...are made in the Chinese village of Yiwu and sold in the nearby market complex.

The complex was declared by the UN to be the “largest small commodity wholesale market in the world”

Does globalisation create acceptable trade-offs?

E.g. manufacturing exported to territories with less stringent pollution control laws?



Why we need Practitioners...

We don't value nature properly

Pollination by insects is free...

when it's gone we have to pollinate crops by artificial means – using machinery, labour and fossil fuels

An independent review by 29 scientists with the International Union for the Conservation of Nature in the USA found **neonicotinoids** (used together with GM crops) are **gravely harming bees**.

Far from protecting food production, the use of neonicotinoid insecticides is threatening the very infrastructure which enables it.



Practitioner standard (and skills map): core **knowledge** competencies



Core knowledge

1. Explain the implications of global trends for the environment, for society, for the economy and for organisations.
2. Explain sustainable business/governance models, their underlying principles and their relationship with organisations, products and services.



Practitioner standard (and skills map): core **knowledge** competencies



3. Explain environmental/socio-economic principles and their relationship with organisations, products and services.
4. Explain major policy and legislation and their implications for organisations, products and services.
5. Explain major and relevant tools, techniques, systems and practices, their application and how they can be used to develop sustainable products and services and improve sustainability performance.
6. Explain the role of innovation and other leading practices in developing sustainable products and services and providing sustainable solutions.

Practitioner standard (and skills map): core **skills** competencies



7. Collect and critically analyse data and report information that informs decision-making.
8. Identify problems and assess opportunities that deliver innovative and sustainable products and services.
9. Determine, implement and measure methods of effective communication.
10. Identify and engage in two-way communication with stakeholders.
11. Apply or implement tools, techniques, systems and practices that identify opportunities and risks.
12. Deliver projects and programmes that achieve performance improvement.
13. Implement change and transformation.

An overview of Learning Outcome 1 from the IEMA Practitioner Standard



Practitioner Standard in Detail

Core Knowledge

Learning Outcome (the learner will...)	Assessment criteria (the learner will be able to demonstrate knowledge by...)	Prescribed Content (the learner will be familiar with...)
Fundamentals of Sustainability		
<p>1. Explain the implications of global trends for the environment, for society, for the economy and for organisations and the role of an Environment/Sustainability practitioner in overcoming these challenges</p>	<p>1.1. Explaining the global mega-trends driving the need to transform the world to sustainability</p> <p>1.2. Explaining the concept of sustainable development</p> <p>1.3. Explaining how the UN's Sustainable Development Goals provide a framework for action</p> <p>1.4. Describing the five sustainable capitals and the dependencies between them</p> <p>1.5. Explaining how environmental limits and the equalities agenda are fundamental to maintaining economic growth and sustainable capital</p> <p>1.6. Explaining how current economic activity regularly creates unintended environmental and social consequences, locally and globally</p> <p>1.7. Describing the role of an Environment/Sustainability practitioner and how this requires the application of sustainability skills to overcome internal and external challenges</p>	<p>Mega Trends: Climate Change (GHG and climate consequences), population, global middle class, urbanisation, pivot to asia-pacific market, resource scarcity, biodiversity loss</p> <p>Sustainable Development: Brundtland definition; triple bottom line (environment, society and economy)</p> <p>Sustainable Capital: Natural, Social, Human, Financial and Manufactured/Built</p> <p>Environmental Limits: Planetary boundaries concept (Stockholm Institute)</p> <p>Sustainability Skills: IEMA Skills Map (overview of all the various skills required and introduction to module 3 where skills will be explored in further detail)</p>

Selection of content from Learning Outcome 1



WEF Global Risks – 2022 update!

