



BUILT BY NATURE

Regenerative Design
ASBP Healthy Buildings – 26th Feb 25
Anna Lisa McSweeney



Our vision is
a built environment
in harmony with nature

The need for a new mindset

Absolutely Planetary limits.
Stockholm Resilience Centre
defined 9 boundaries for human
survival - 6 transgressed!

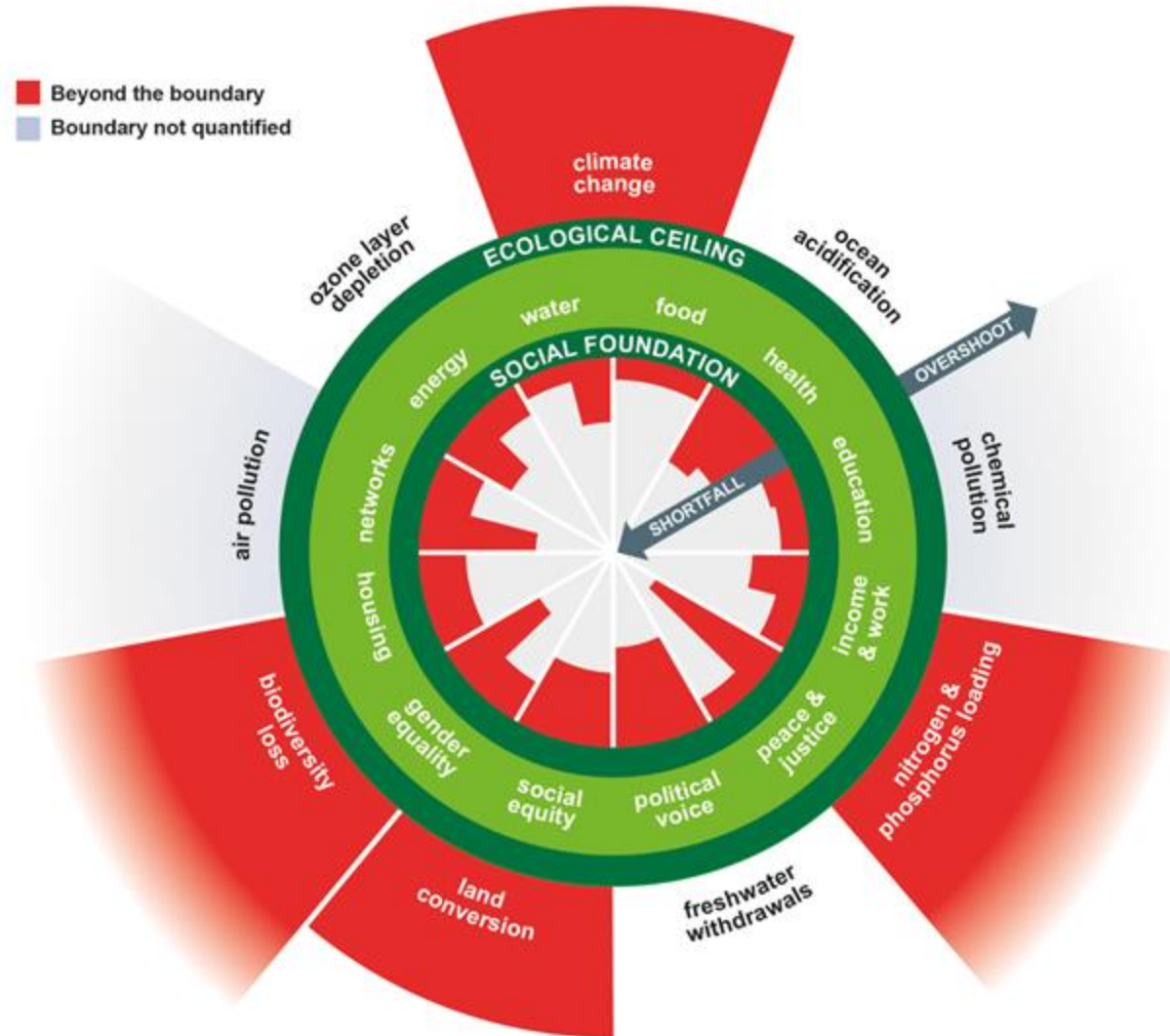
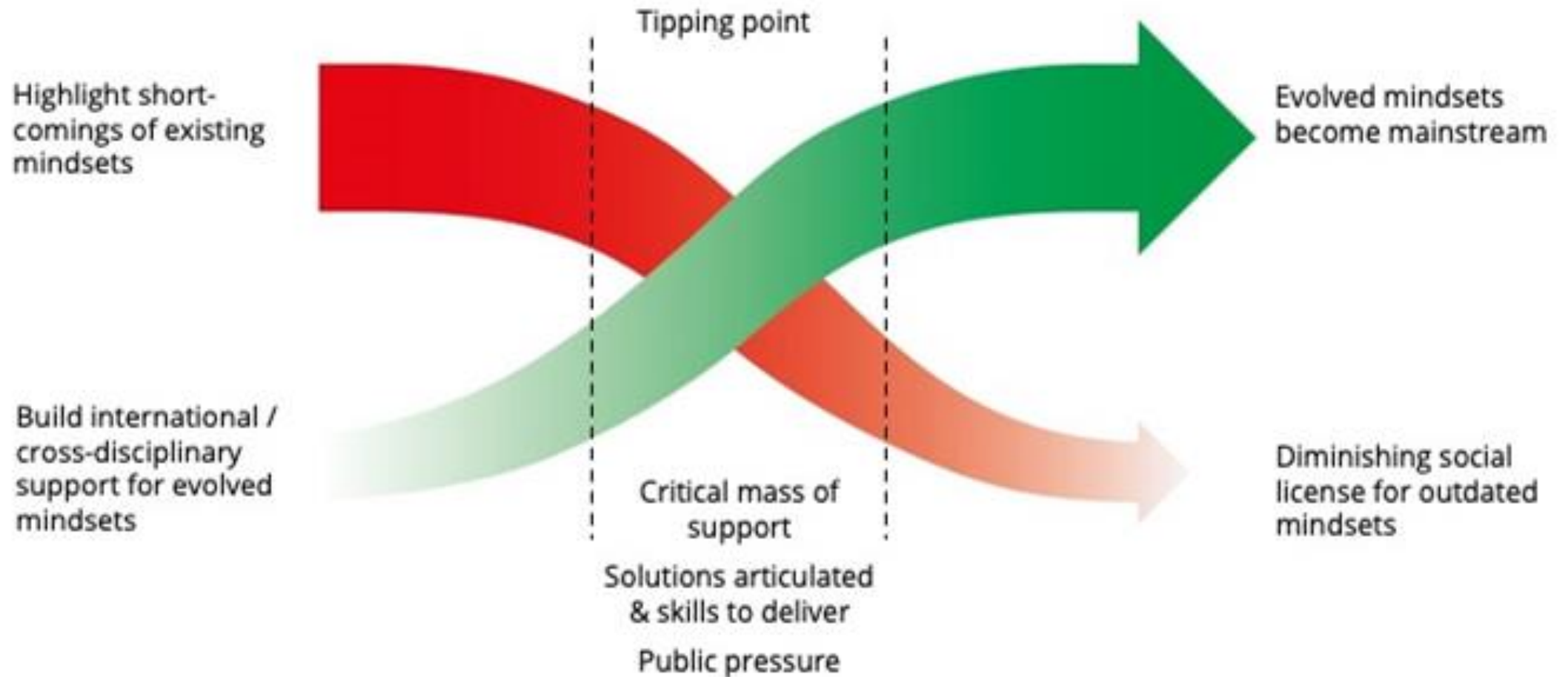


