

A close-up photograph of overlapping, scale-like structures, possibly fish scales or bird feathers, in various colors including light blue, purple, and orange. The scales are arranged in a regular, overlapping pattern, creating a textured surface. The lighting is soft, highlighting the individual shapes and colors of the scales.

Biomimicry in Architecture

Image © Linden Gledhill





Image © Esto, Ezra Stoller

Image © 2014 Wikimedia
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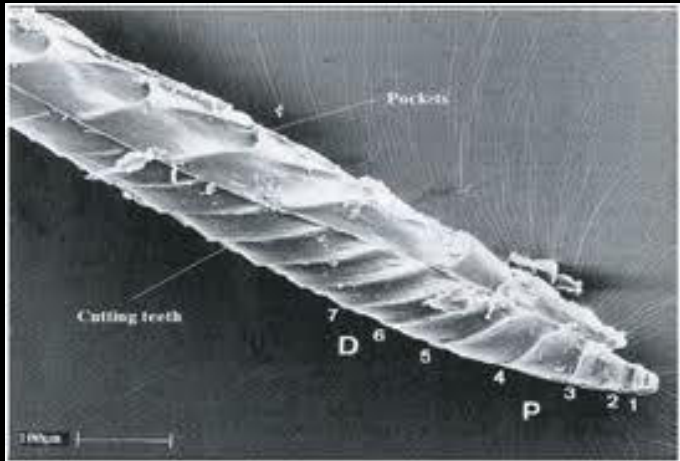


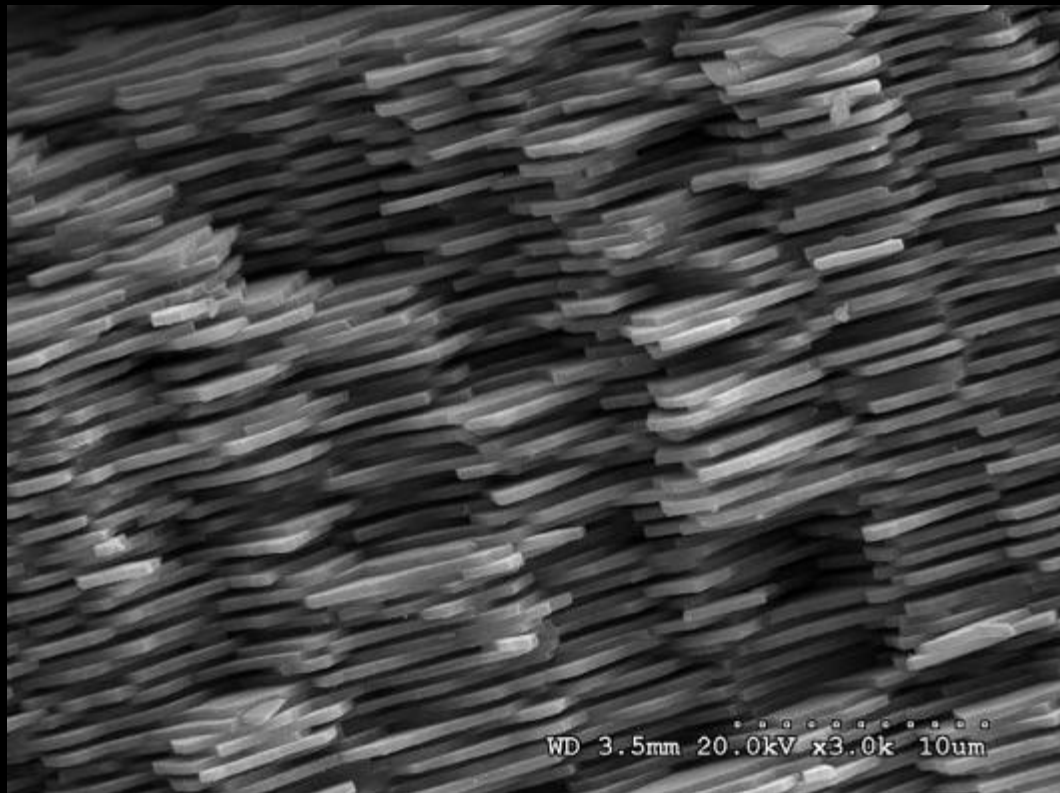




Image © bern...







An underwater photograph showing sunlight rays filtering through the water, creating a serene and blue-toned environment. The water is clear, and the light rays are prominent, creating a sense of depth and tranquility.

The Biomimetic Office

Image © Anterovium - Fotolia



Image © Kelly Hill Photography











Zero Waste Textiles
Factory

Human-made systems

Simple, disconnected

Linear / wasteful

Resistant to change

Long-term toxins

Fossil-fuel dependent

Maximise one goal

Extractive

Biological systems

Complex, interconnected

Closed loop / zero waste

Adapted to constant change

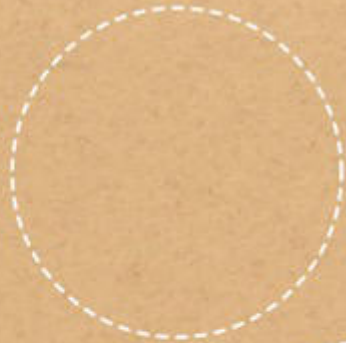
No long-term toxins

Current solar income

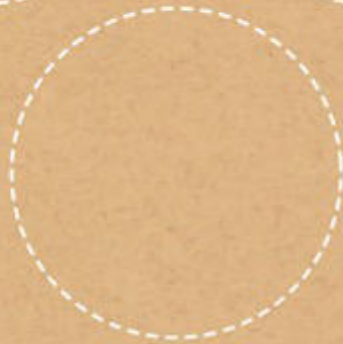
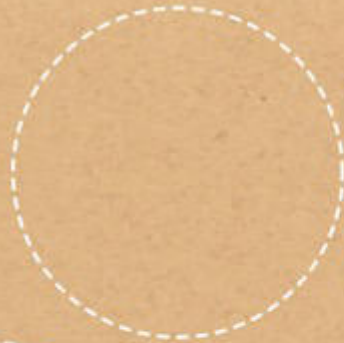
Optimised as whole system