1 Climate action failure

2 Extreme weather

3 Biodiversity loss

4 Social cohesion erosion

5 Livelihood crises

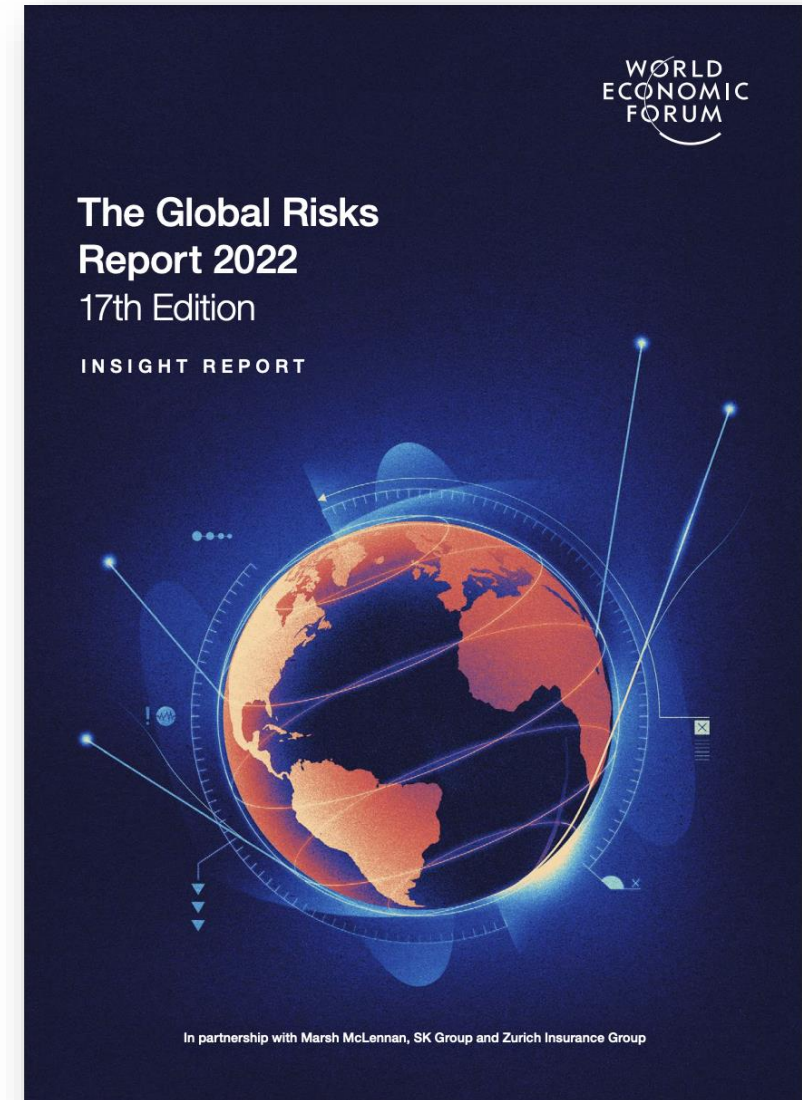
6 Infectious diseases

7 Human environmental damage

8 Natural resource crises

9 Debt crises

10 Geo-economic confrontation

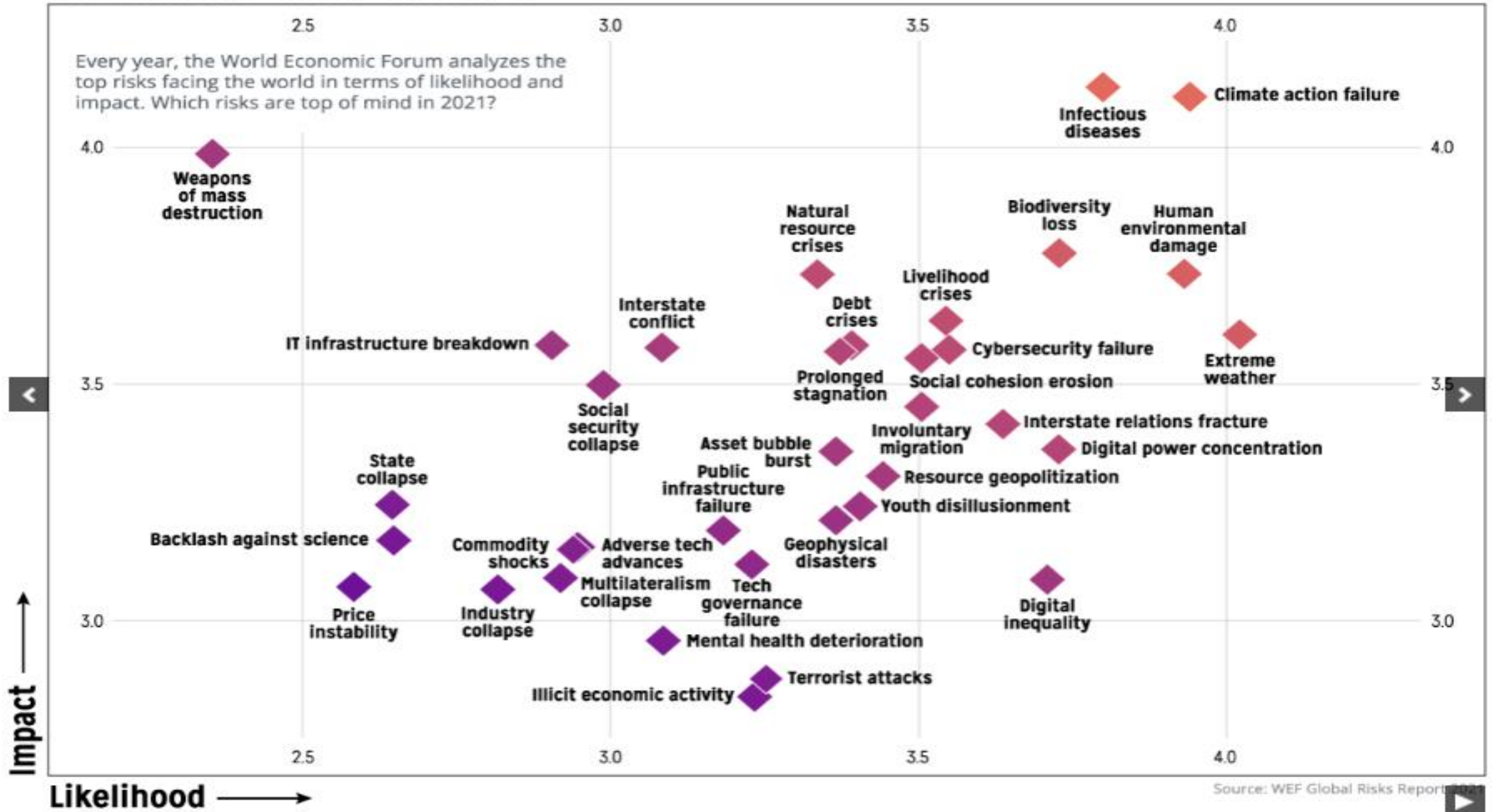


Global Risks 2022 (and its only April)



