

A satellite image of New Zealand, showing the two main islands, North and South Island, surrounded by a vast expanse of blue ocean and white clouds. The land is green, with some brownish-yellow areas indicating urban or developed regions.

Reimagining cities...

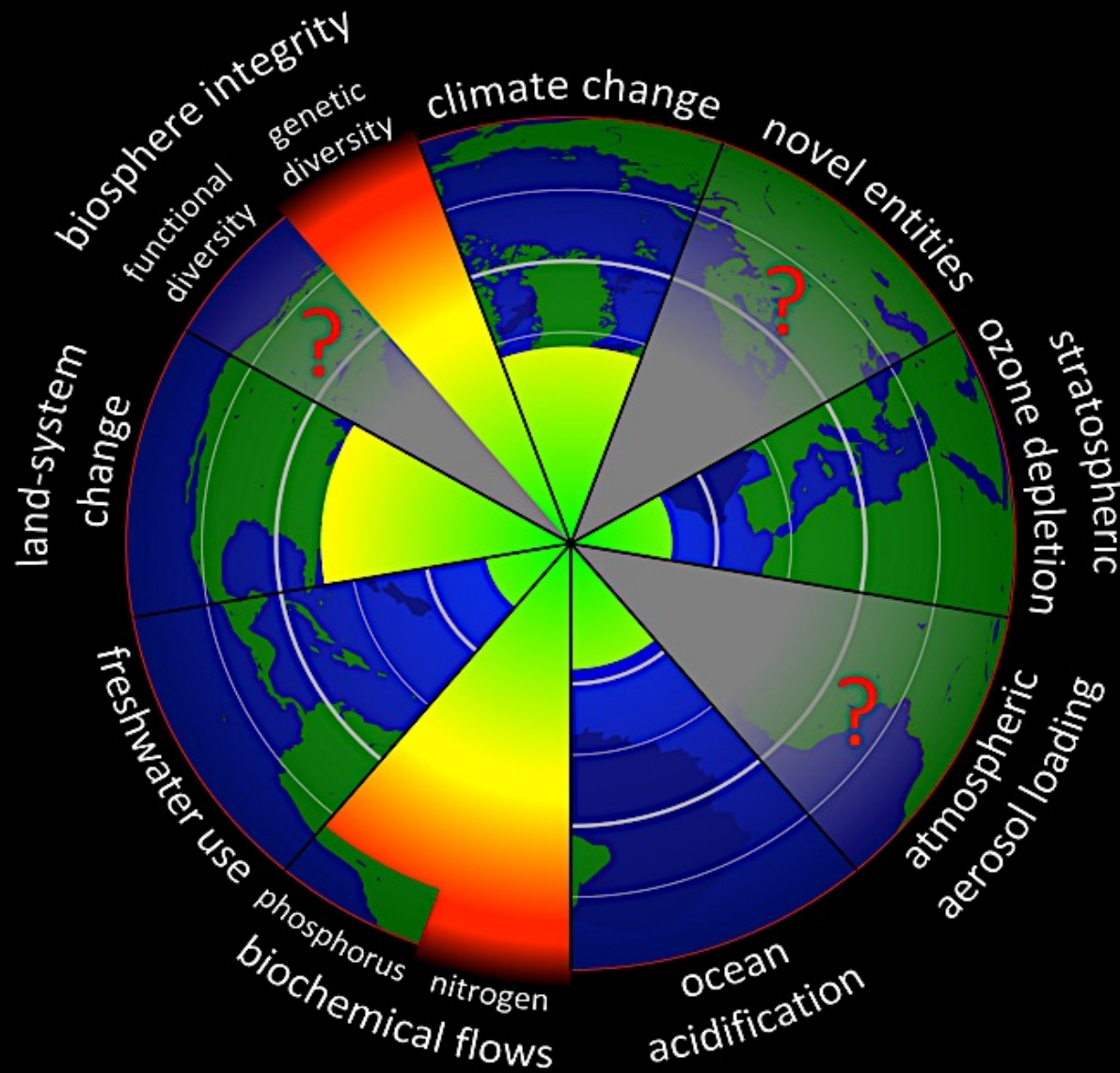
*...seeking hope in
the Anthropocene*

Rod Oram's presentation to
The Energy Summer School
University of Auckland
Auckland, March 2nd, 2017

Agenda

- Anthropocene
- Cities
- Hope
- Aotearoa

The Nine Planetary Boundaries

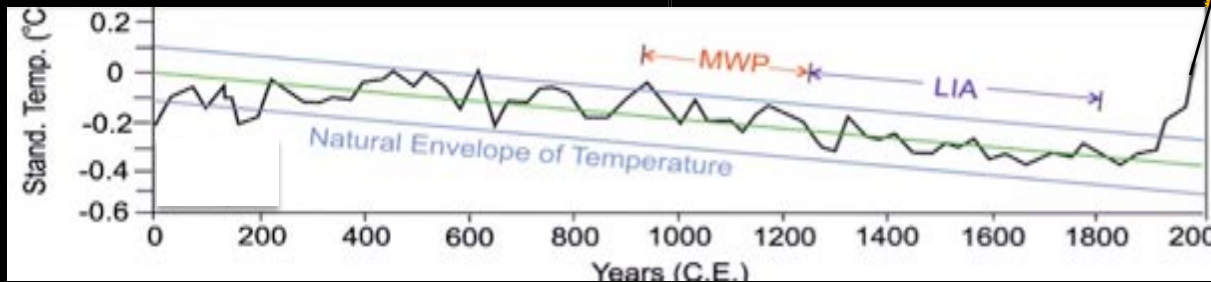


Earth System moves to a new state? Severe challenge to contemporary civilisation. Possible collapse?