Image Credit -
Kate Raworth
Doughnut Economic model,
social and planetary



Construction is a major contributor to the climate and biodiversity emergency **our industry has the solutions needed for rapid progress.**



What is a paradigm?

“The shared idea in the minds of society, the great big unstated assumptions - or deepest set of beliefs about how the world works.”

Donella Meadows



Regenerative Design

‘Regenerative design is an approach in which human systems are designed to co-exist and co-evolve with natural systems over time’.



What is Regenerative Design?

1. From being 'less bad' to being **net positive**.
2. From being just focussed on humans to considering **the whole web of life**.
3. From a focus too exclusively on carbon to a more **holistic and systemic approach**.

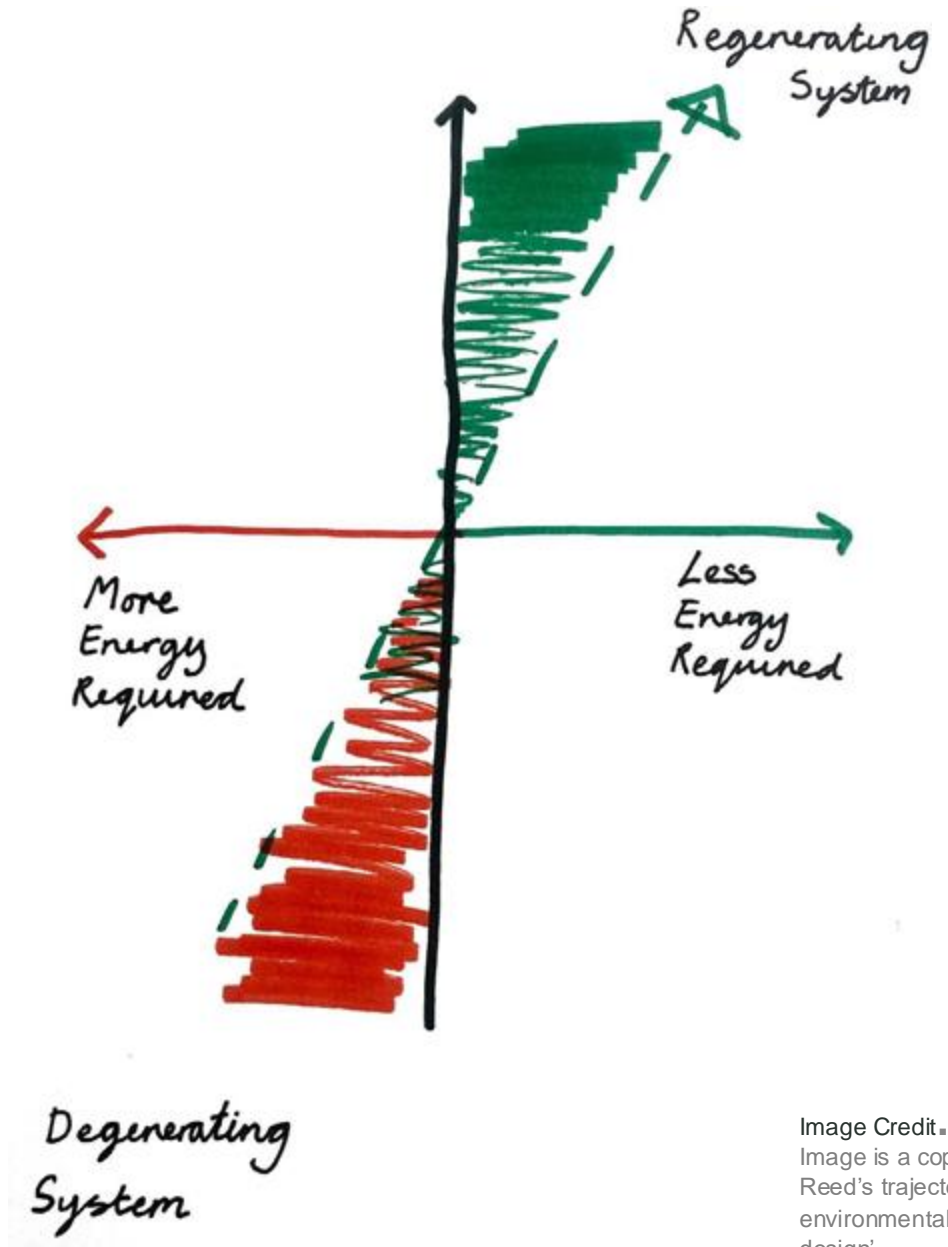


Image Credit -
Image is a copy of that by Bill Reed's trajectory of environmentally responsible design'.