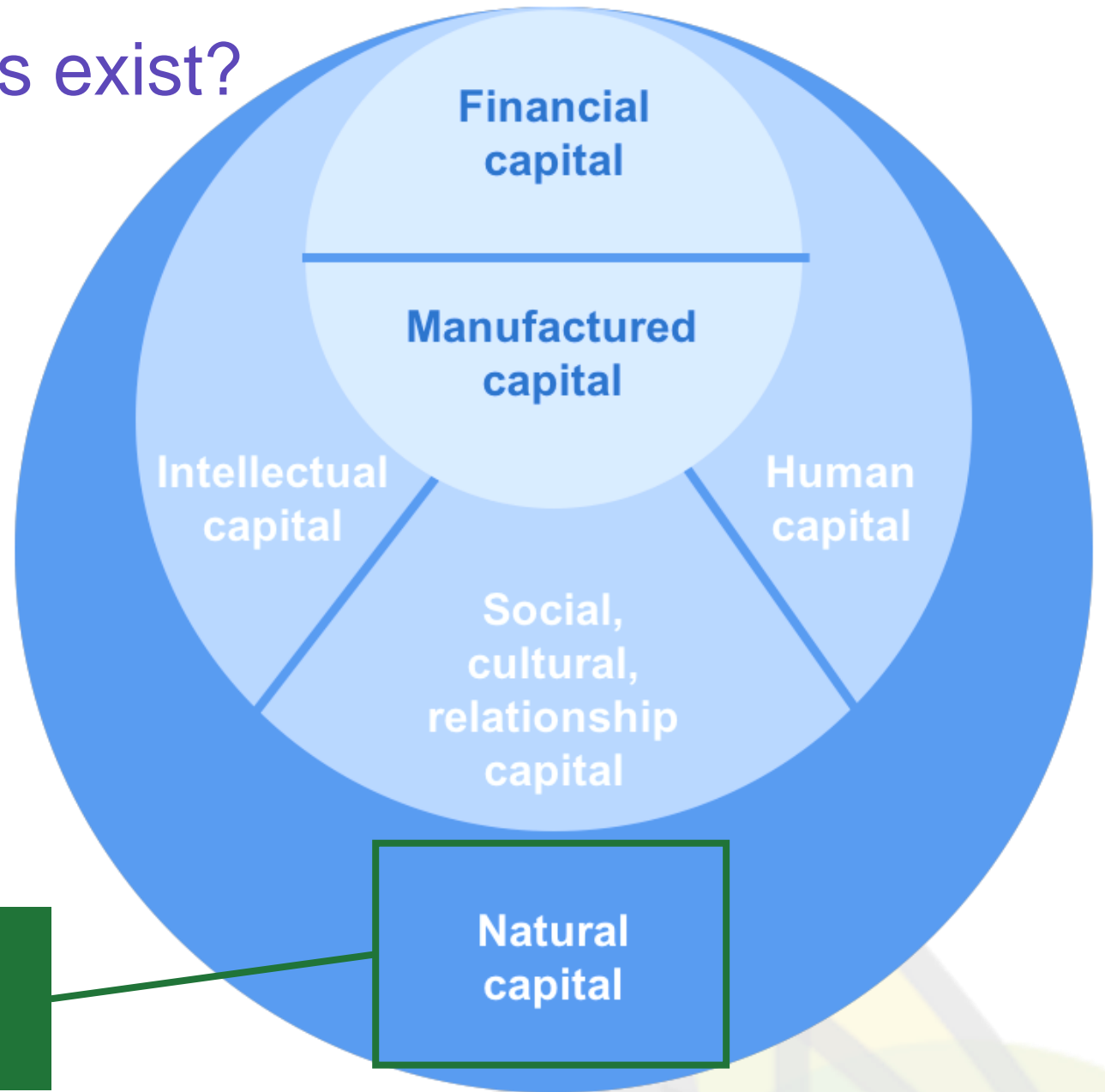
2021 Global Risks Outlook

Every year, the World Economic Forum analyzes the top risks facing the world in terms of likelihood and impact. Which risks are top of mind in 2021?



Do sustainable organisations exist?