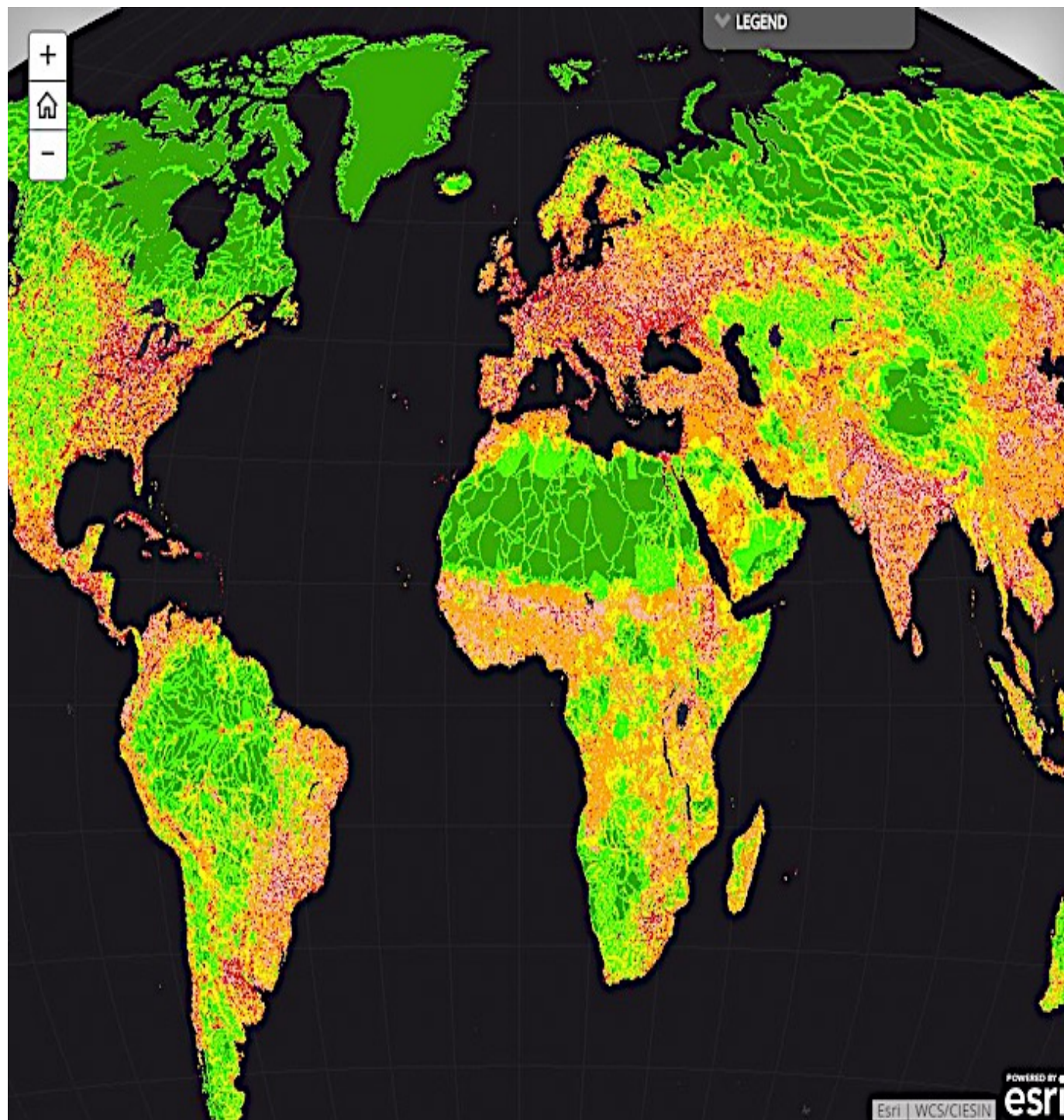
**IPCC Projections
2100 AD**

Global Temperature (°C)

Committed



Summerhayes 2015



A story map



We are Living in The Age of Humans

75%

of Earth's land surface outside of ice sheets is managed by humans.

The map at left, developed by the Wildlife Conservation Society, reflects patterns of roads, urban concentrations, agriculture and other factors to show the extent of human modification of the landscape. Green represents minimal human impact; orange, red and purple reflect a high degree of human activity.

CLICK on the locations below to see examples of highly managed landscapes:

The Netherlands is home to this geometric array of fields and villages called the *Zuiderzeewerken*, an expanse of reclaimed land created by diking and draining portions of the *Zuiderzee*, a shallow inlet of the North Sea.

British Columbia, Canada has been transformed by intensive clear-cut logging. Vast woodland tracts in western Canada and the United States have become

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**NZ species loss is accelerating
...and a rising number of species are threatened
e.g. only 12 breeding pairs of Fairy Terns
and only 65 or so Maui Dolphins**

