



Accelerating Change and Transforming Industries

Neurodiversity: A New Paradigm Conference 2023

16 June 2023

Melissa Zanocco OBE

Infrastructure Client Group

Global Systemic Challenges

CHALLENGE

**Exceeding Planetary
Boundaries**

Climate Change

Biodiversity loss



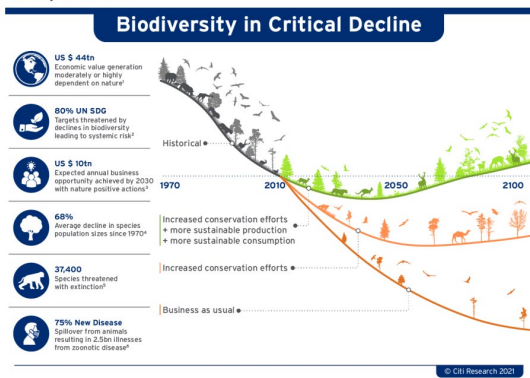
SOLUTION

Circular Economy

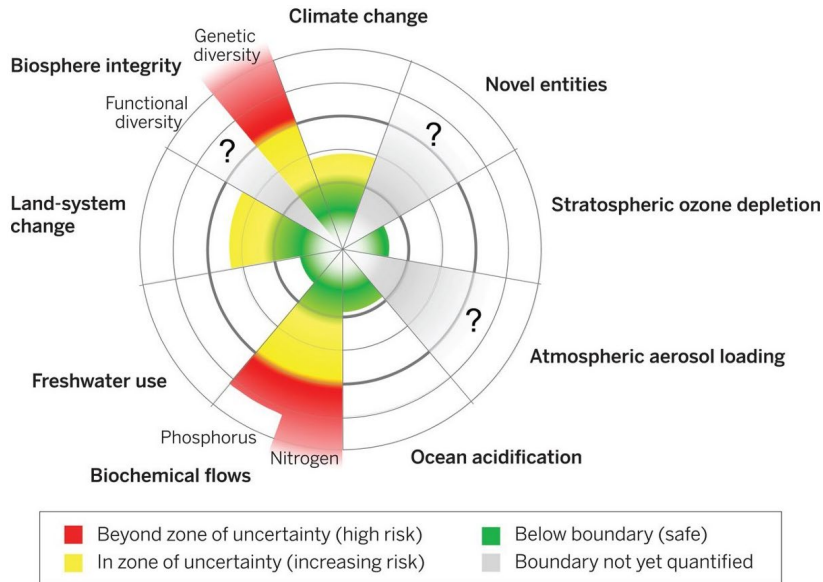
**Adaptation (Resilience)
Mitigation (Net Zero)**

Biodiversity Net Gain

Figure 1. Biodiversity in Critical Decline



Source: Leclère et al, Nature, 2020 (DOI: 10.1038/s41586-020-2705-y), Adam Islam International Institute for Applied Systems Analysis (IIASA), CII Research & Global Insights



Source: "Azote for Stockholm Resilience Centre, based on analysis in Wang-Erlandsson et al 2022

NEWS

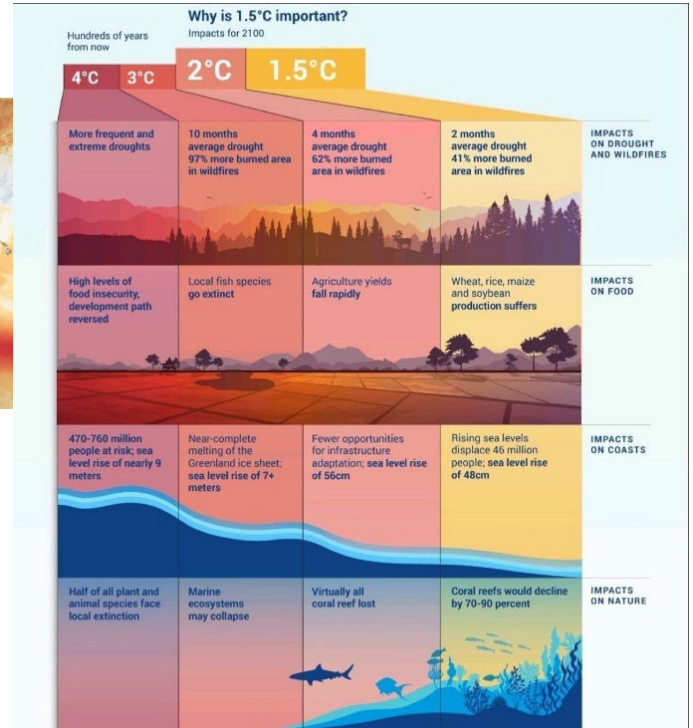
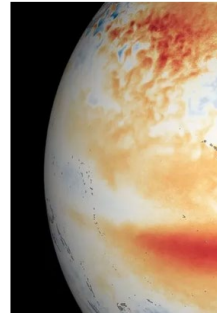
Home Cost of Living War in Ukraine Climate UK World Business Politics Culture Tech