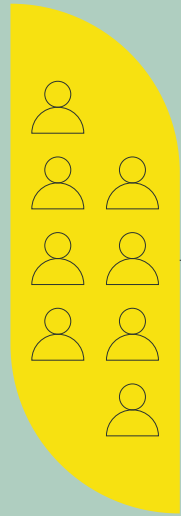


Image Credit. Space&Matter, Metabolic, Schoonschip Amsterdam

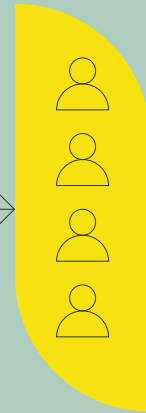
We focus on the 'frontrunners' to show the 'majority' the way

'the industry majority'

'the Frontrunners'

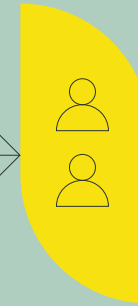


Mainstream



Early majority

Adopt new ideas before the average person but typically need to see evidence that the innovation works before they are willing to adopt it. Strategies to appeal to this population include success stories and evidence of effectiveness.
34%



Early adopters

Opinion leaders and organisations that enjoy leadership roles. Aware of the need to change and willing to embrace it and adopt the new idea. Strategies to appeal to this population include manuals and implementation guides.
13.5%