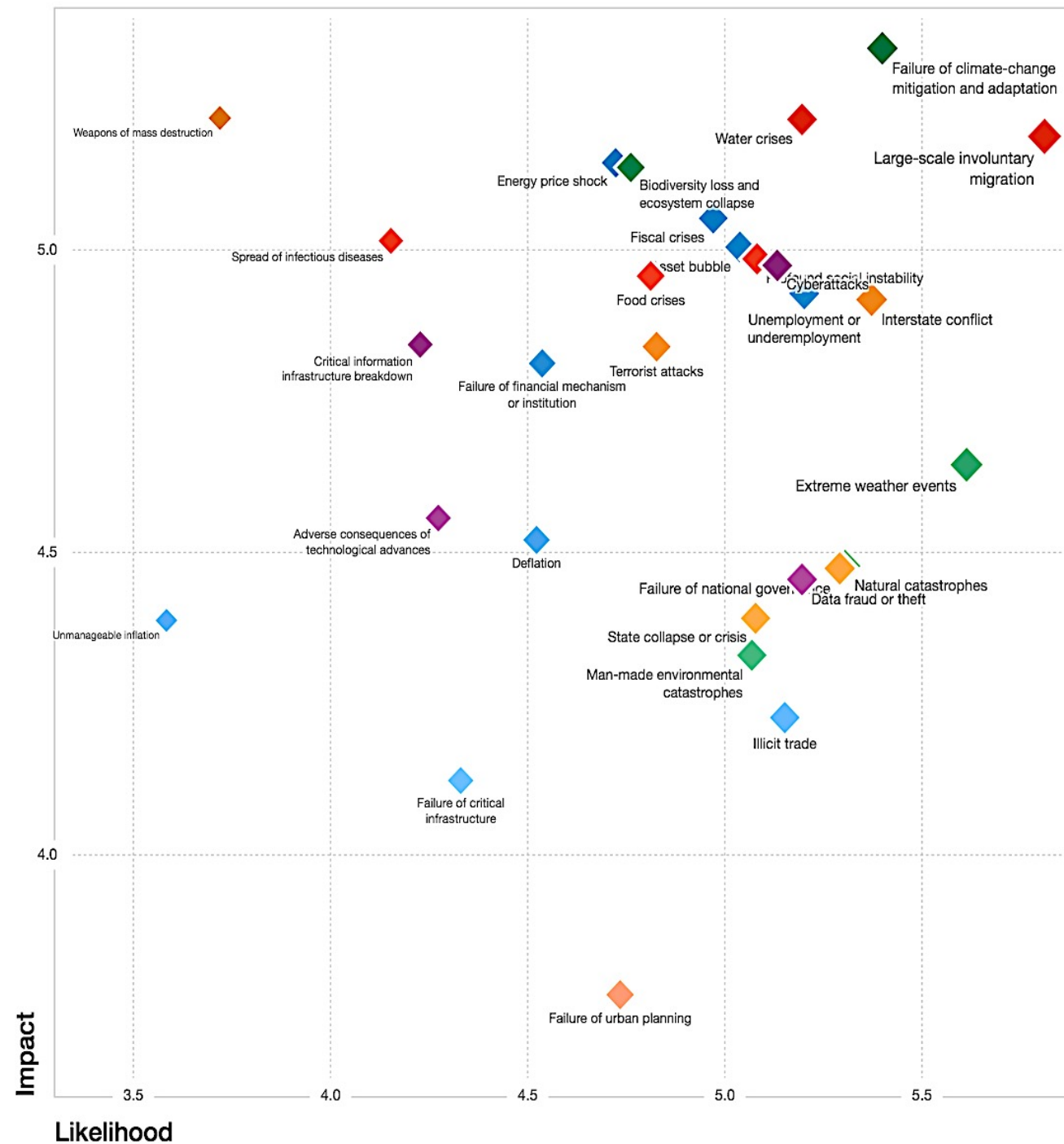
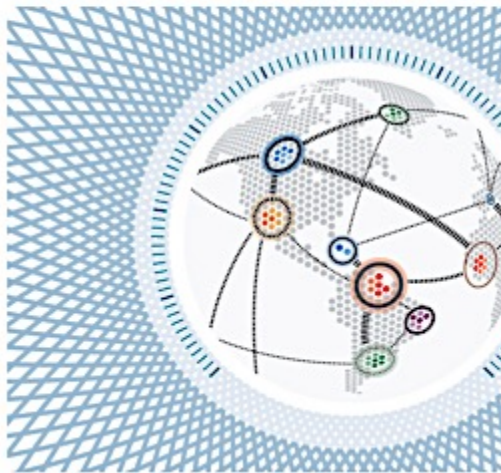