Regenerative

WATER



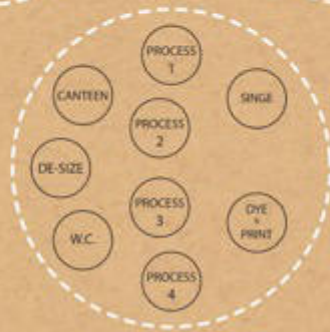
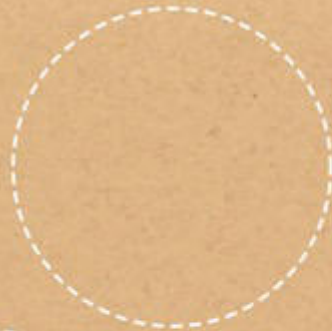
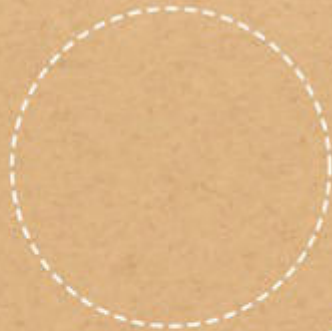
ENERGY



FACTORY

WATER

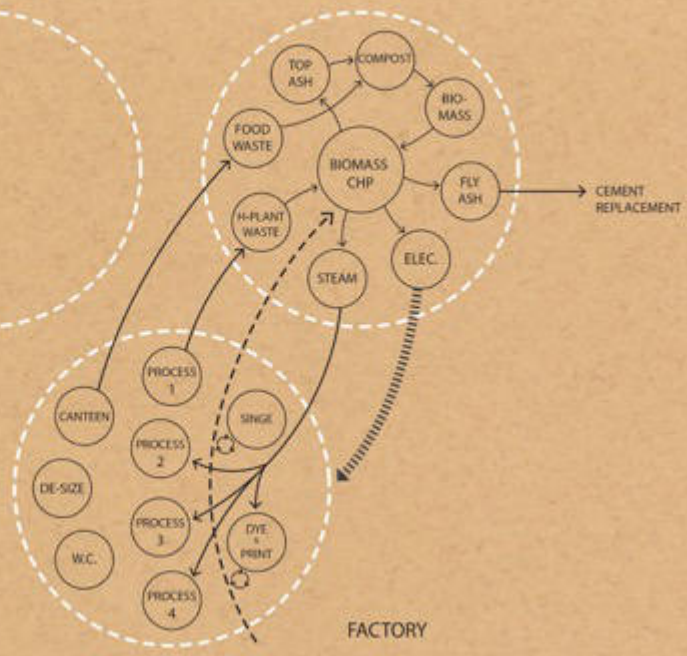
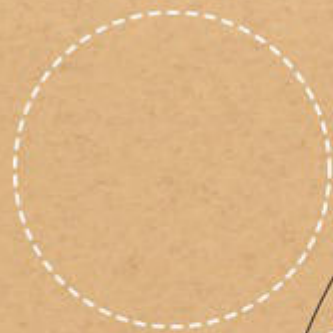
ENERGY