Science & Environment

Global warming set to break key 1.5C limit for first time

17 May · Comments

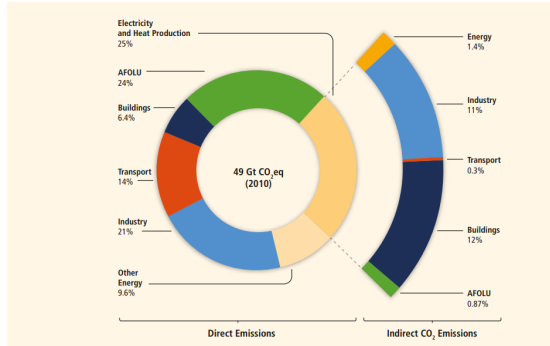
COP27



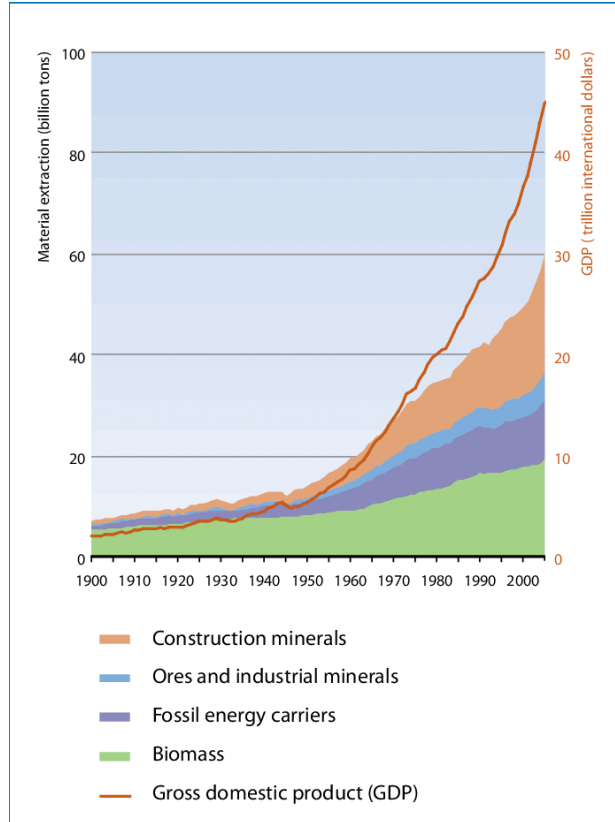
Source: <https://www.unep.org/resources/infographic/last-climate-action#:~:text=COP26%20in%20Glasgow%2C%20UK%2C%20is,action%20on%20the%20climate%20emergency>