The 6th Great Extinction

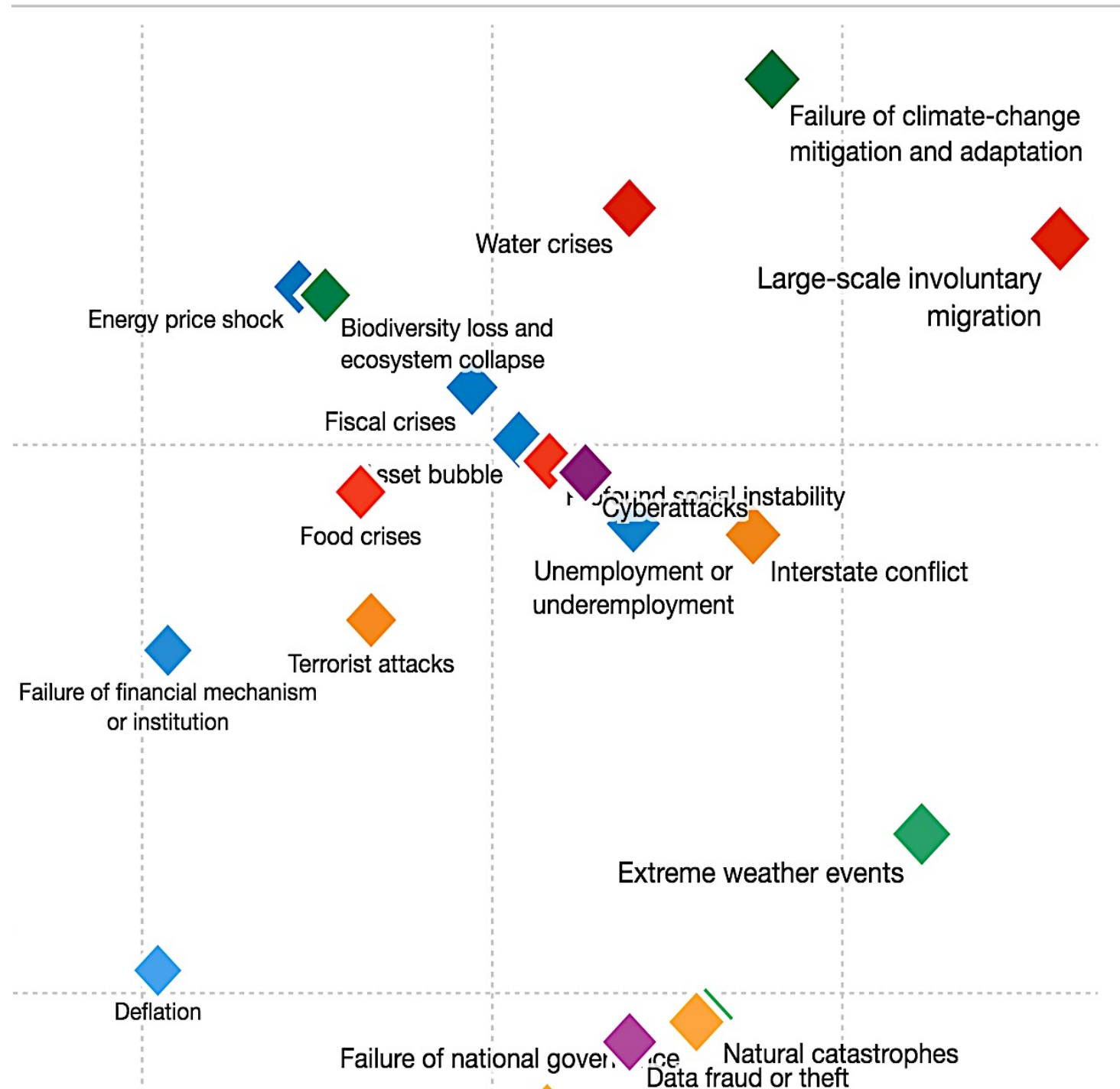


Insight Report

The Global Risks Report 2016 11th Edition

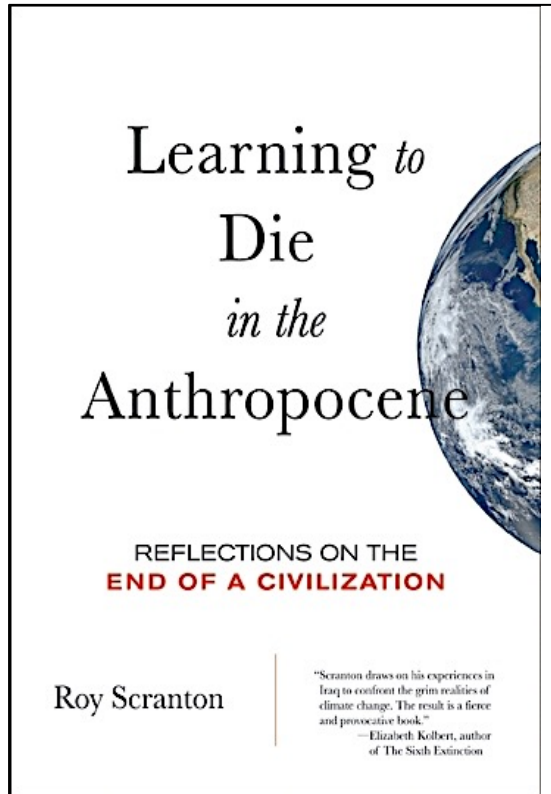


Biggest risks





Dying to live



- “The greatest challenge we face is a philosophical one:

understanding that this civilization is already dead.

The sooner we confront our situation and realise that there is nothing we can do to save ourselves,

the sooner we can get down to the difficult task of adapting, with mortal humility, to the new reality.”
Roy Scranton



Agenda

- Anthropocene
- **Cities**
- Hope
- Aotearoa

The rapid rise of cities

- 2008: 3.4bn people lived in cities.....2030: 5bn, = +50%, UN forecast
- 2012: 40 mega-urban regions = 18% of world population
 - ...but 66% of economic activity, 85% of technological & scientific innovation





95%
OF URBAN
GROWTH
IN THE NEXT 20
YEARS WILL BE IN
AFRICA
AND ASIA



GLOBAL CITIES
A TATE MODERN EXHIBITION
20 JUNE - 27 AUGUST 2007

FREE ADMISSION
18 SOUTHMAK BLAQUEMANS
WWW.SAN.ORG.UK

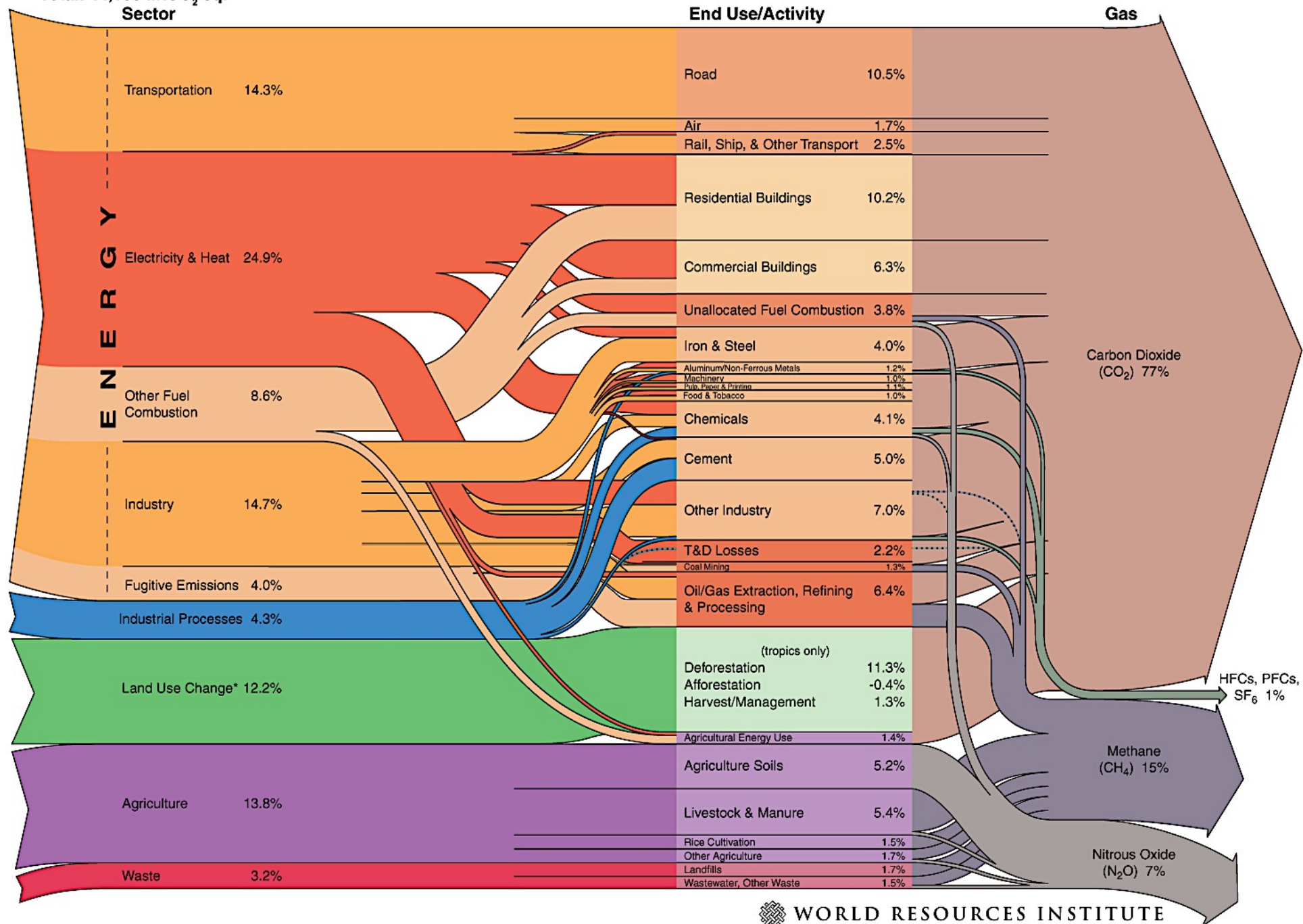
CARD
STANBULL
JHARRISHWAG
LONDON
LOS ANGELES
NEW YORK CITY
MUMBAI
SINGAPORE
TOKYO