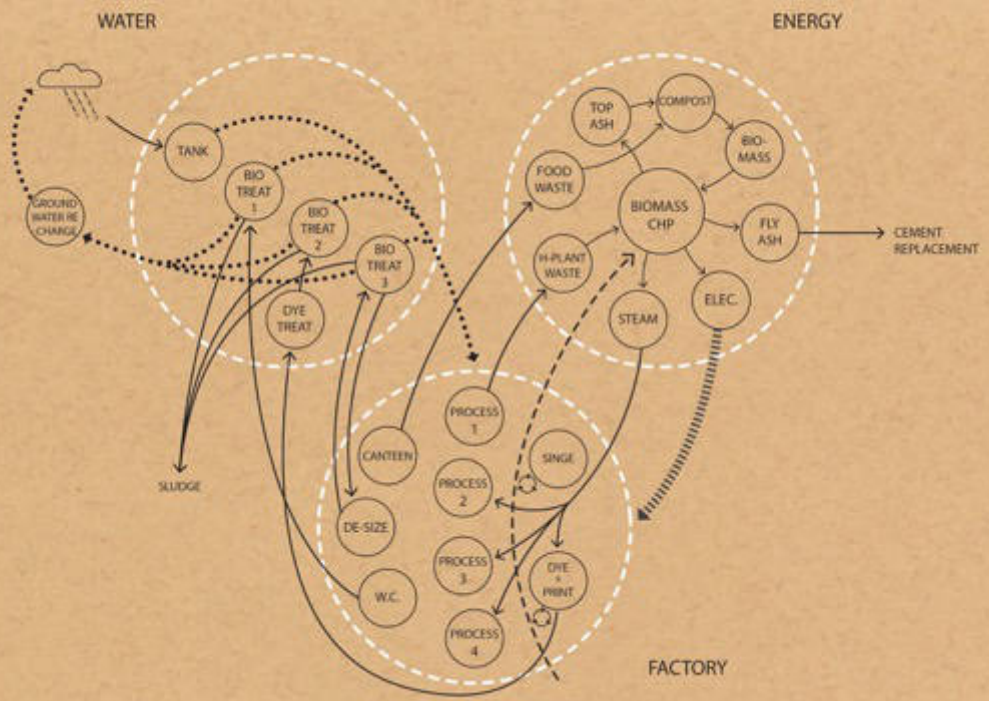


FACTORY

WATER

ENERGY





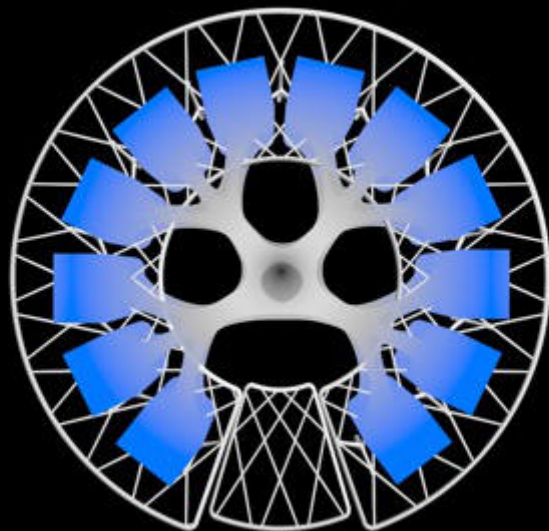


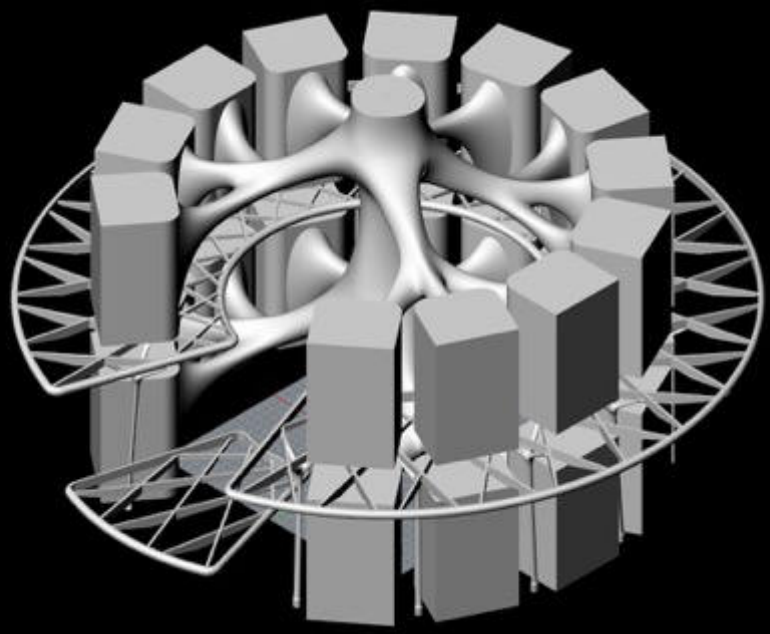




The Mountain Data Centre





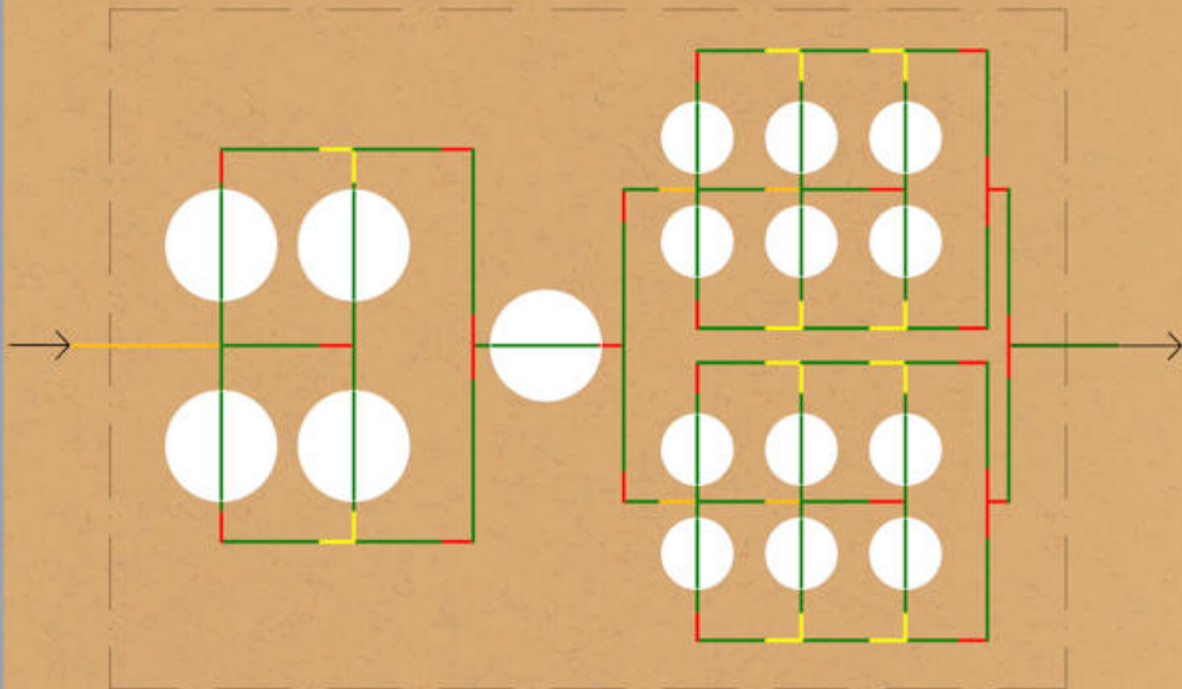


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FLOW OPTIMISATION



Total Length
367m
100.0% of 367m

Average Angle
14.7°
100.0% of 14.7°

Angle
00°  90°+



Desert Rain Pavilion

© Witte-art.com - Fotolia.com

Desert Rain Pavilion

- Camel's nostrils
- Persian ice-making
- Solar cooling

ROOF SURFACE UNDER THE LOUVRES TO BE HIGHLY REFLECTIVE

SHAPTS OF LIGHT FROM ROOFLIGHTS

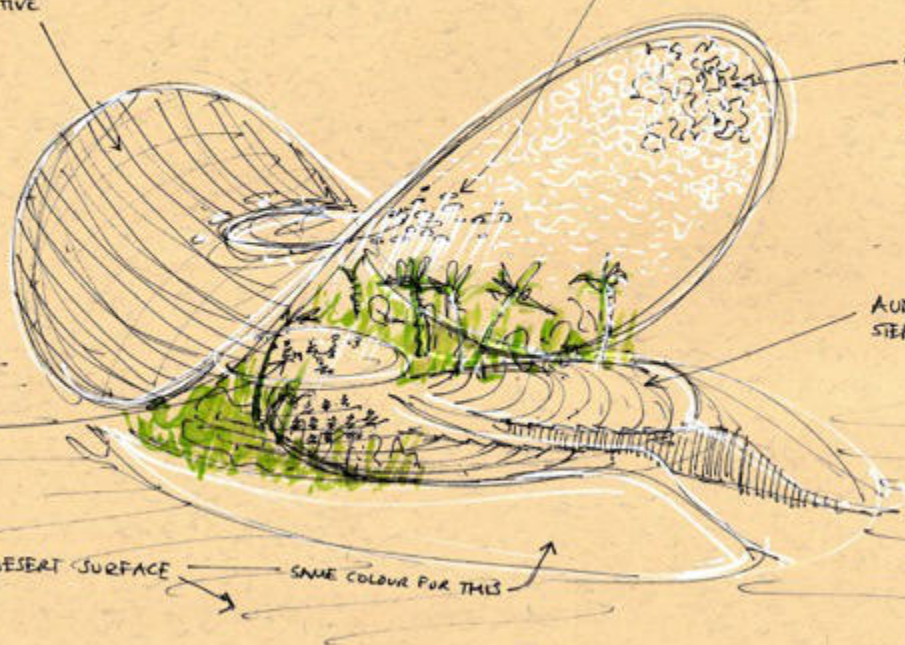
CAMEL'S NOSTRIL / BRAIN CORAL PATTERN (FAIRLY WHITE)