Built Environment

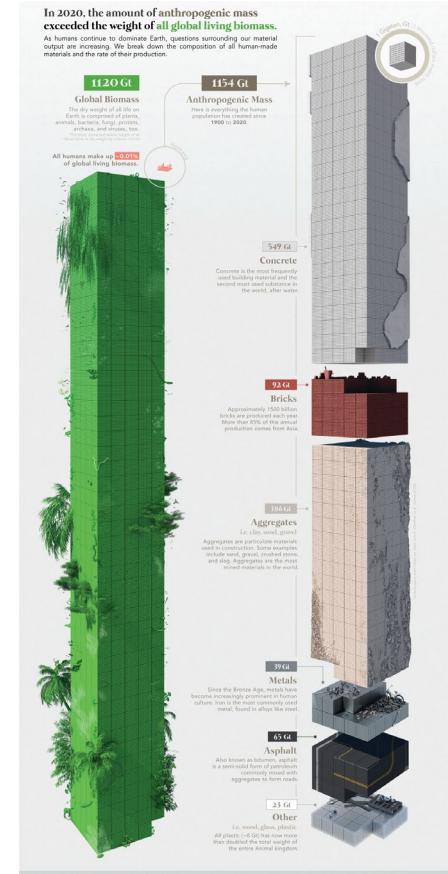
Greenhouse Gas Emissions by Economic Sectors



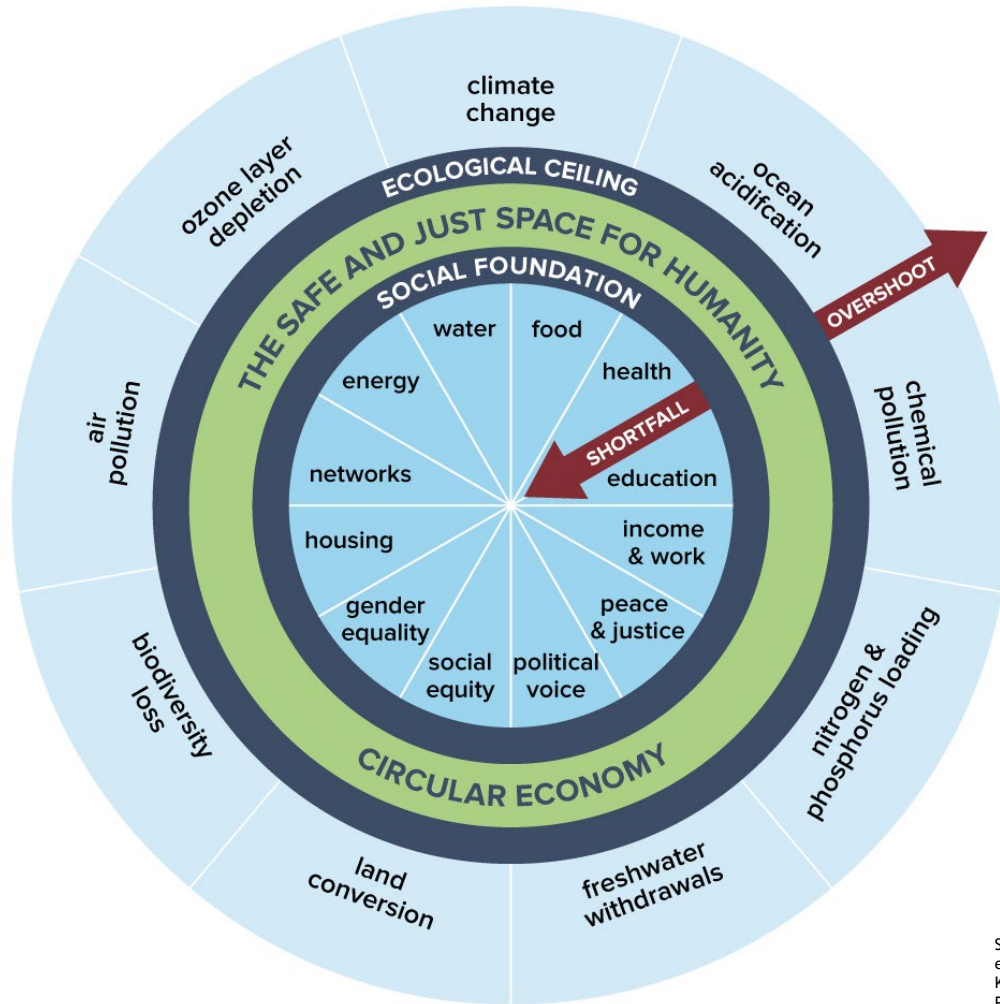
Source: <https://www.ipcc.ch/report/ar5/wg3/>