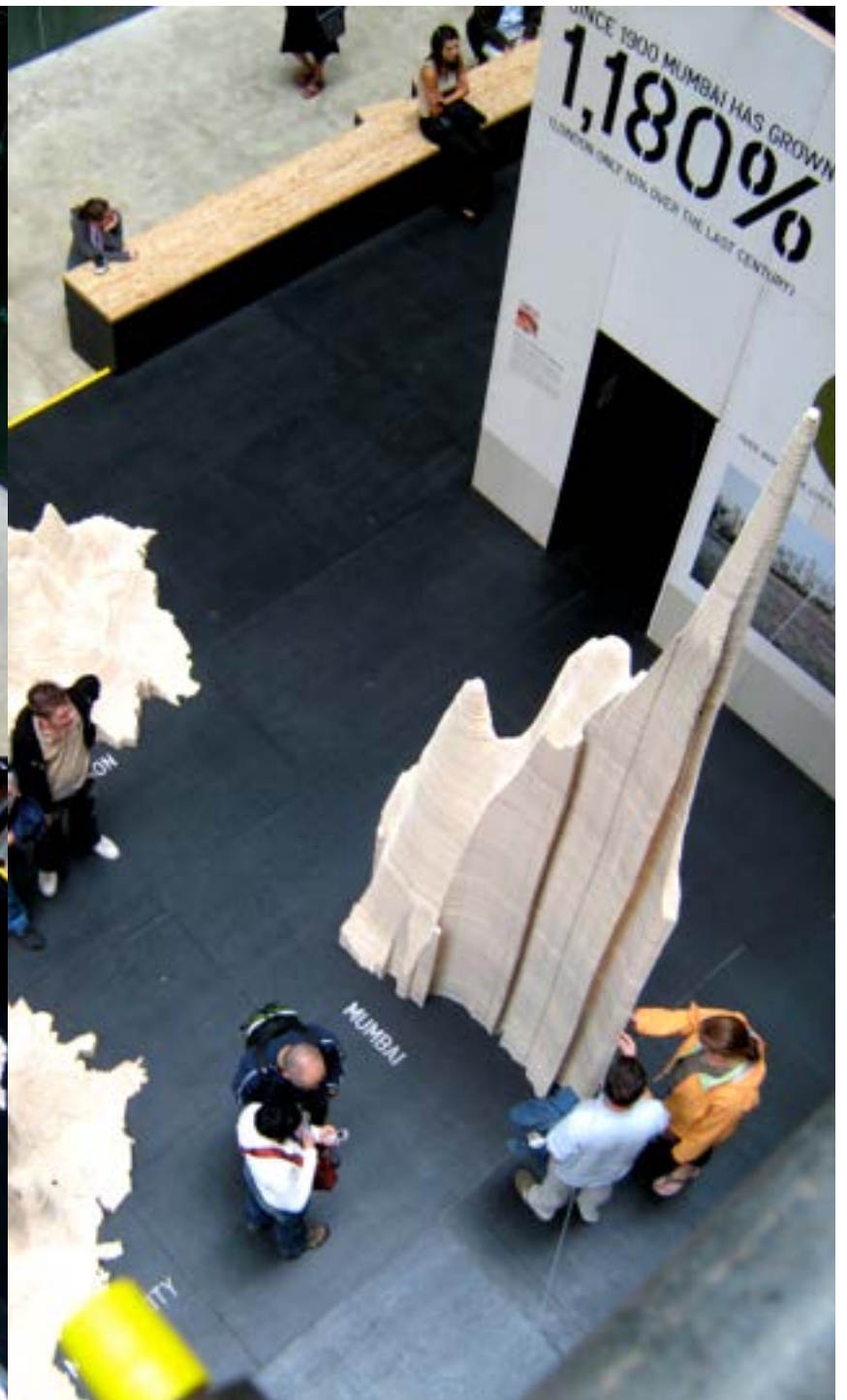
CITIES
PRODUCE
75%
OF THE WORLD'S
CARBON
DIOXIDE
EMISSIONS

Landscaping

World Greenhouse Gas Emissions in 2005

Total: 44,153 MtCO₂ eq.





An aerial photograph of a dense urban environment, featuring a complex multi-level highway interchange with numerous ramps and overpasses. The surrounding city is filled with various buildings, including a prominent tall skyscraper on the right side. The image is tilted at an angle, giving it a dynamic feel. The text "CAN CITIES BE IMPROVED BY DESIGN?" is overlaid in the center in a white, bold, sans-serif font.

CAN CITIES BE IMPROVED
BY DESIGN?

An aerial photograph of a city, showing a stark contrast between a densely packed slum on the left and a more developed area on the right. The slum consists of numerous small, closely packed buildings. To the right, there is a large, open area with a tennis court and some trees. The text "CAN CITIES PROMOTE SOCIAL JUSTICE AND GREATER EQUALITY?" is overlaid in the center.

CAN CITIES PROMOTE SOCIAL JUSTICE AND GREATER EQUALITY?