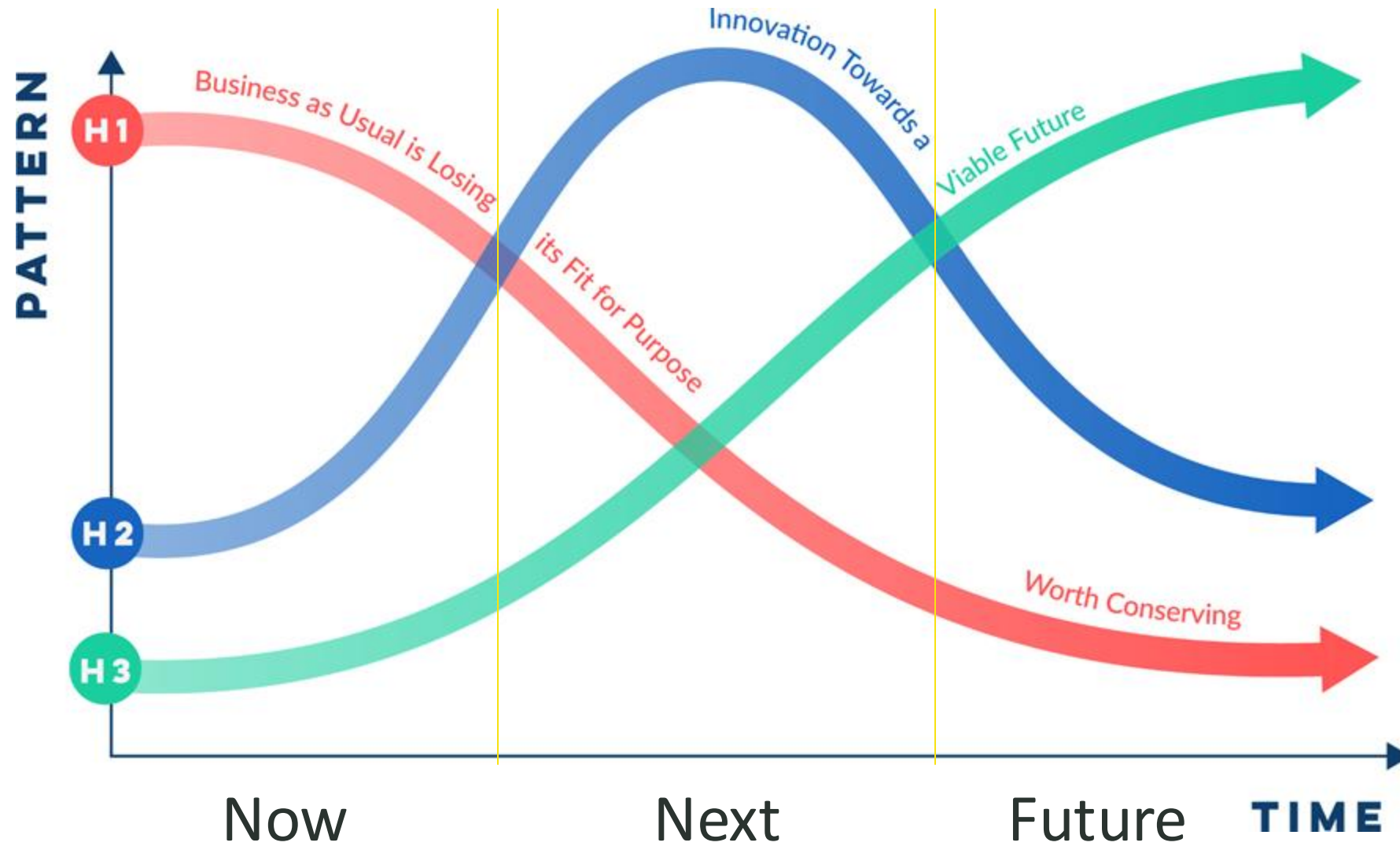


Innovators

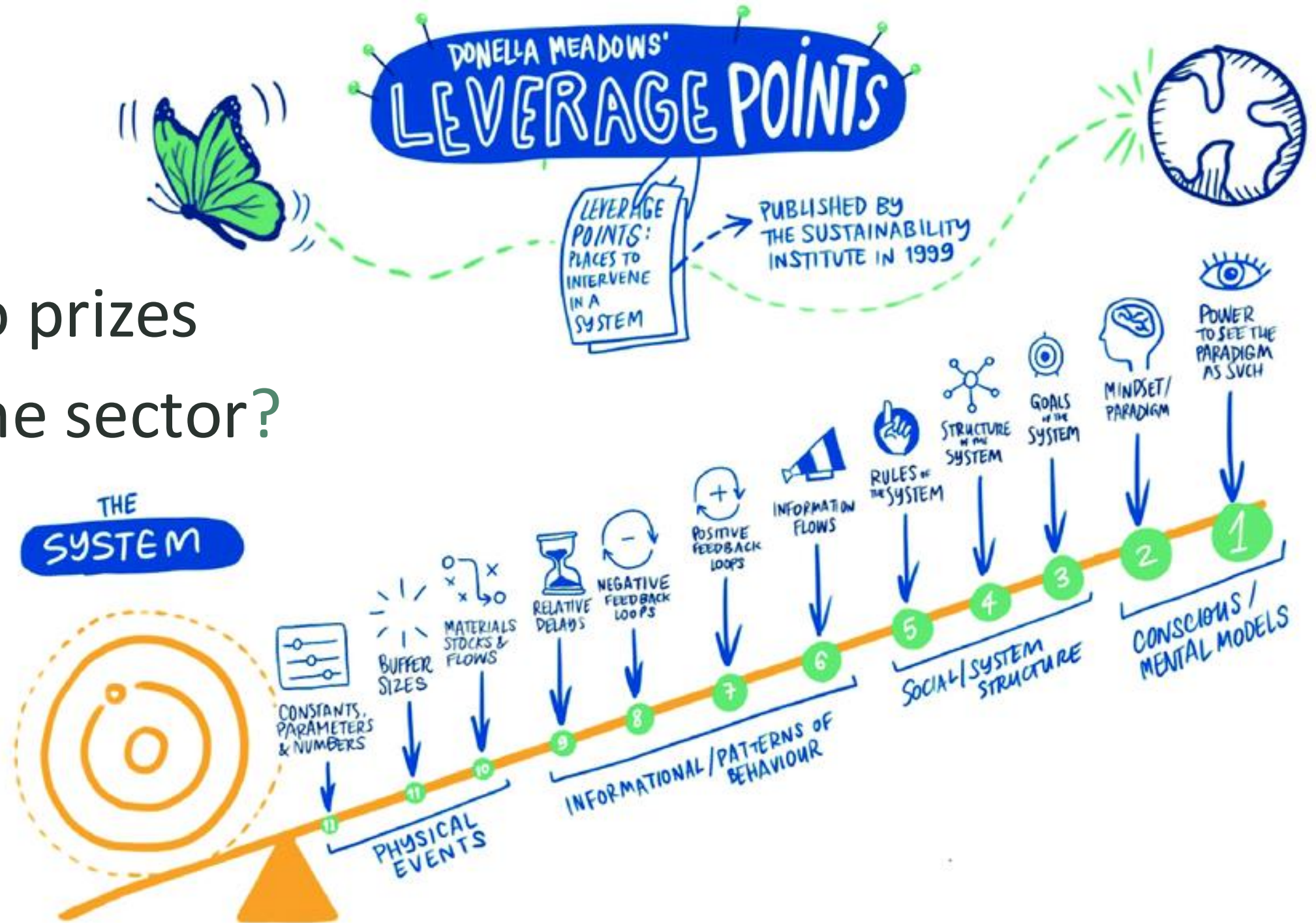
The first to try the innovation. They are venturesome and interested in new ideas. Willing to take risks and are often the first to develop new ideas.
2.5%