Global material extraction in billion tonnes, 1900-2005 Industrial production drives most of the ores extraction, and significant parts of biomass and construction. Source: Krausmann et al. (2009)

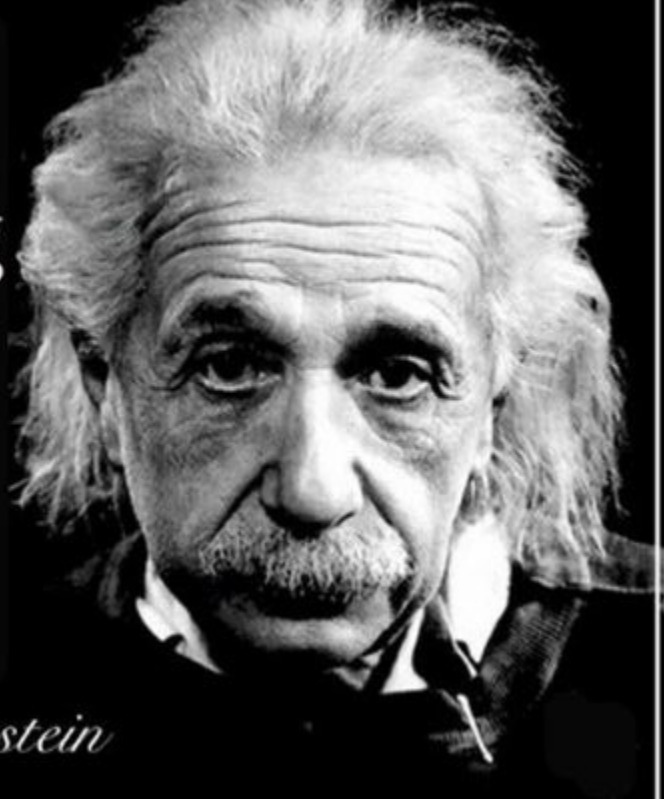


Source: <https://www.visualcapitalist.com/visualizing-the-accumulation-of-human-made-mass-on-earth/>



Insanity:
doing the same thing
over and over again
and expecting
different results.

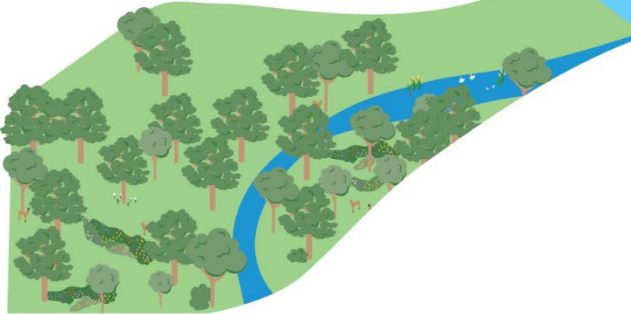
- Albert Einstein



Our Vision for the built environment

Our Vision is for a built environment whose explicit purpose is to enable people and nature to flourish together for generations

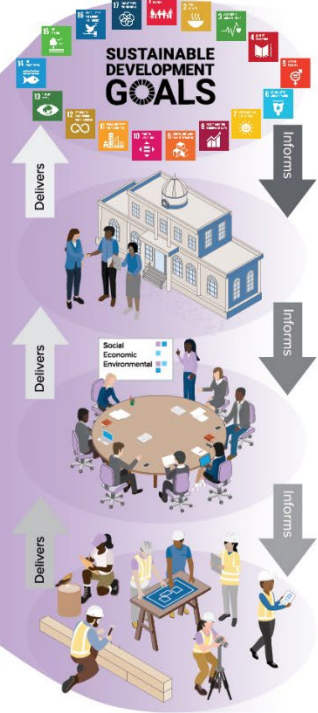
Built systems



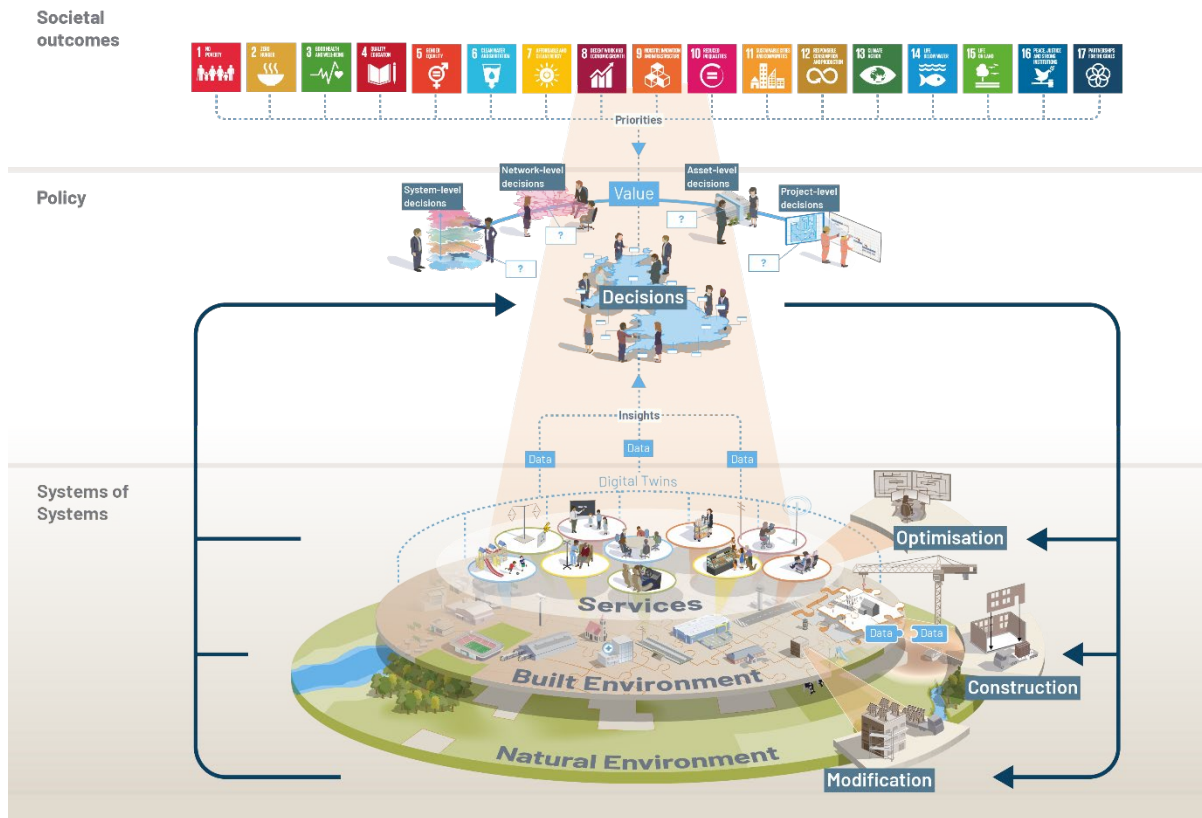
Natural systems

Services

Outcomes for people and nature



IPA's Transforming Infrastructure Performance: Roadmap to 2030





Infrastructure Client Group Members



Tideway

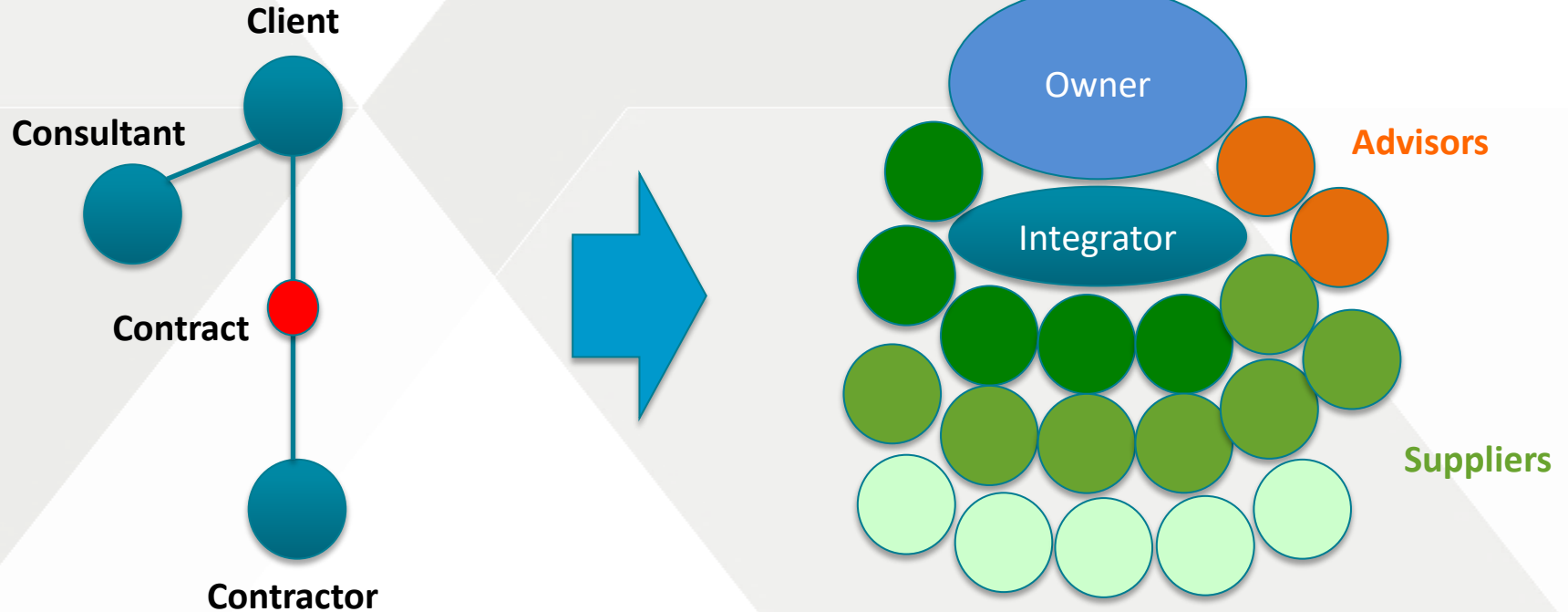
nationalgrid



openreach

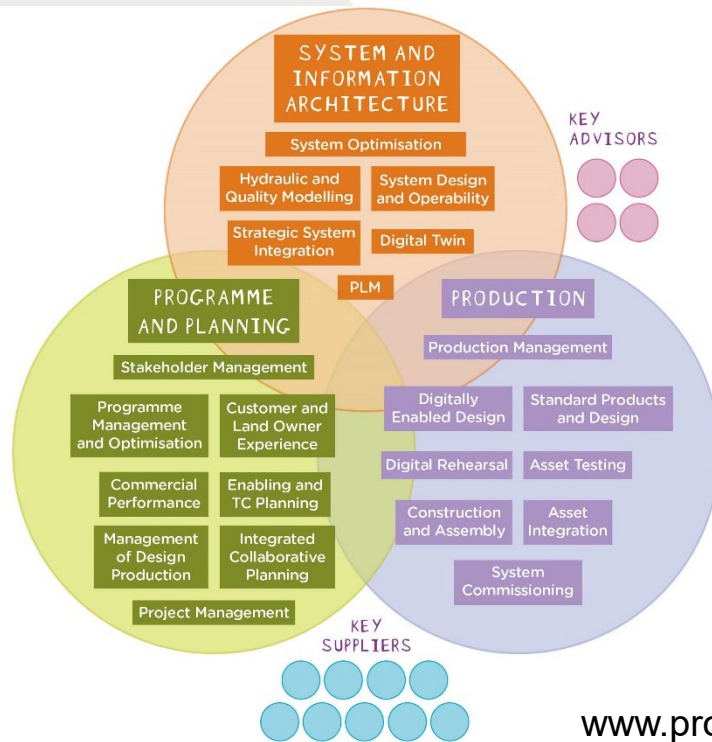


Project 13: from transactions to enterprises

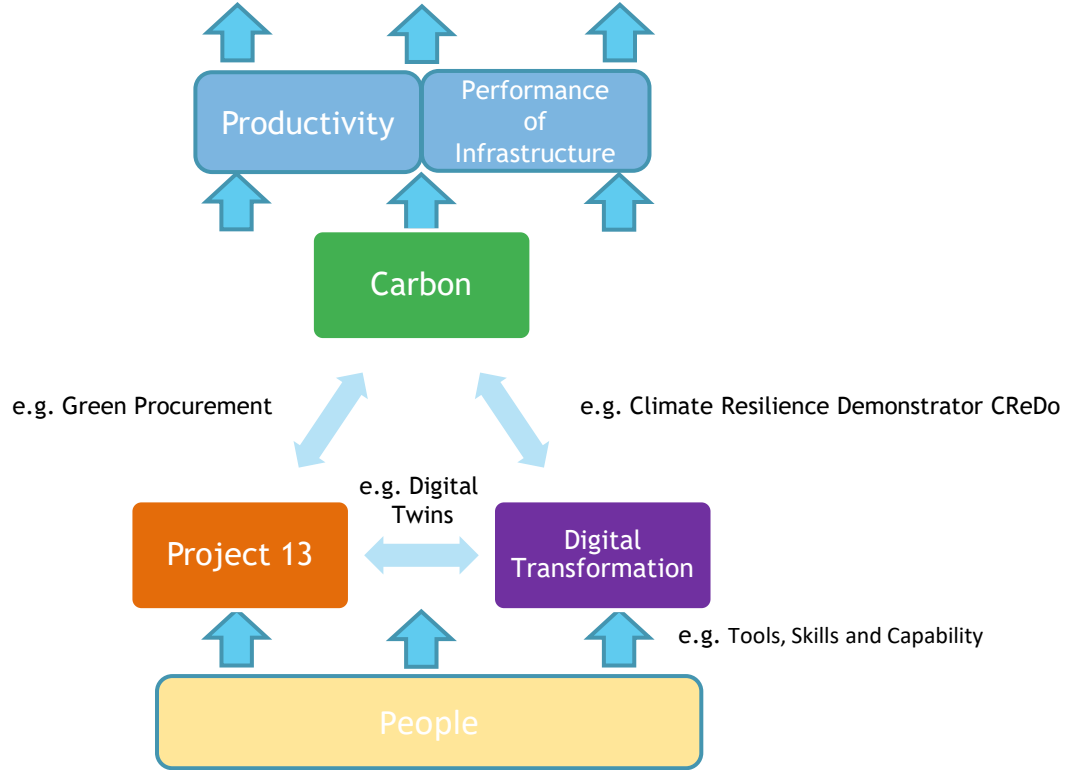
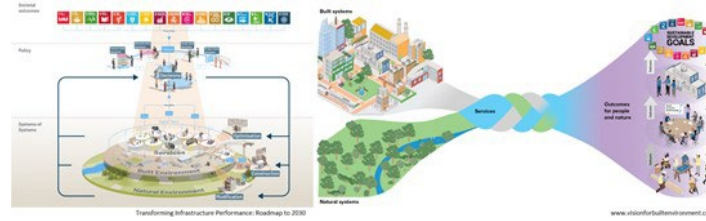