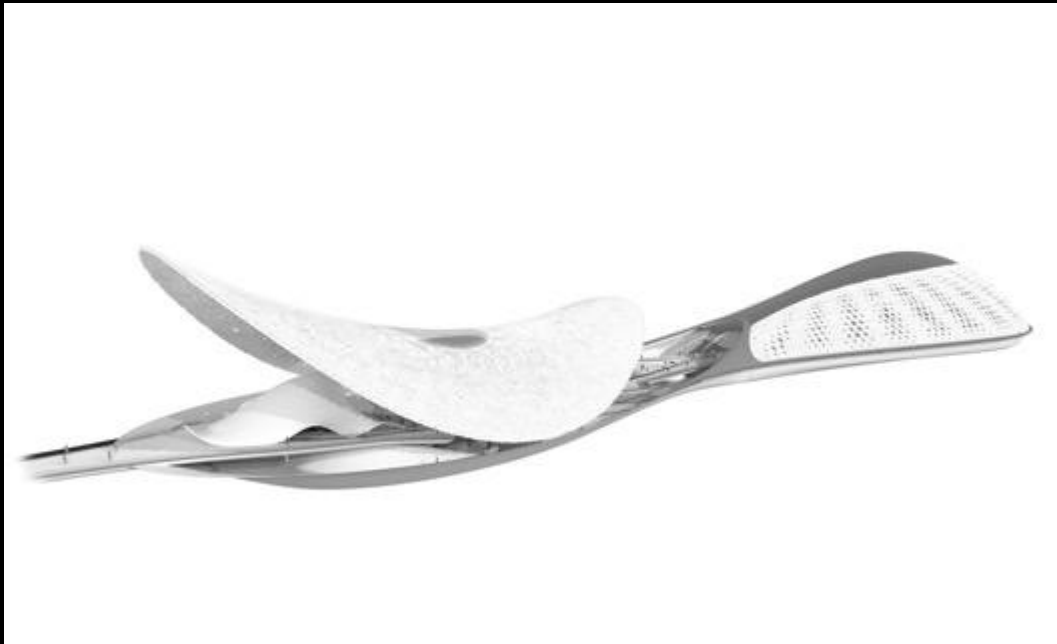
AUDIENCE ON STEPPED SEATING

MUSICAL PERFORMANCE

DESERT SURFACE

SAME COLOUR FOR THIS







Regenerative landscapes

Image courtesy of NASA



Image © Sahara Forest Project Foundation







SUNLIGHT

SEAWATER

CARBON DIOXIDE



BIOMASS

OXYGEN

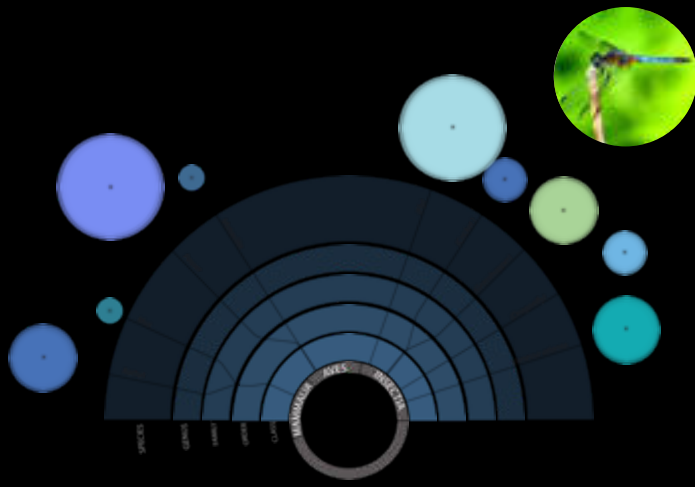
ELECTRICITY

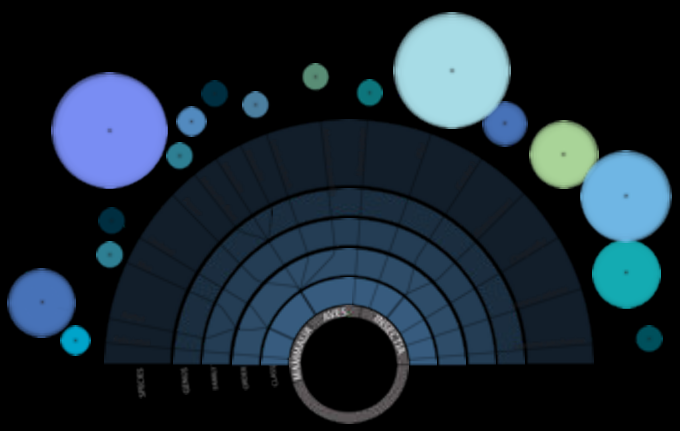
CROPS

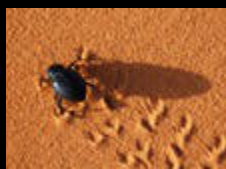
MATERIALS

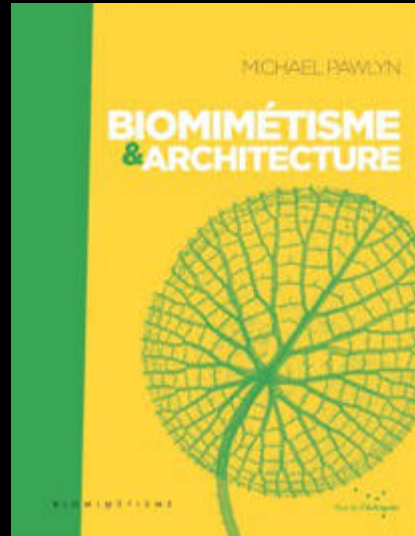
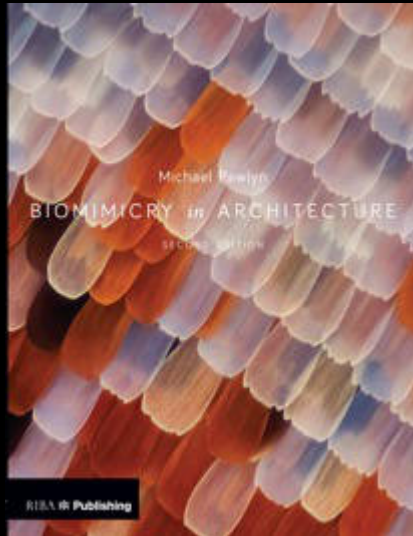












**Forty-Eighth Session of the IPCC and
First Joint Session of Working Groups I, II and III**
제48차 기후변화에 관한 정부간 협의체(IPCC) 총회

1-5 October 2018 | Incheon, Republic of Korea



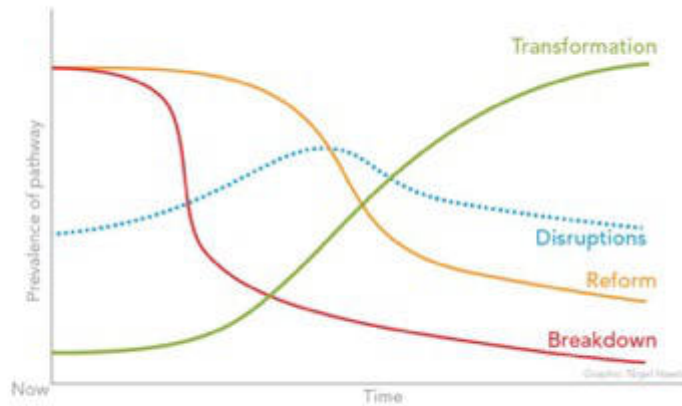
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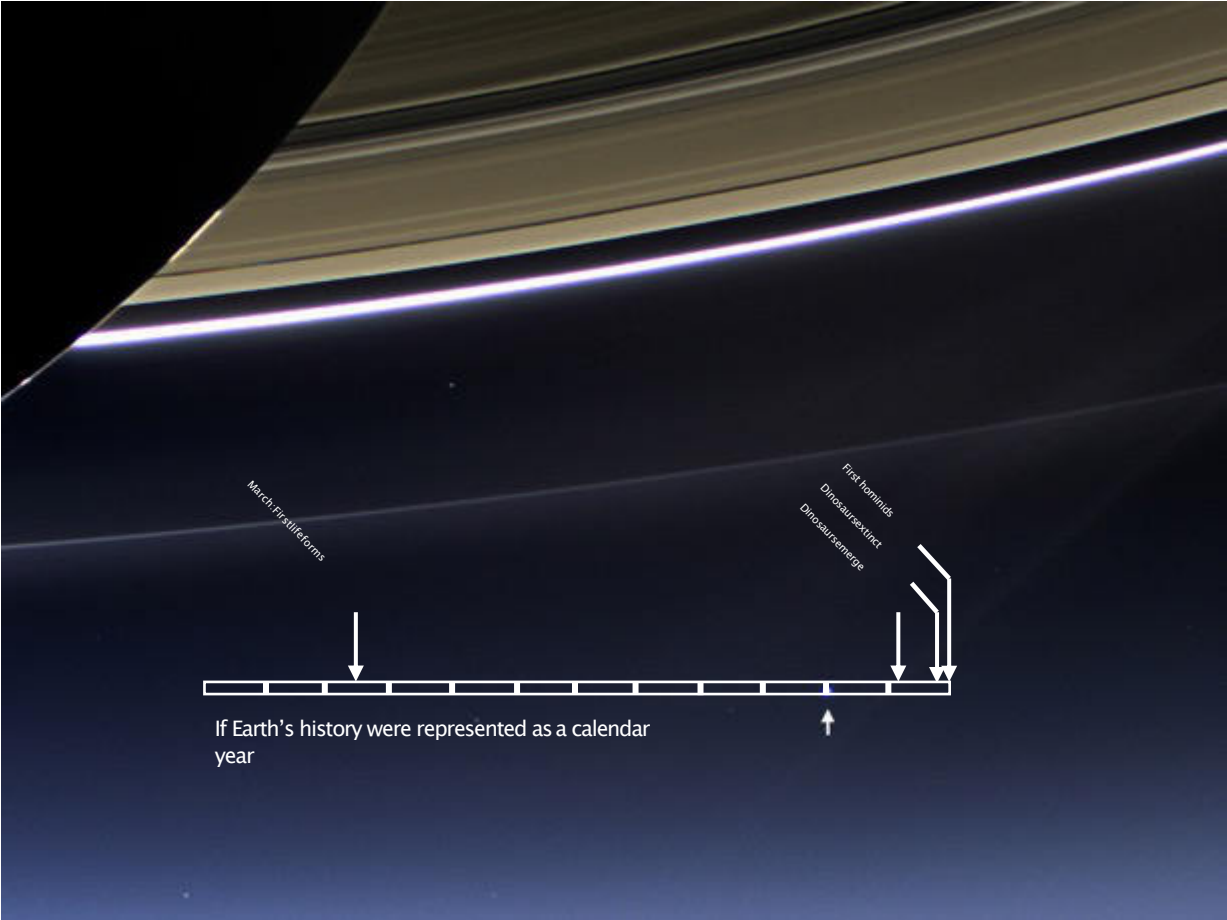
Donella Meadows Institute

Leverage Points: Places to Intervene in a System - The Donella Meadows Institute

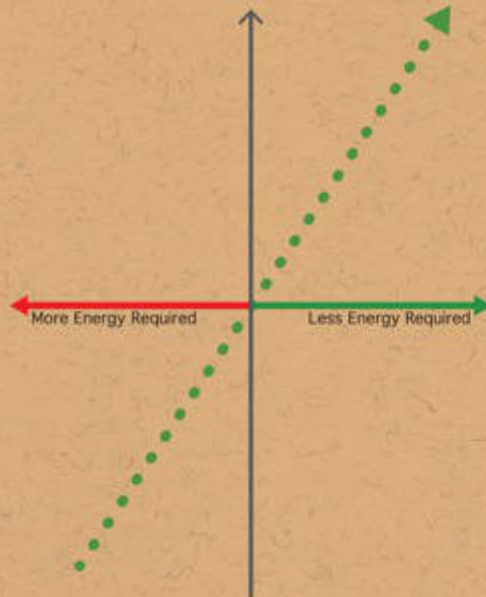
Three pathways for civilisation



*From The Good Ancestor: How to Think Long Term in a Short-Term World
by Roman Krznaric. Graphic by Nigel Hawtin.*



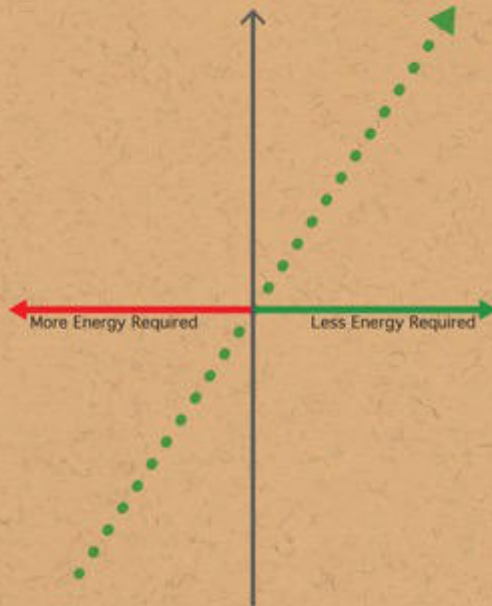
Trajectory of Environmentally Responsible Design



Adapted from Bill Reed - Regenesys Group

Adapted from - Bill Reed - Regenesys Group

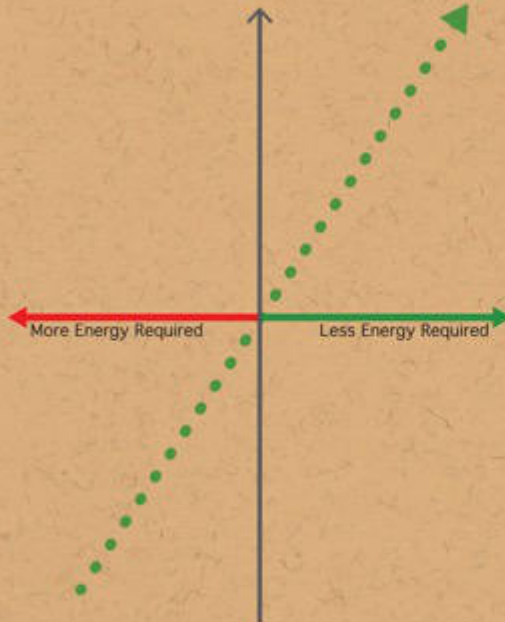
Trajectory of Environmentally Responsible Design



Conventional Practice

Adapted from Bill Reed - Regenes Group
"One step better than
breaking the law" (Croxtan)

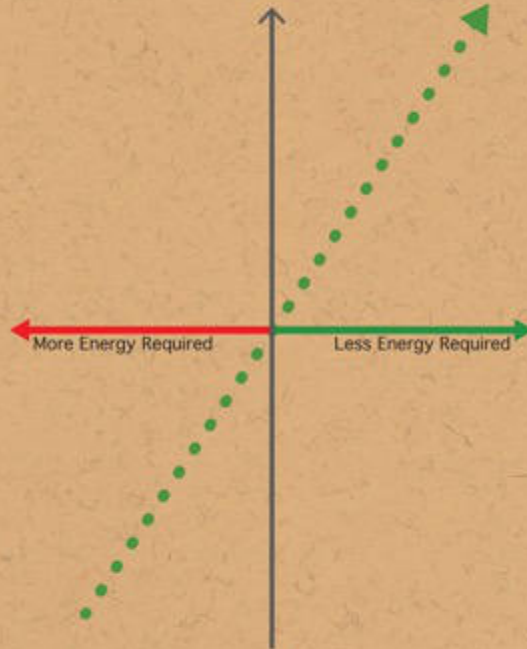
Trajectory of Environmentally Responsible Design



Green
Relative Improvement
(LEED, BREEAM, etc.)

Conventional Practice
"One step better than
breaking the law" (Croxtan)

Trajectory of Environmentally Responsible Design



Sustainable

Neutral
"100% less bad" (McDonough)

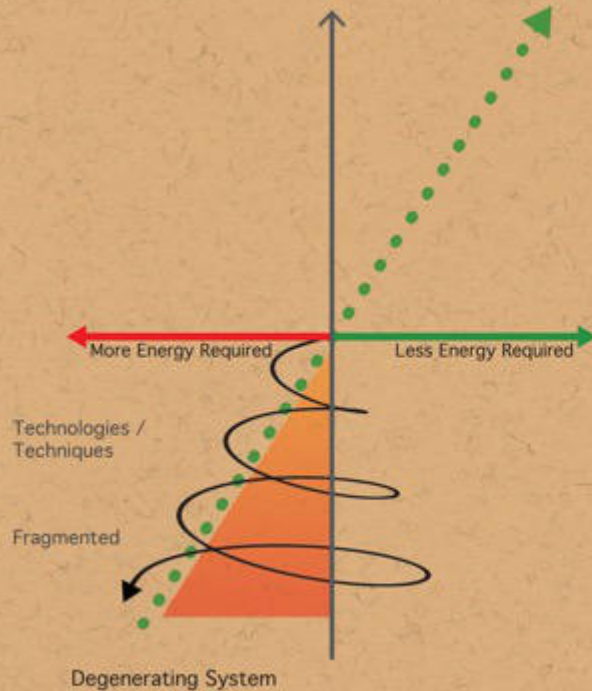
Green

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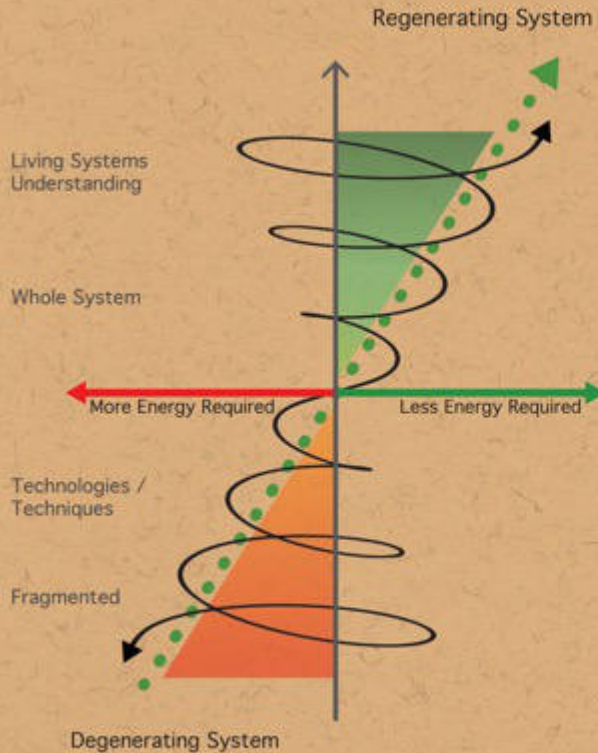
Green

Relative Improvement
(LEED, BREEAM, etc.)

Conventional Practice

"One step better than
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Trajectory of Environmentally Responsible Design



Regenerative

Humans PARTICIPATING as Nature -
Co-evolution of the Whole System

Reconciliatory

Humans as an integral part
of nature

Restorative

Humans doing things to Nature -
Assisting the evolution of Sub-Systems

Sustainable

Neutral
"100% less bad" (McDonough)

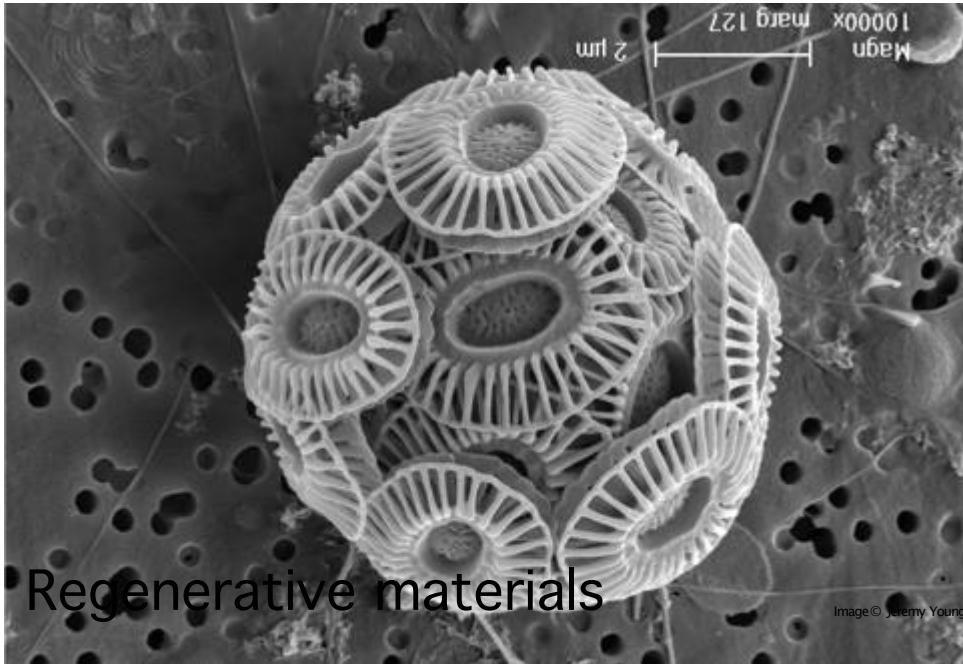
Green

Relative Improvement
(LEED, BREEAM, etc.)

Conventional Practice

"One step better than
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Adapted from Bill Reed - Regenesys Group



Regenerative materials

Image © Jeremy Young

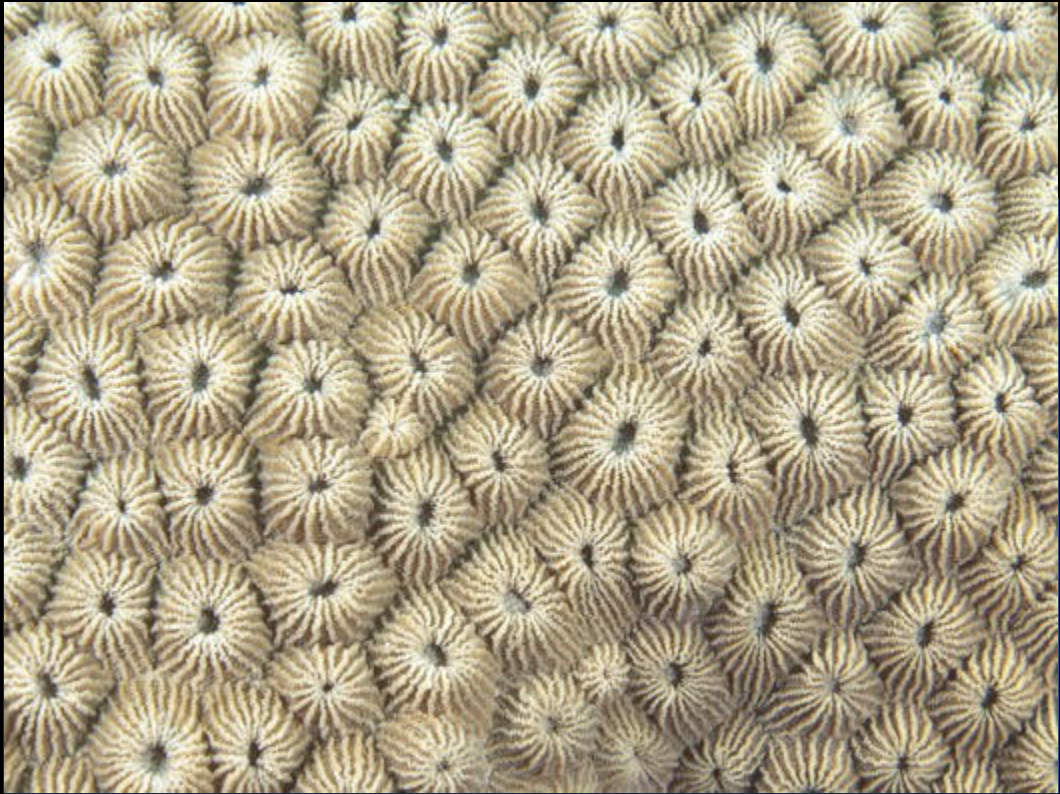




Image ©
Biomason



Image © Exploration
Architecture



Construction
Declares
Climate and
Biodiversity
Emergency

And we are still growing



Winter 2020

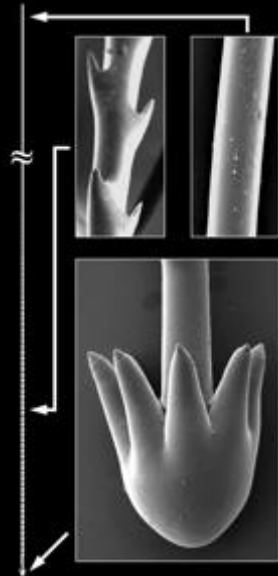
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Czech Republic
Spain



Image by Kristi McCluer



Image by Lola Perrin





Flourish: Design paradigms for our planetary emergency

By Sarah Ichioka & Michael Pawlyn

To be published by Triarchy Press mid-
2021

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