Planet of slums

International curators

Bohemians



Conditioning the mind

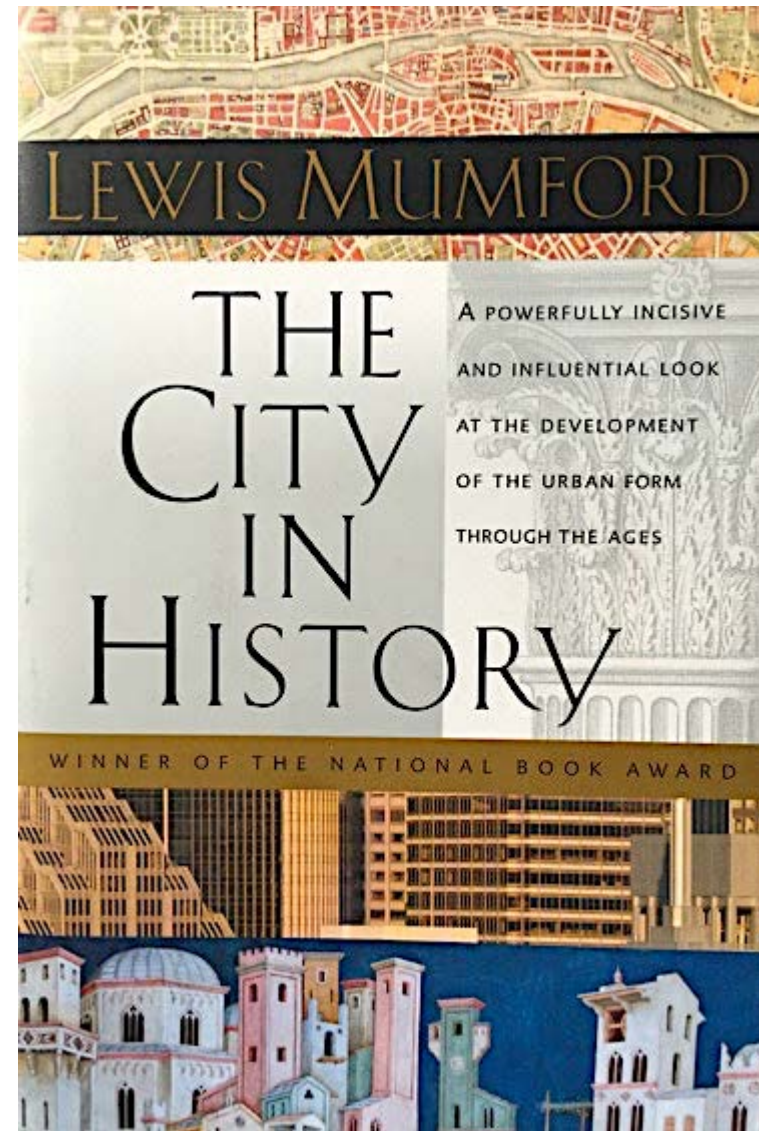
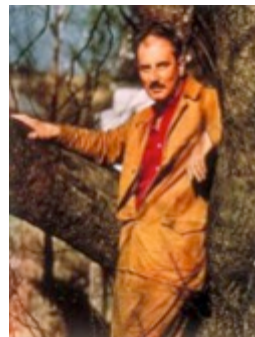
- “The city is a fact of nature, like a cave, a run of mackerel or an ant-heap.

But it is also a conscious work of art,
and it holds within its communal framework
many simpler and more personal forms of art.

Mind takes form in the city;
and in turn, urban form conditions mind.”

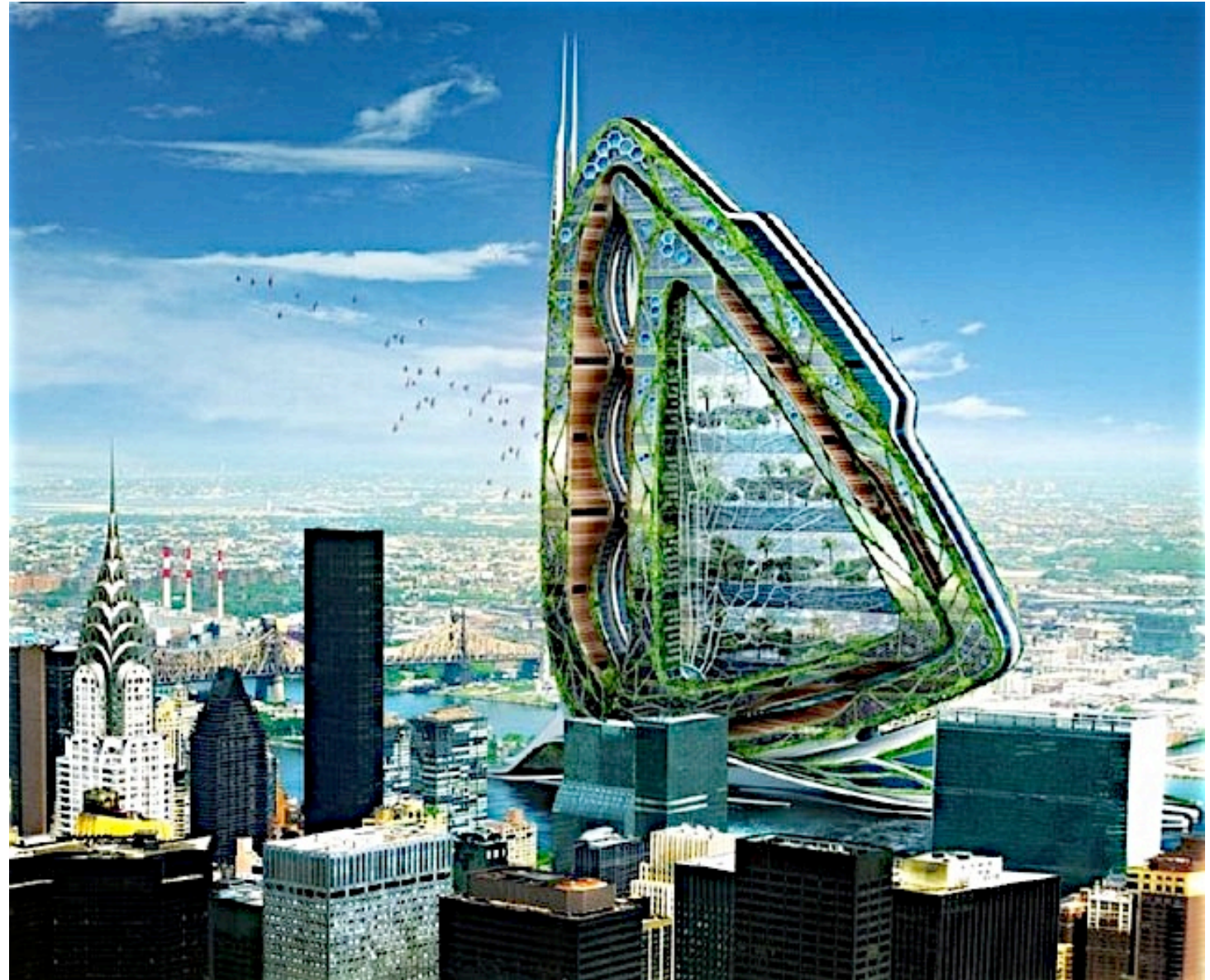
The Culture of Cities

Lewis Mumford, 1938



Cities will have to change fundamentally

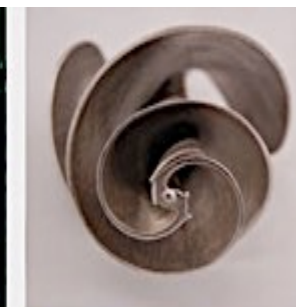
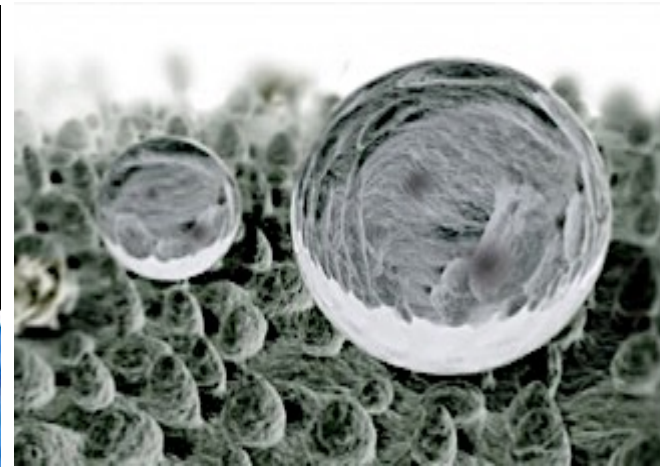
- ...bringing nature back into cities
- ...making them largely sufficient for energy, food and other resources
- ...be delightful, inspiring places to live and work
- ...to restore our relationship with the ecosystem



Biomimicry

Learning, borrowing, adapting from nature
...massive transformation of technology

...e.g. <https://biomimicry.org>



t



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cellular agriculture.

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open, public, collaborative
research that reinvents the way
we make animal products -
without animals.

Vertical farming

- ...an example in New Jersey: AeroFarms, <http://aerofarms.com>
- *New Yorker* magazine Jan 2017 <http://www.newyorker.com/magazine/2017/01/09/the-vertical-farm>



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GLOBAL ECONOMIC DYNAMICS AND THE BIOSPHERE

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How to tackle antibiotic resistance

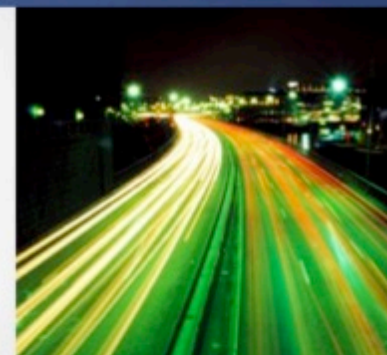


Global Economic Dynamics and the Biosphere

The Global Economic Dynamics and the Biosphere programme (GEDB) is a five-year Academy research programme at the Royal

News

*Putting financial
systems to work*



Publication

*How to tackle
antibiotic resistance*

News

*Grant to investigate
supply chain strategies
for sustainable fisheries*

News

*Sustainability screening
to combat illegal
fishing*



SEEDS OF GOOD ANTHROPOCENES

Identifying socially-ecological bright spots that could grow & connect to produce a better anthropocene



[about](#) / [seed collection](#) / [map of collected seeds](#) / [contribute a seed](#) / [the anthropocene](#)

WHAT ARE SEEDS?

Seeds are existing initiatives that are not widespread or well-known. They can be social initiatives, new technologies, economic tools, or social-ecological projects, or organisations, movements or new ways of acting that have that appear to be making a substantial contribution towards creating a future that is just, prosperous, and sustainable.

We are gathering seeds



BOGOTA'S CICLORUTA

25 October, 2015

United Nations' Sustainable Development Goals



Agenda

- Anthropocene
- Cities
- **Hope**
- Aotearoa


A roadmap for NZ

- bwb.co.nz/books/three-cities

Three Cities

Seeking Hope in the Anthropocene

Rod Oram

The book cover for 'Three Cities' by Rod Oram features a horizontal bar at the top with four colored segments: blue, yellow, green, and red. Below this, the title 'Three Cities' is displayed in a large, bold, sans-serif font, followed by the subtitle 'Seeking Hope in the Anthropocene' in a smaller font. The author's name 'ROD ORAM' is at the bottom. The cover is divided into a light grey upper section and a darker grey lower section. The text 'BWB Texts' is visible in the lower section, and the word 'Preview' is at the very bottom.

Three Cities
Seeking Hope in
the Anthropocene

ROD ORAM

BWB Texts

Preview

Buy book (\$14.99)

Buy ebook (\$4.99)

Buy bundle (\$16.99)

Print publication: Aug 2016

Orthodox is obsolete; conventional is kaput. We thought we knew how we make economics, politics, technology and nature work for us. But increasingly, they are failing to run by the rules and systems we've honed over recent decades. Boom-bust economies, fractured and destructive politics and a deeply degraded ecosystem are just some of the symptoms.

Pioneers around the world are seeking new values, systems and technologies. Thus equipped we might achieve the unprecedented, speed, scale and complexity of change we need to meet the immense challenges of the twenty-first century.

In this BWB Text acclaimed business journalist Rod Oram travels to Beijing, London and Chicago to meet some of these pioneers and report on their setbacks and progress. Because if 10 billion people are going to live well on this planet in 2050, we're going to have to fundamentally change the way we do things.

Beijing
Ecological Civilisation





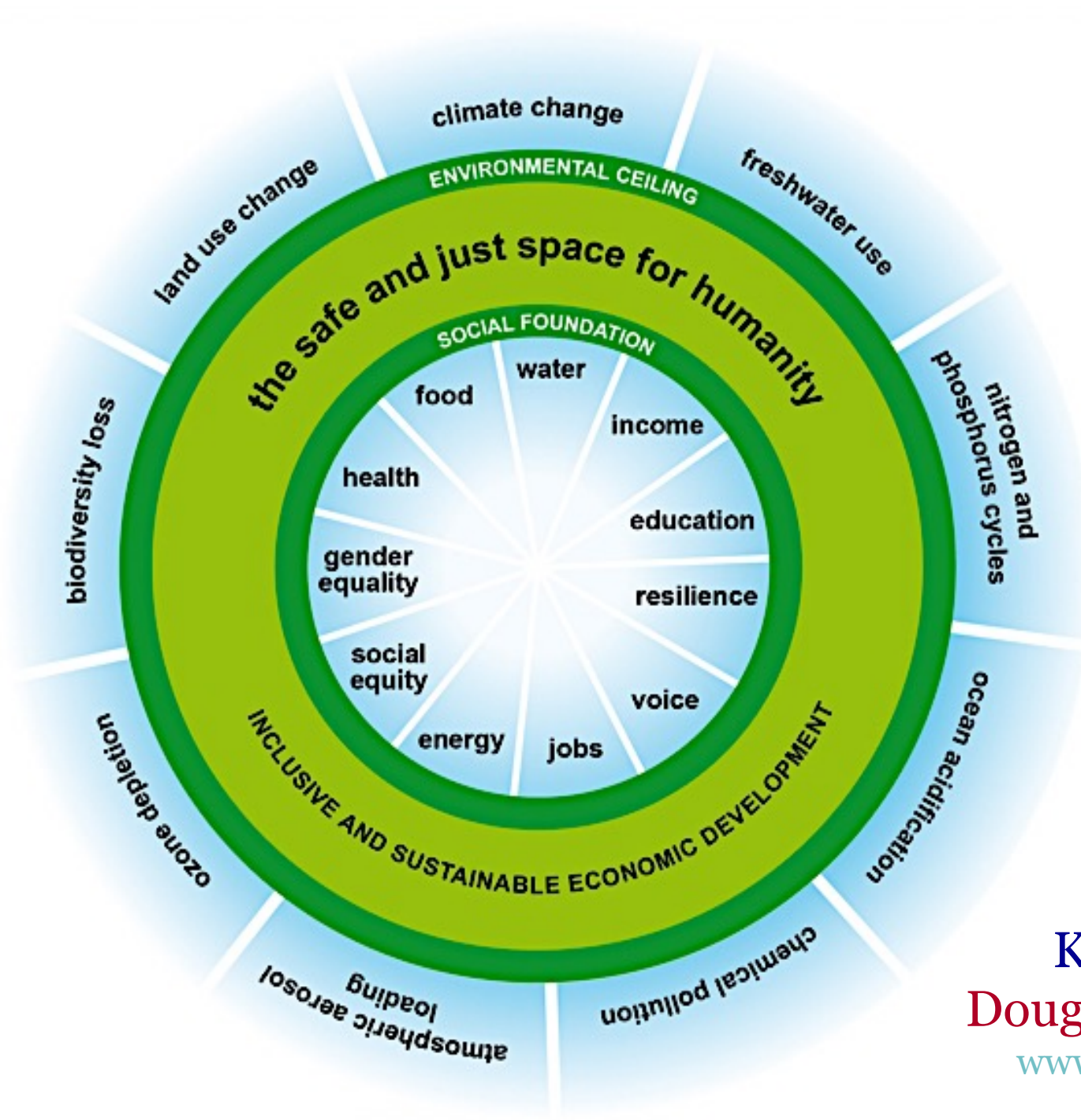


London
A bland building in Southwark





2 DEGREES INVESTING	2
350.ORG	2
AGILIC	3
ANDREW PHILLIPS	3
AQUA	1
ASSET OWNERS DISCLOSURE PROJECT	2
AVIATION ENVIRONMENT FEDERATION	2
BUILDINGS PERFORMANCE INSTITUTE EUROPE	2
CARBON BRIEF	2
CARBON POLICY	2
CARBON TRACKER	2
CENTRE FOR LONDON	3
CHANGING MARKETS	2
CITYMAVENS	3
CLIMATE BONDS	1
CLIMATE STRATEGIES	2
ENERGY AND CLIMATE INTELLIGENCE UNIT	2
EUROPEAN CLIMATE FOUNDATION	2
FINCA	3
FLUID BUSINESS SOLUTIONS	3
G G G I	2
GINGKO	3
NEIGHBOURHOOD	1
PARKOPEDIA	1
SANDBAG	2
SIGMA RESOURCING	3
THE SOCIAL KINETIC	2
TRACK 0	3
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Kate Raworth
Doughnut Economics
www.kateraworth.com

Chicago
Riding the Red Line

1891



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TOGETHER WE CAN

KEEP IT
WEIRD

Do Anything
We Can Dream of
Create a better tomorrow
- Kristina

GET SHIT DONE
CLEAN UP
REALLY GOOD

MAKE
A
DIFFERENCE

FIGHT DIRTY! CAN DO IT!!

♥ Tanya
BE ROLE MODEL
IN BOTTLES
- ERIC

Be Remarkable! and be PROUD
Live as one
Andy & Kristina

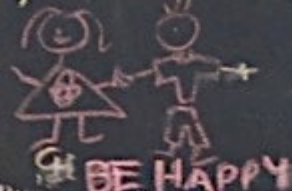
Blow
Beautiful
Bubbles

and heal the planet
He always did
kind of like bubbles
In his bath

Create a Buzzzzzzzz!
do the thing
BELIEVE

IN EACH OTHER
from JB! Change the World
Sisters!

Oliver



PULLMAN REDUX - BUT BETTER

HAVE FUN
I AM AN



What is your vision of a contemporary utopian community?



“Sane oases in a rabid world”

- Marseille: 30% Muslim, 70% “Christian”...peaceful cf. Paris
- Kerala: 32m Christians, Muslims and Hindus...has India’s best literacy, life expectancy and health care
- Queens, NYC: 2.3m people, 138 languages...“a crucible of creative diversity”
- These and some other cities are “oases of civility...where human ingenuity and determined statecraft had defused potentially explosive civil conflicts.”
- Karl Meyer and Shareen Blair Brysac
Pax Ethnica.



Agenda

- Anthropocene
- Cities
- Hope
- **Aotearoa**

Jing-Jin-Ji



- Supercity of 100m people
- Beijing + Tianjin + Hebei
- 216,000 sq km = 463 people per sq km

New Zealand



- A country of 4.5m people
- North & South islands
- 268,021 sq km = 10 people per sq km



NZ architectural inspiration for China:
<http://www.vanbrandenburg.co.nz/architecture/marisfrolg>







Tamaki Makaurau



Tuhoe's Te Uru Taumatua

- ...the first Living Building in New Zealand...doing things in very NZ distinctive ways



But now there are no more islands to be found
And the eye scans risky horizons of its own
In unsettled weather, and murmurs of the drowned
Haunt their familiar beaches –

Who navigates us towards what unknown
But not improbable provinces. Who reaches
A future down for us from the high shelf
Of spiritual daring?

Allen Curnow *Landfall in Unknown Seas*