How to shift Mindsets



What do prizes do for the sector?





Regenerative Architecture Index 2024

Sixty-eight organisations, ranging from sole practitioners to multi-disciplinary global brands, have taken part in the world's first Regenerative Architecture Index.

Together, they have created a compendium of best practice, and an invaluable insight into the challenges and creativity involved in accelerating the transition to a regenerative, more equitable future



**REGENERATIVE
ARCHITECTURE
INDEX**



**Architecture
Today**

**UK Architects Declare
Climate & Biodiversity
Emergency**

Interface[®]

The Regenerative Architecture Index is a partnership between Architecture Today and Architects Declare. The Regenerative Architecture 2024 launch is sponsored by Interface.



Image Credit: Atelier Luma, by Assemble. Arles France is focused on regionally oriented production



Image Credit. Architype, The Enterprise Centre at The University of East Anglia



Image Credit.

Nest House, Studio Bark. An eco-home built by students for the first ever No Building As Usual (NBAU) educational programme

RAI what's next?

Wildheart Animal Sanctuary

The lemur domes at Wildheart Animal Sanctuary on the Isle of Wight are the first bamboo structures to obtain Building Regulations approval in the UK – part of an ever-evolving experiment in natural materials and regenerative design. Neil Thomas discovers a world that revolves around the needs of wildlife, the environment, and generations to come