6 Capital model

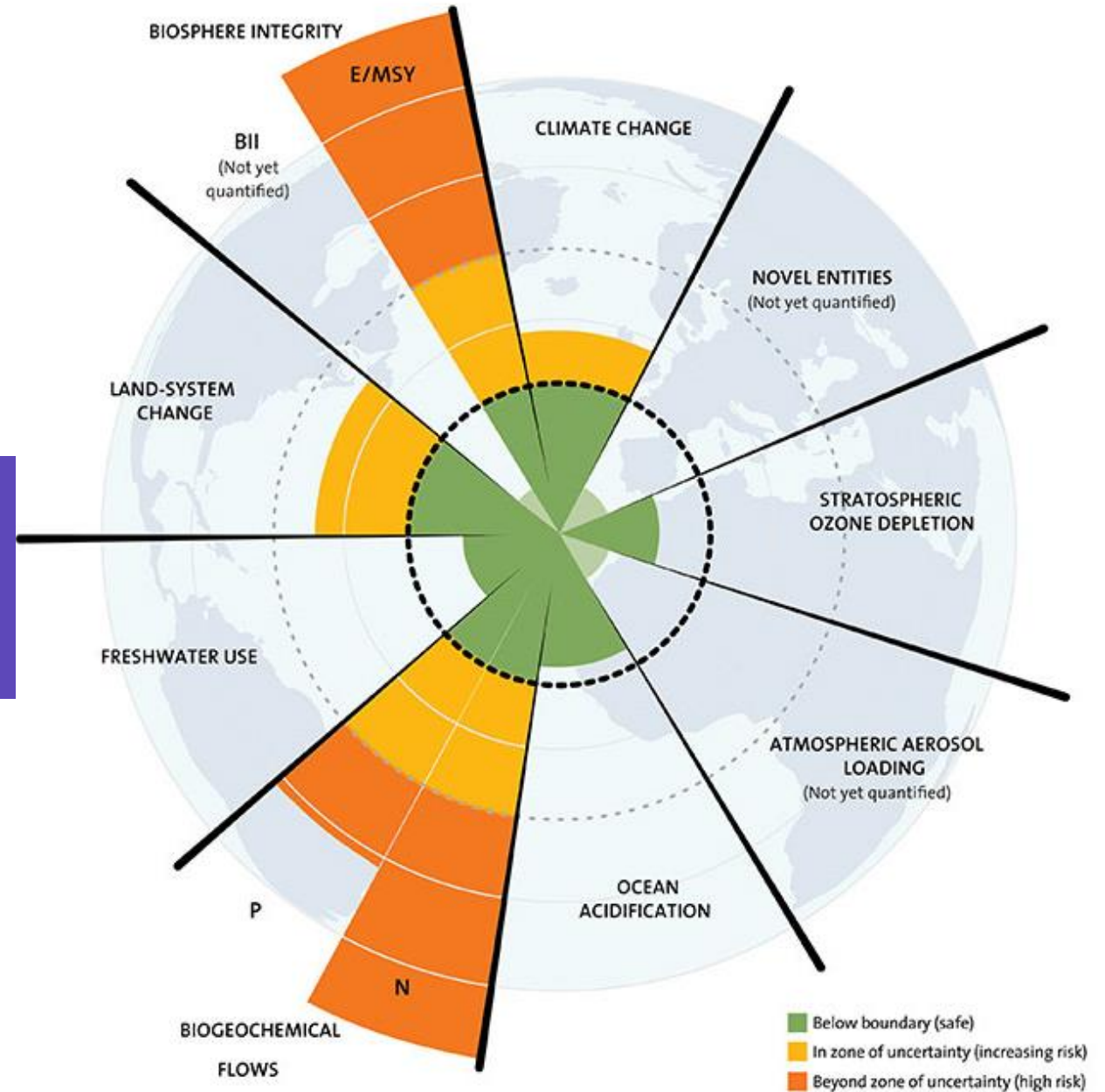


Life, society and business critical – but **totally failed** by modern capitalism and economics

Current state of natural capital

The nine planetary boundaries humanity must respect to keep the planet habitable

(Diagram from Stockholm Resilience Centre)

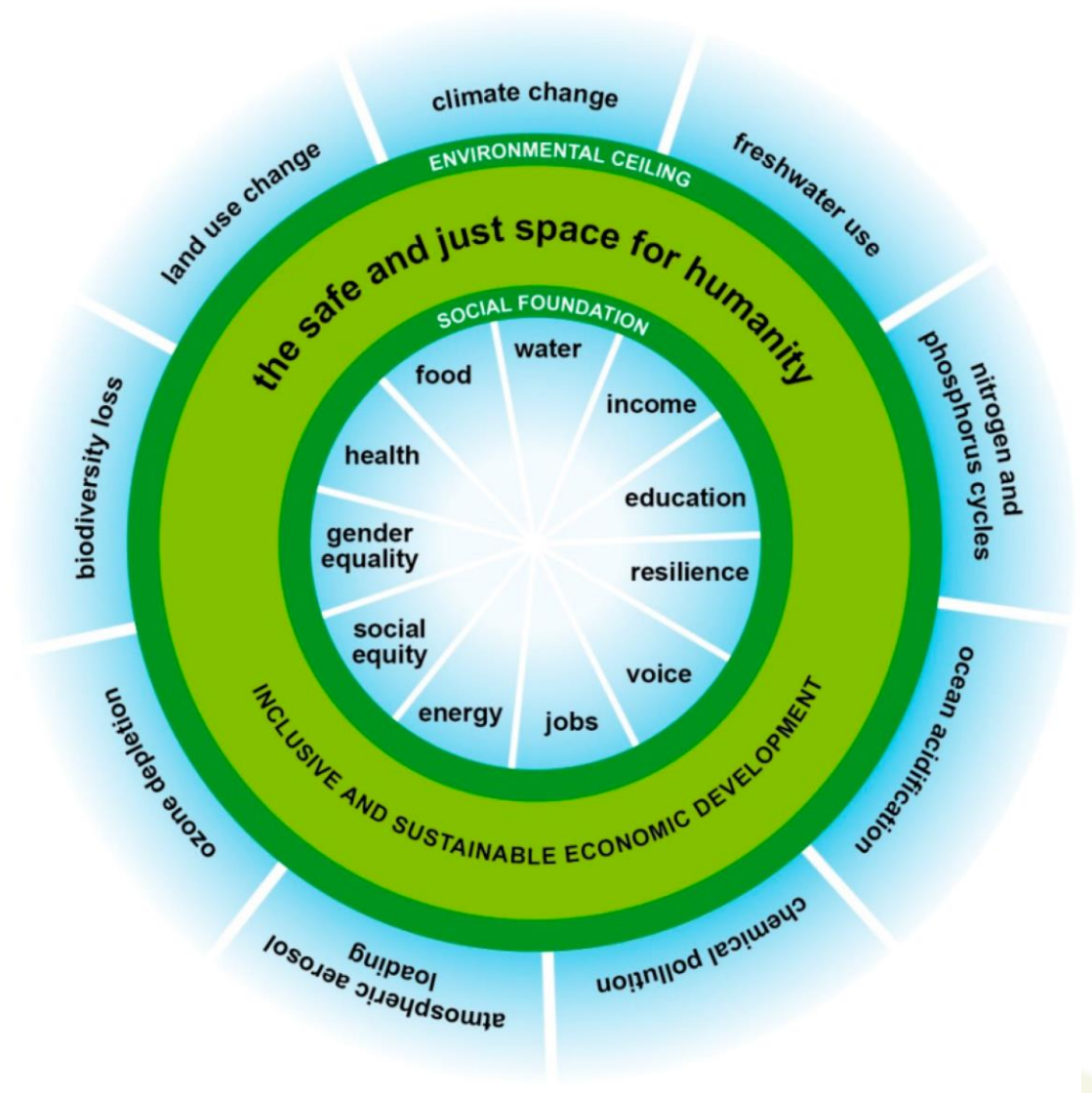


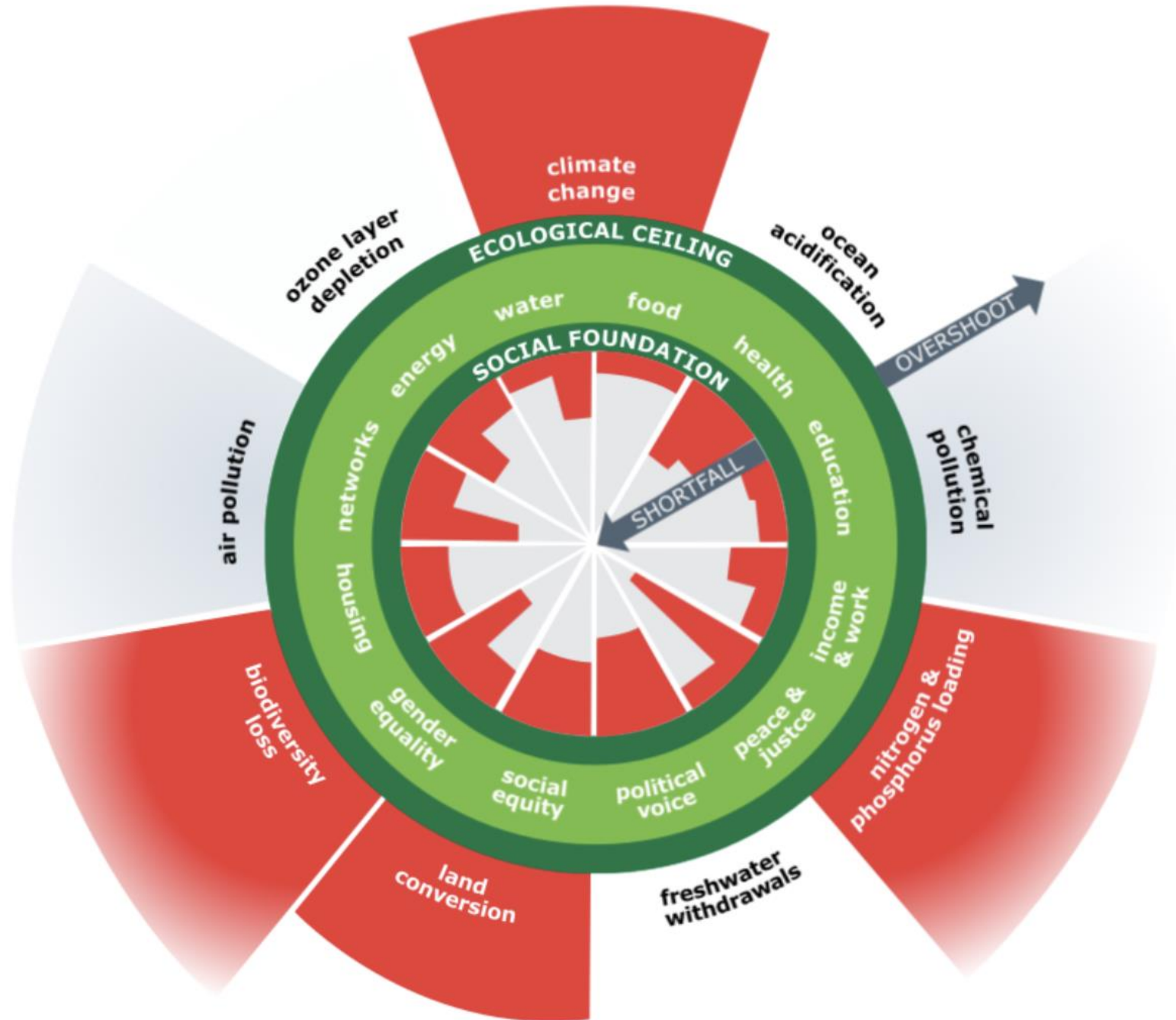
Doughnut Economics: a model for sustainability

A vision for what it means for humanity to thrive in the 21st Century

“At the centre of the image is a space of critical human deprivations – such as hunger, illiteracy, poverty, and voicelessness. The first priority must be to ensure that all people are free from such deprivations, and are empowered with the rights and resources needed to provide a social foundation for leading lives of dignity, opportunity and fulfilment.”

Kate Raworth, Oxfam





climate change

ozone layer depletion

ocean acidification

OVERSHOOT

ECOLOGICAL CEILING

SOCIAL FOUNDATION

water

food

health

education

chemical pollution

air pollution

energy

networks

housing

income & work

peace & justice

political voice

social equity

gender equality

biodiversity loss

land conversion

freshwater withdrawals

nitrogen & phosphorus loading

SHORTFALL

The United Nations Sustainable Development Goals and organisations

The 17 goals provide a shared blueprint for peace and prosperity for people and the planet, now and into the future

- The Goals provide an approach for organisations and governments to frame sustainability issues
- Organisations all over the world are using them as an easily understood and communicable framework



Goal 13 – Climate action – underlying targets

TARGET 13.1



STRENGTHEN RESILIENCE AND ADAPTIVE CAPACITY TO CLIMATE RELATED DISASTERS

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

TARGET 13.A



IMPLEMENT THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE

Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.

TARGET 13.2



INTEGRATE CLIMATE CHANGE MEASURES INTO POLICIES AND PLANNING

Integrate climate change measures into national policies, strategies and planning.

TARGET 13.B



PROMOTE MECHANISMS TO RAISE CAPACITY FOR PLANNING AND MANAGEMENT

Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.

TARGET 13.3



BUILD KNOWLEDGE AND CAPACITY TO MEET CLIMATE CHANGE

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

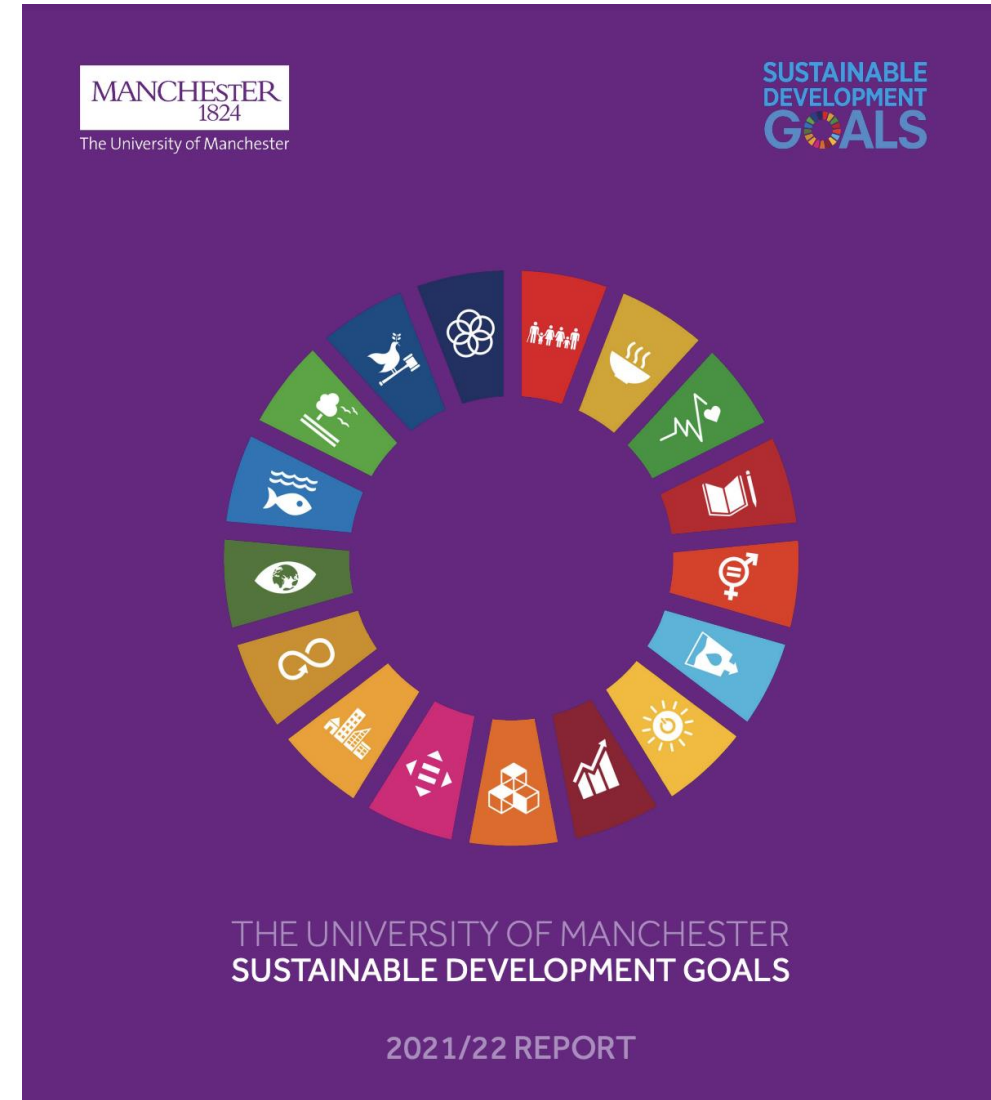
13 CLIMATE ACTION



Case-study: University of Manchester and the SDGs

Integrating the SDGs through:

- **Research** - linking publications to SDGs
- **Teaching** - building SDGs into curricula
- **Public engagement** with local communities
- **Campus operations** - SDGs in policies (from HR to energy management)



Case-study: University of Manchester and the SDGs



End poverty in all its forms everywhere

RESEARCH

A Human Development Report for Greater Manchester

We published the *Human Development Report for Greater Manchester* in June 2017. The report mirrors the UN approach by measuring human development in Greater Manchester across three themes of health, knowledge and standards of living. It also examines key life stages from early years through school to adulthood, midlife, older working age and old age. The

Global Development Institute

Our Global Development Institute (GDI) is Europe's largest research and teaching institute focused on poverty and inequality. The GDI runs the Effective States and Inclusive Development (ESID) Research Centre, which investigates how politics promotes inclusive development and government accountability. Recent research suggests that countries with the highest government capacity can reduce

Khalid Malik former director of the UN's Human Development Report Office.



PUBLIC ENGAGEMENT



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

RESEARCH

Food insecurity in the UK

Working with Manchester City Council, Cracking Good Food, Save the Children, Oxfam and other charities, our Cathie Marsh Institute for Social Research and Institute for Collaborative Research on Ageing conducted pioneering research to document food insecurity in the UK following the economic recession. We

Sustainable agriculture through electronic engineering

The environmental impacts of intensive agriculture and a growing global population are increasing the need for more effective processes. Researchers in our Department of Electrical and Electronic Engineering are examining how electronic engineering might



PUBLIC ENGAGEMENT

Promoting good agricultural land management in Malawi

Our Department of Earth and Environmental Sciences is working with farmers in Malawi, some of the poorest in the world, to help share knowledge about plant and soil management through delivering free workshops and building a

Questions

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