www.project13.info

Anglian Water

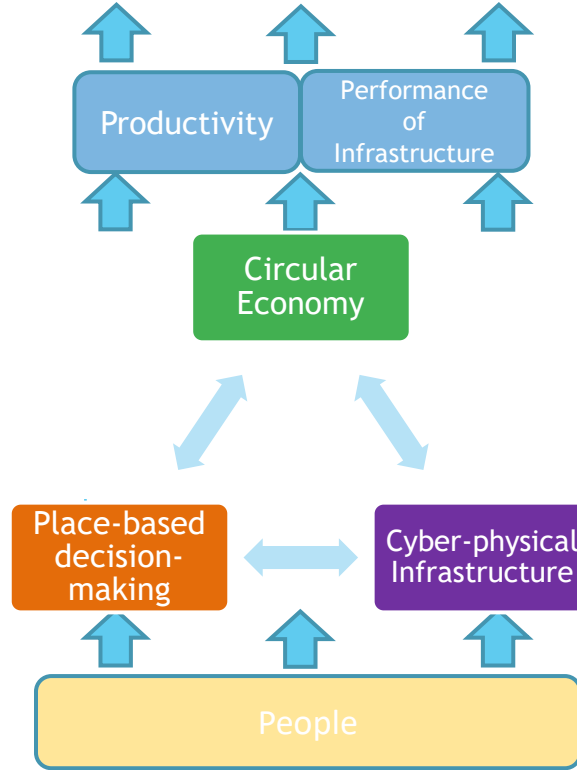


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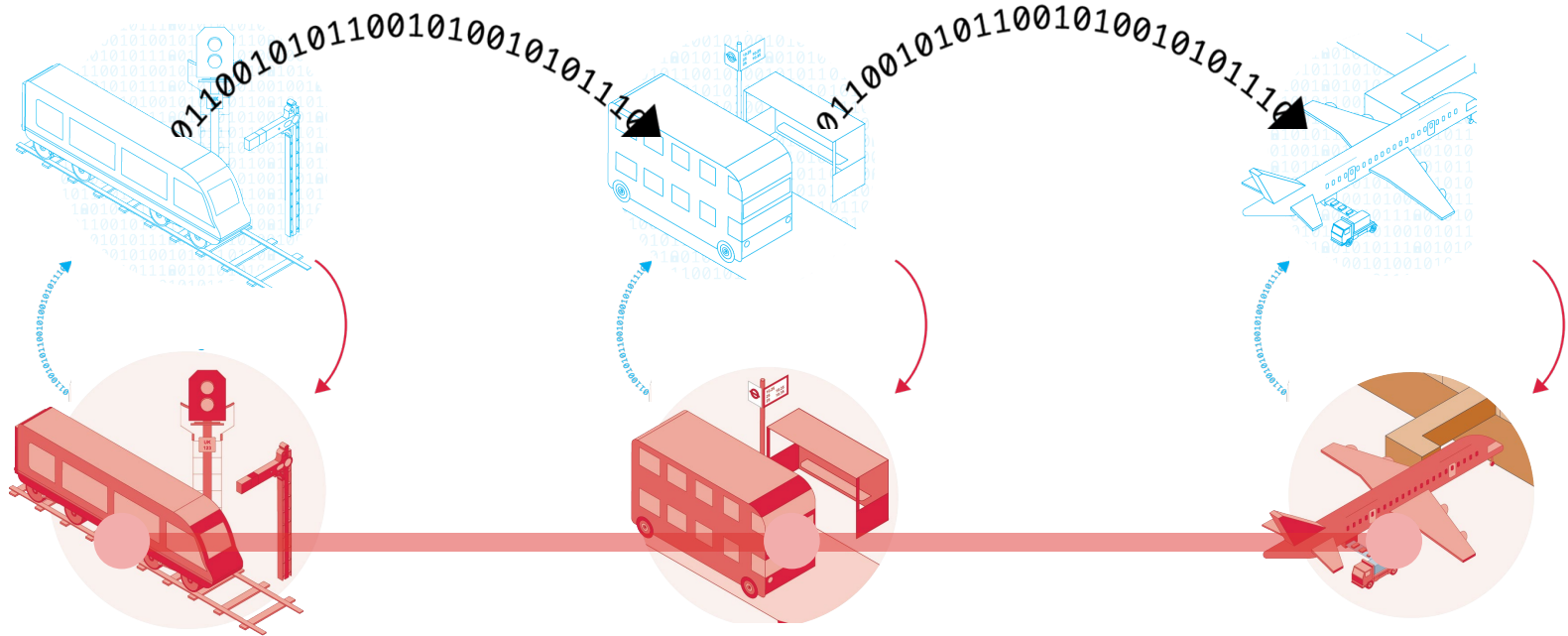




The Future



Ecosystem of connected digital twins



Tomorrow Today - a CReDo film