Photographs by Timothy Soar





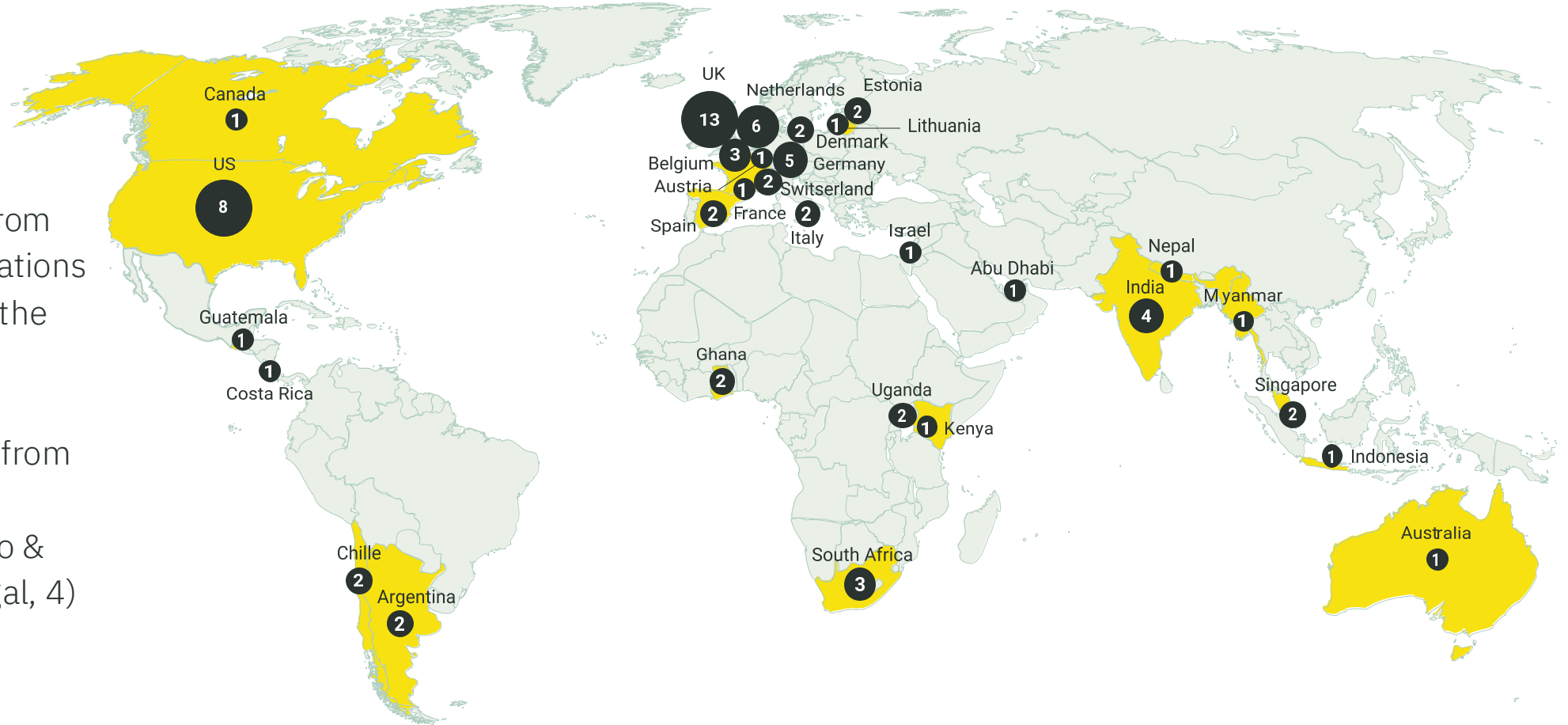
Built by Nature prize

A Global Call for Scalable Biobased Construction Material Solutions

2024: A global prize

Highlights

- The Majority of applications came from Europe. Most applications were received from the UK, US, and The Netherlands.
- Prize winners come from and operate in: 1) Singapore, 2) Mexico & Nicaragua, 3) Senegal, 4) UK.





WIDUZ manufactures BVL™ structural products using FSC-certified bamboo and biobased adhesives up to 3 x stronger and 20% lighter than typical engineered timber.



CASA CONGO is a bamboo-adobe programme in Nicaragua and Mexico, providing housing in emerging economies.



ELEMENTERRE, based in Senegal, uses clay and Typha to manufacture load-bearing bricks and insulating boards.



SUGARCRETE® from the UK, upcycles sugarcane waste into sturdy building elements, using mineral binders to achieve different degrees of structural strength.

The Principles for Responsible Timber Construction (Draft)



Extending the life of existing buildings.

The potential for existing structures to be repurposed, renovated, and/or extended using timber, biobased, secondary and other low-carbon materials is prioritised over demolition.



Accounting for the Whole Life Cycle.

New timber buildings and renovations are designed and constructed to be safe and resilient, in ways that minimise Whole Life Cycle impacts, optimising operational efficiency and minimising embodied carbon emissions and other environmental impacts from materials. Carbon is accounted for transparently, clearly differentiating between biogenic and fossil carbon.



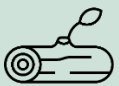
Ensuring Sustainable Forest Management.

Wood-based construction materials are sourced from forests managed according to best practices in sustainable forest management which as ‘a dynamic and evolving concept, aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations’ [UN definition of SFM].



Maximising the carbon storage potential of wood.

Wood is used efficiently, and its carbon storage potential is maximised by prioritising and incentivising its use for durable products such as construction where appropriate. Circularity of wood use for buildings is promoted, including design for disassembly to facilitate re-use and subsequent cascading of timber components in successive buildings to maximise the material’s lifespan.



Promoting a responsible timber building bioeconomy.

Information, education and training is provided for stakeholder across the ‘forest to frame’ value chain on the benefits and practices of responsible timber use in construction. Innovation, research and development is supported and encouraged to enable a timber construction economy and wood culture to thrive.



2025 Prize activities

- Launch: Mass Timber Conference, Oregon
- Nominees: Woodrise, Vancouver
- Awards: BbN Summit 2025, *location tbc*
- Film screening: COP30, Belém

Be first to hear about the 2025 Prize in line with the Responsible Principles for Timber Construction:

