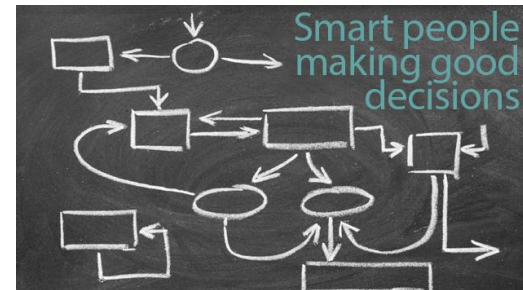


SUSTAINABLE
ENTERPRISE
CONSULTING

Thoughts on the NA Sustainability/CSR State of Play

Kevin Brady

Sustainable Enterprise Consulting



Three Things

- Insights from NA sustainability research
- Thoughts on where we need to focus
- Inspiration from the circular economy discussion

One thought

- *“its about perspective. Its not that we have an entirely new problem, its not that we have an entirely new world to deal with, but how we look at it, how we approach the problem, might benefit from some adjustment”*

*Ken Webster
Head of Innovation, EMF*

A large crowd of people is shown from behind, looking towards a city skyline under a cloudy sky. The text 'POPULATION NINE BILLION' is overlaid in white, bold, sans-serif font.

POPULATION NINE BILLION

Photo from J Garrett JLR

Adapt or ????



World Business Council for
Sustainable Development

“The growth of world population and production combined with unsustainable consumption patterns places increasingly severe stress on the life-supporting capacities of our planet.”

Agenda 21 1992

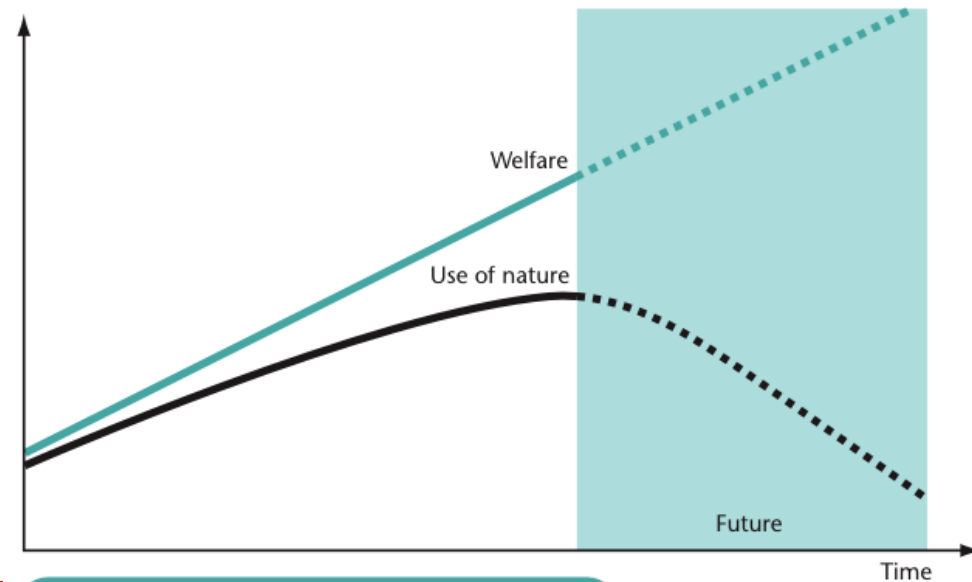


Figure 1: More welfare from less nature

“At the heart of this assessment is a stark warning. Human activity is putting such strain on the natural functions of Earth that the ability of the planet’s ecosystems to sustain future generations can no longer be taken for granted”.

UN Millenium
Ecosystem Assessment 2005

A complete overhaul of the way the planet is managed is urgently needed if the challenges of global sustainability are to be met for seven billion people.

Global Environmental Outlook Feb. 2012

Hottest year on record

During 2014, the average temperature across global land and ocean surfaces was 1.24°F (0.69°C) above the 20th century average. This was the highest among all 135 years in the 1880–2014 record, surpassing the previous records of 2005 and 2010 by 0.07°F (0.04°C).

Source NOAA



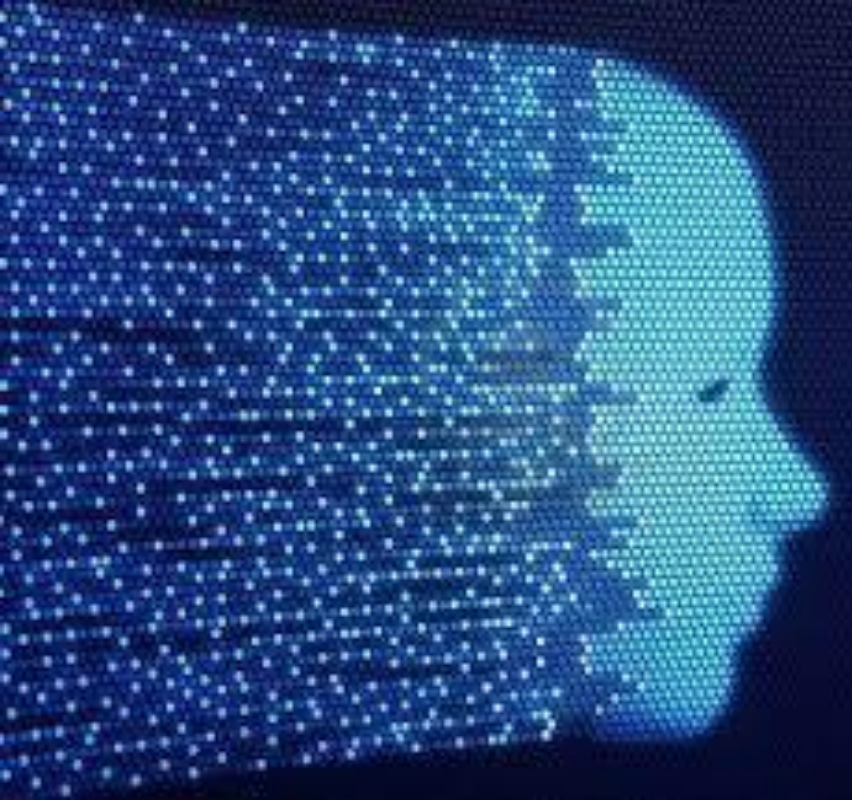
“fourteen of the fifteen warmest years on record have all occurred in the 21st century,” WMO Secretary-General Michel Jarraud.

Source: Adapted from Climate Reality Project



Source WBCSD/Photo Zak Noyle and driftsurfing.eu





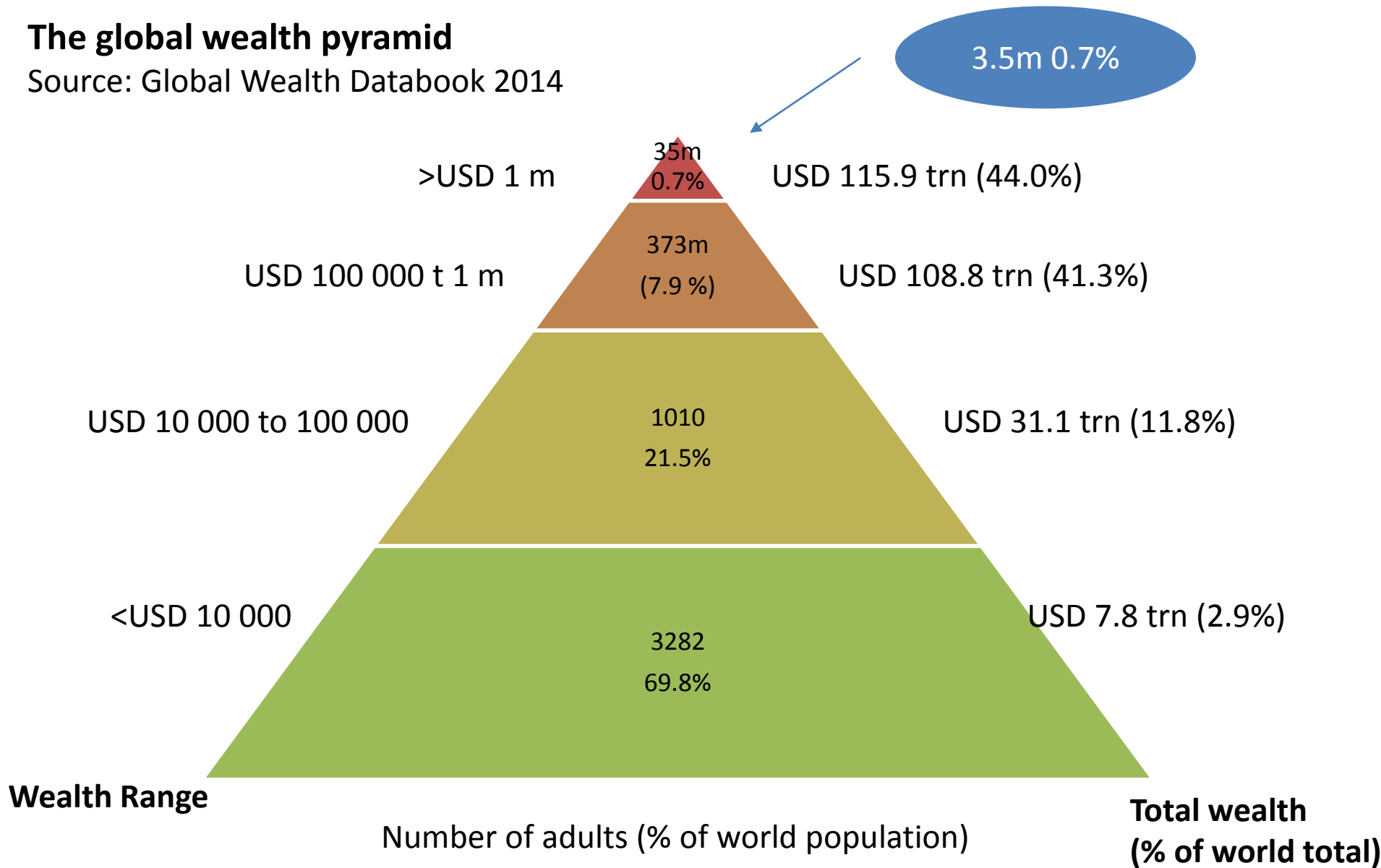
Digitization

Urbanization



The global wealth pyramid

Source: Global Wealth Databook 2014



Increase of wealth for 0.7 percent in 2014 over 2013 number was 17.2 trillion = >2x wealth of bottom

Rapacious Capitalism Unleashed?



Martin Shkreli, Turing Pharmaceuticals CEO



**Greater Vancouver house
prices jump 20 per cent
to average \$1.47-million**

[Brent Jang](#)

VANCOUVER — The Globe
and Mail

Sep. 02, 2015



More faces of rapacious capitalism

- In 2009, Goldman Sachs international vice chairman Lord Brian Griffiths, described giant paychecks for bankers as an economic necessity.
“We have to tolerate the inequality as a way to achieve greater prosperity and opportunity for all,”.
- <http://blogs.wsj.com/marketbeat/2009/11/09/goldman-sachs-blankfein-on-banking-doing-gods-work/>



Has written and lectured extensively on economic issues and the relationship of the Christian faith to politics and business

Served at No. 10 Downing Street as head of the Prime Minister's Policy Unit from 1985 to 1990 - was a chief architect of the government's privatisation and deregulation programmes

Koch Brothers



- \$ spent on 2012 Election \$400m
- Planned for 2016 election \$889m
- # of staff hired in their competitive intelligent team to gather information on Liberals - 25 including a former CIA analyst

Source Politico 11/18/15

Liu Yiqian

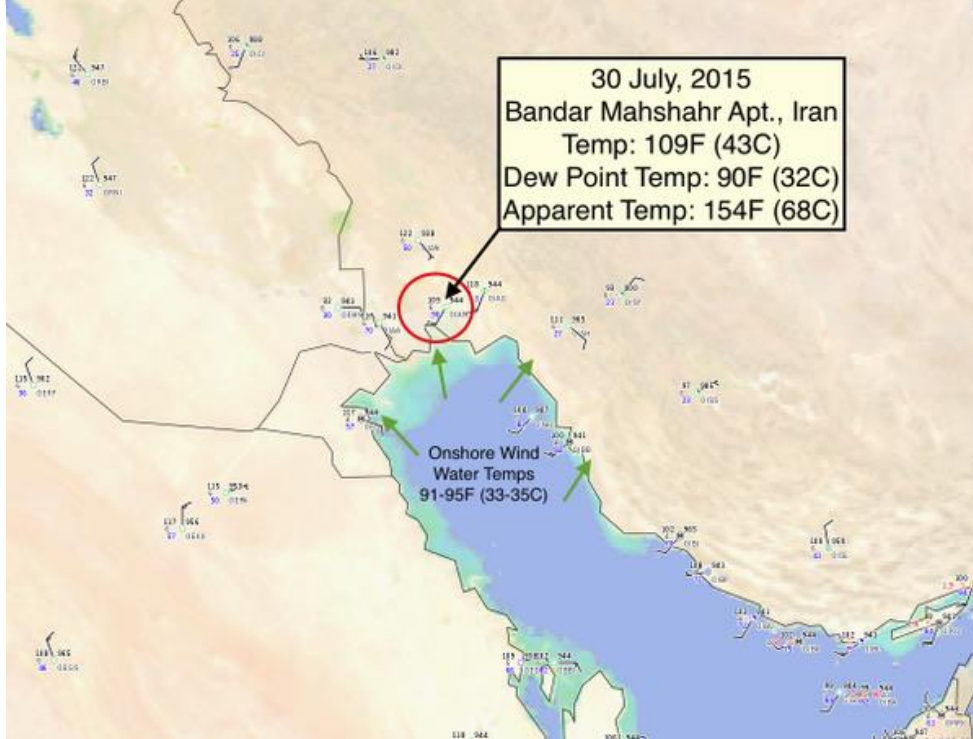
- Liu Yiqian -paid 170m for a Modigliani nude.
- “The message to the West is clear: We have bought their buildings, we have bought their companies, and now we are going to buy their art.”



Is Rapacious Capitalism Contagious?

- Gladwell in discussing school shootings referenced Stanford sociologist Mark Granovetter who noted the paradox of “situations where outcomes do not seem intuitively consistent with the underlying individual preferences.”
- Riots
- Providing a script or the wrong mental model of how things should be





Are things changing?

“Commodities linked to nature (water, fibre, palm oil etc...) will see scarcity and pricing pinch. Companies need to think about long term access to natural capital.”

Climate



Resources



Supply chains



Source K. Brady

Example ASI Standard - structure and concept



- Primary producers/transformers
 - Hydro
 - RTA
 - Alcoa
 - Aleris
 - Constellium
 - Novelis
- Convertors
 - AMAG/Constantia Flexibles
 - Amcor Flexibles
 - Ball Corporation
 - Rexam
 - TetraPak
- Commercial/consumer goods producers
 - Audi/Volkswagen
 - BMW
 - Jaguar/Landover
 - Nespresso

Source: Hydro

*“The main trend is for **transparency** – transparent as you are comfortable is ideal but companies like NIKE and Patagonia are pushing more and more radical transparency. I never thought we would see this...”*

*“The internet of things combined with the cloud will produce **data** anyone can use...”*

*“Increasingly it is going to be important for **suppliers and vendors** to be aware of the importance of sustainability issues and to be a **partner to create shared value** – pressure will be greater and greater...”*

Transparency



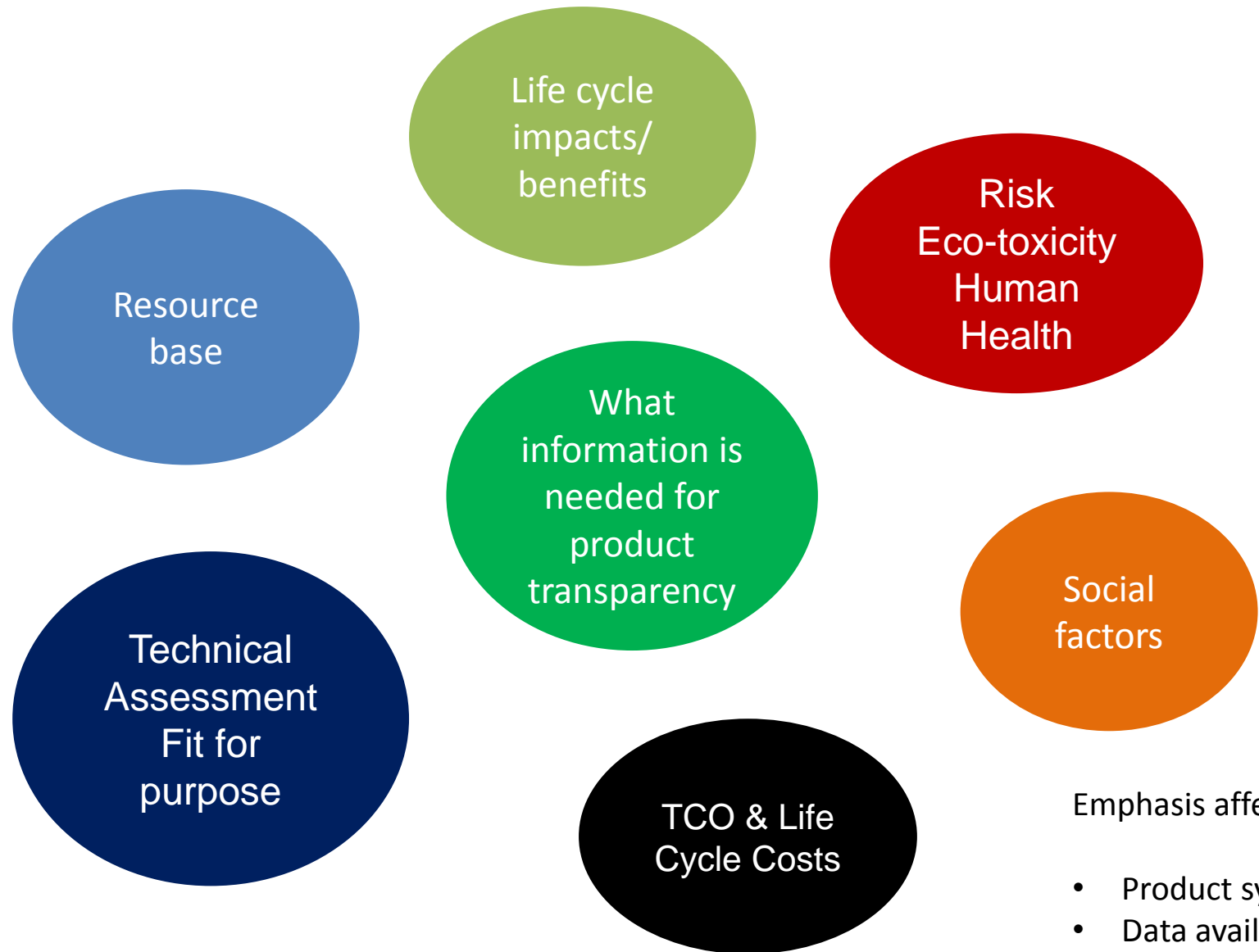
Technology



Shared Value



Source K. Brady



Emphasis affected by

- Product system
- Data availability
- Ability to influence
- External pressure
- Etc...

Source K. Brady

“employees and potential employees are asking what are you doing about climate change, what are you doing about...”

“We see recognition in the financial services sector that improvement is needed but no inclination or courage from companies to be the first to really move...”

Innovation comes from real science and thinking – changing the way we make things and engineering advances are linked to the circular economy – lighter stuff, different materials, and better products

Workforce &
Social Capital

Financial Management
Engagement

Innovation



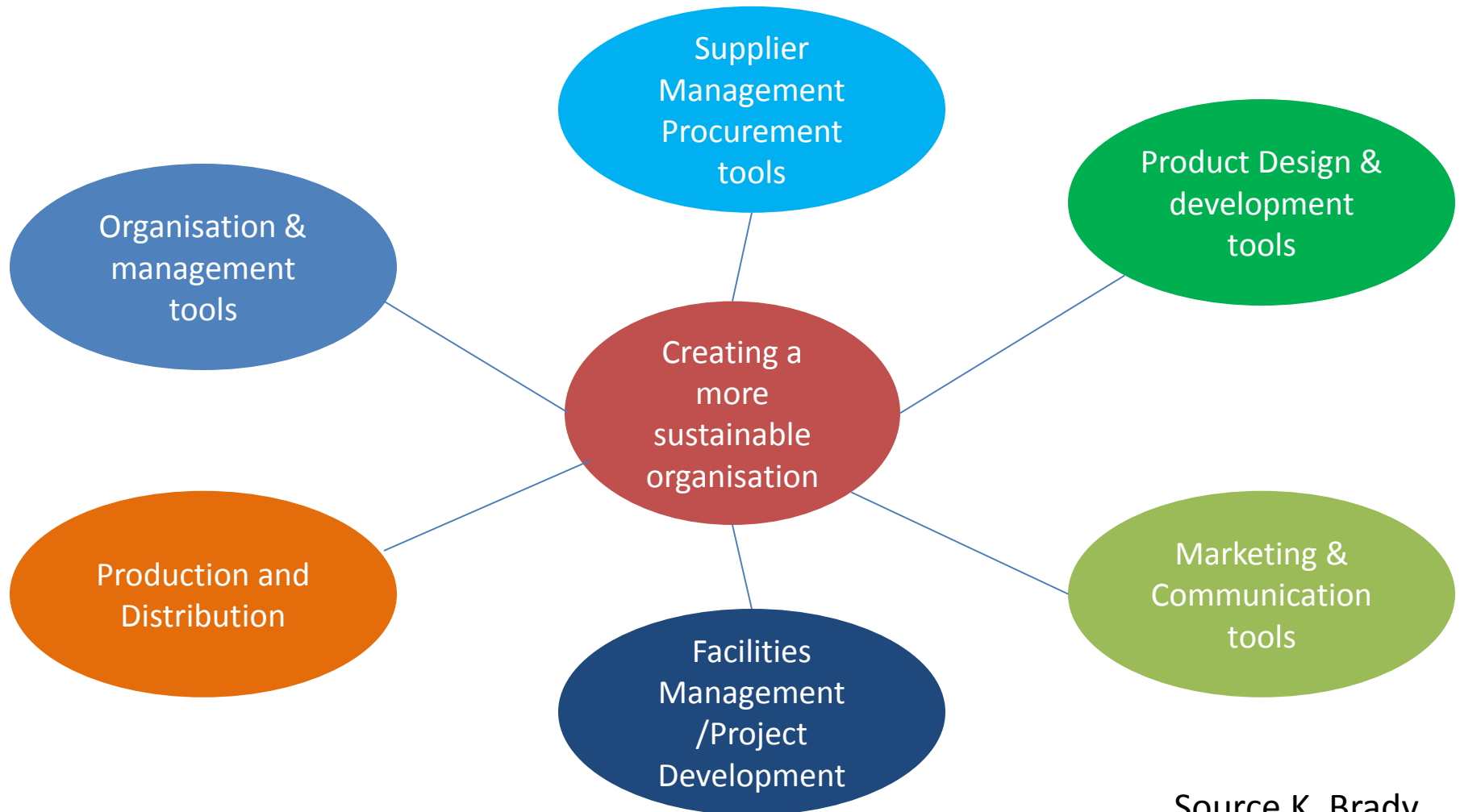
Source K. Brady

State of Play

- Mature understanding of “weak” sustainability
- Serious lack of recognition of scale and scope of challenge
- Progress stagnant due to lack of incentives- carbon pricing, regulation, market rewards – all missing
- Metrics on outcomes lacking



We have the Tools



Source K. Brady

Need to join them up – need more interoperability

We Lack Vision and Leaders who Challenge Conventional Thinking

“I believe that the financial crisis of 2008/9 exposed more a lack of ethics and morality -- especially by the financial sector -- rather than a problem of regulation or criminality. There were, of course, regulatory lessons to be learned, but at heart **there was a collective loss of our moral compass. Too many put self-interest ahead of the interest of the greater good**”.

It became all about "having more," instead of "living more.”

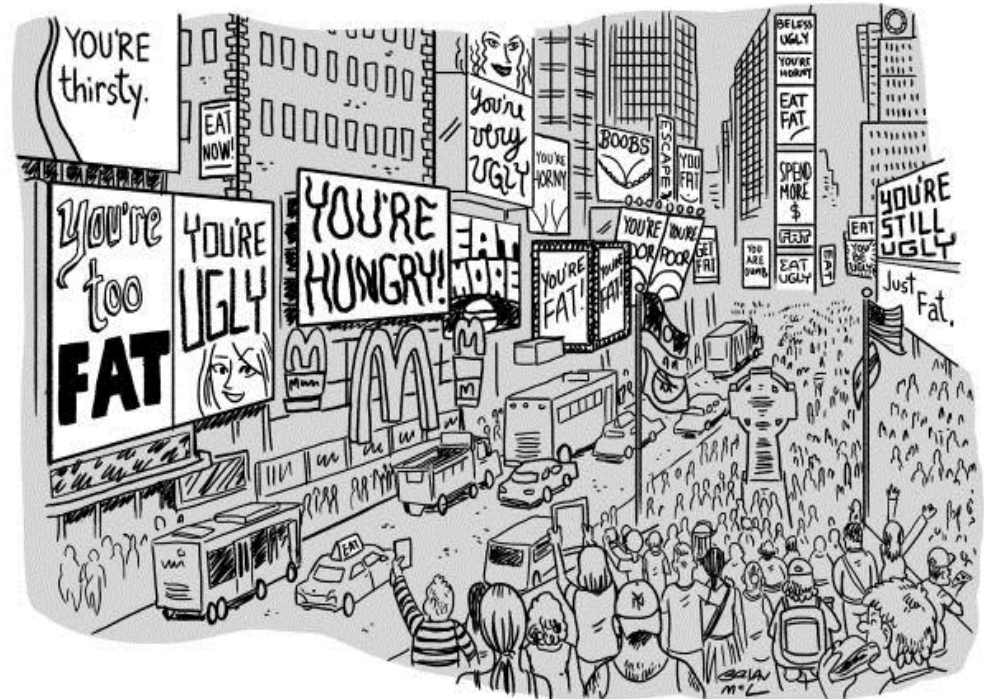
Addressing the weaknesses of capitalism will require us, above all, to do two things: first, to take a long term perspective; and second, to re-set the priorities of business”.

“The great challenge of the 21st century is to provide good standards of living for 7 billion people without depleting the earth's resources or running up massive levels of public debt. **To achieve this, government and business alike will need to find new models of growth that are in both environmental and economic balance.** It requires new levels of leadership as well”.



Paul Polman
CEO Unilever

What to do?



“the key to escaping the “20th century lifestyle” lies in changes to the consumers consciousness and consumption activities

Fumikazu Masuda

Anti-consciousness?

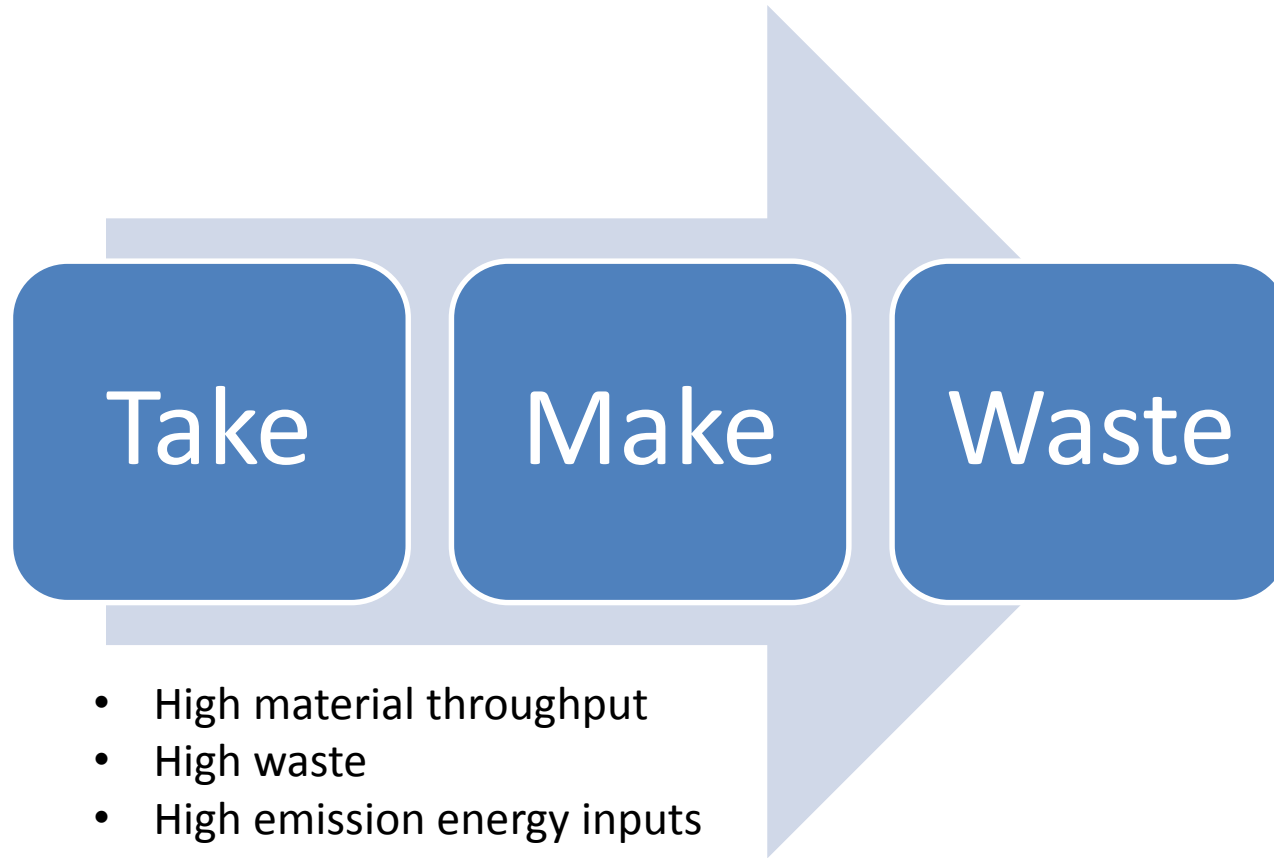


2014 Revenue est. 1.5b USD



2015 revenue 14b USD

Throughput economy

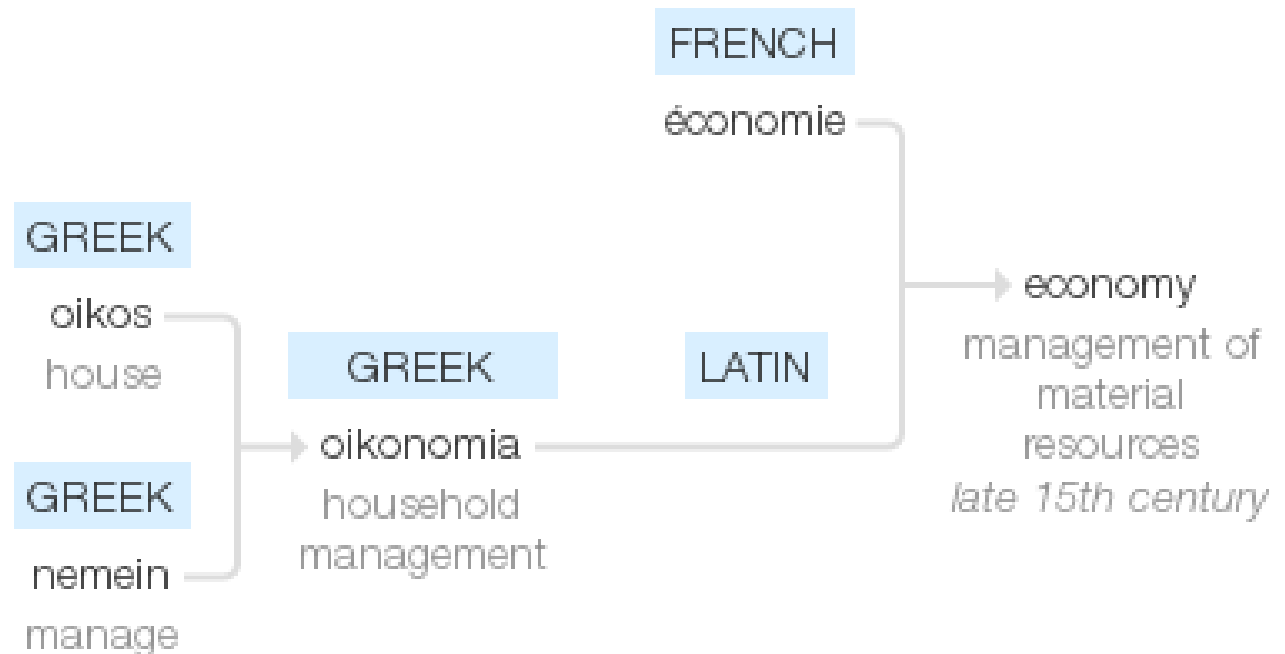


- High material throughput
- High waste
- High emission energy inputs
- Dependence on growth
- Decreasing quality
- Dependence on cheap labour
- Concentration of wealth

Economy

1. The wealth and resources of a country or region, especially in terms of the production and consumption of goods and services.

2. Careful management of available resources



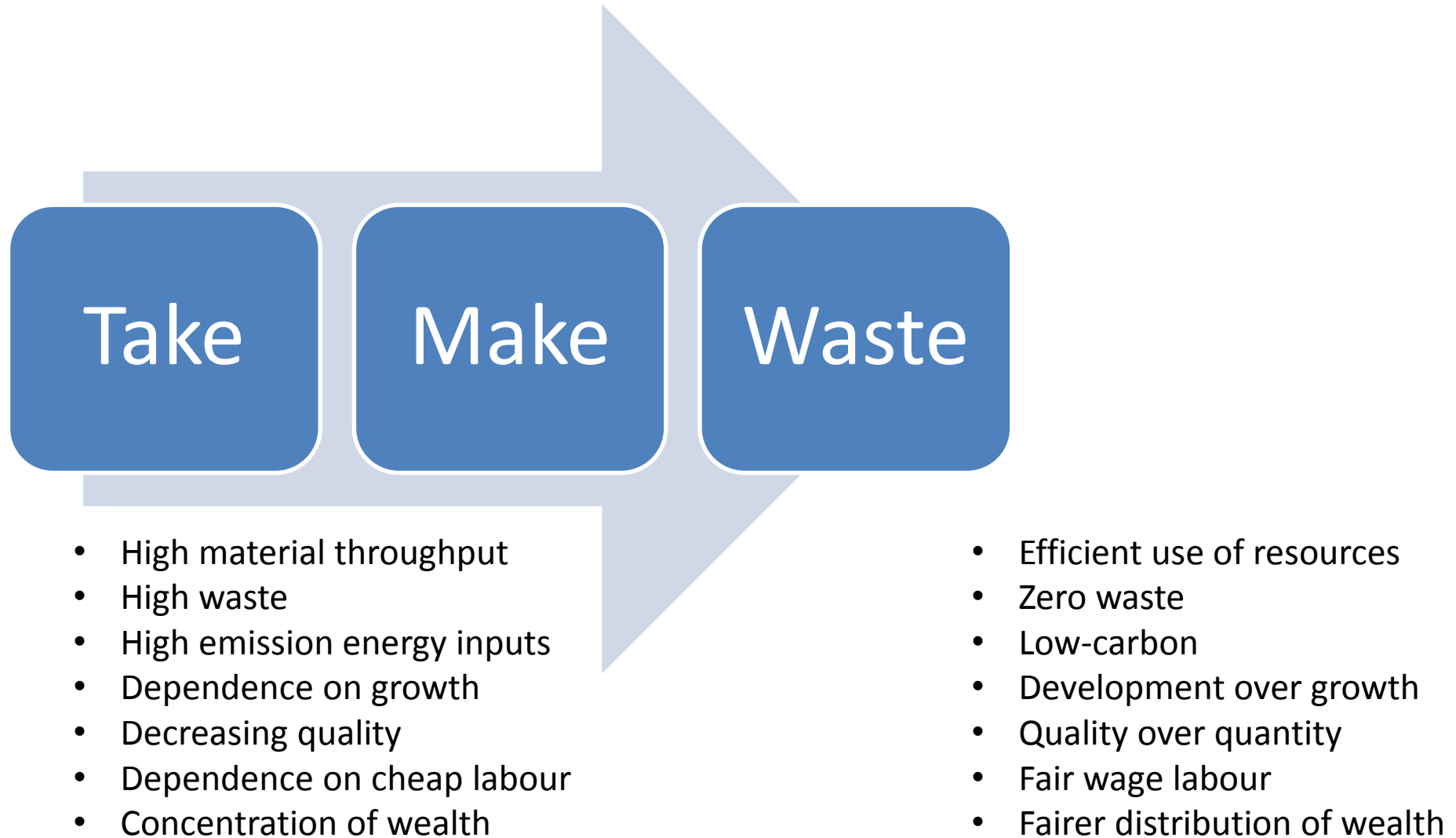
Consequences of the Linear Economy

- According to Greenpeace's report [Plastic Debris in the World's Oceans](#) "At least 267 different species are known to have suffered from entanglement or ingestion of marine debris including seabirds, turtles, seals, sea lions, whales and fish. The scale of contamination of the marine environment by plastic debris is vast. It is found floating in all the world's oceans, everywhere from polar regions to the equator."

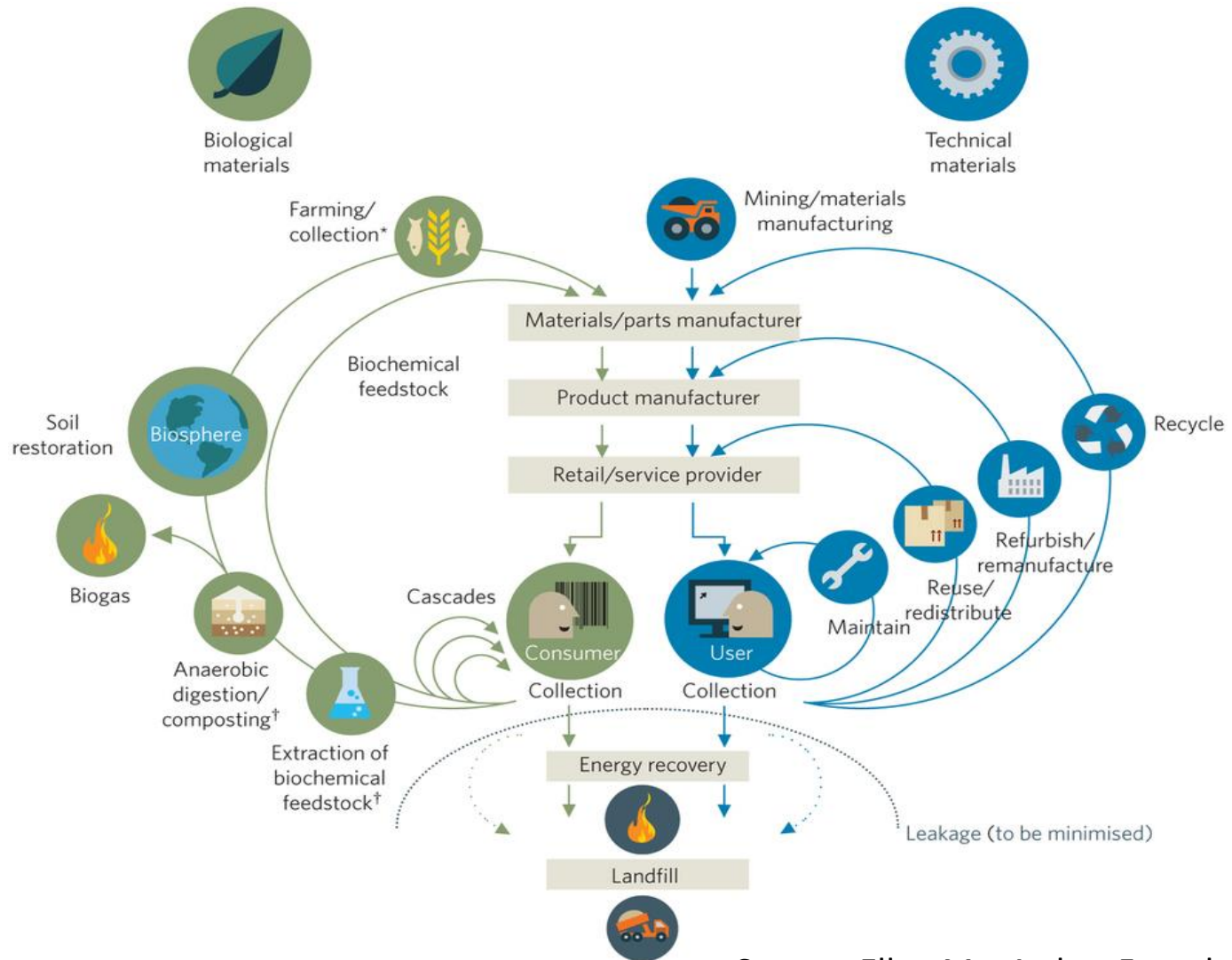


<http://ecologymatters.org/marine-debris/>

Throughput economy

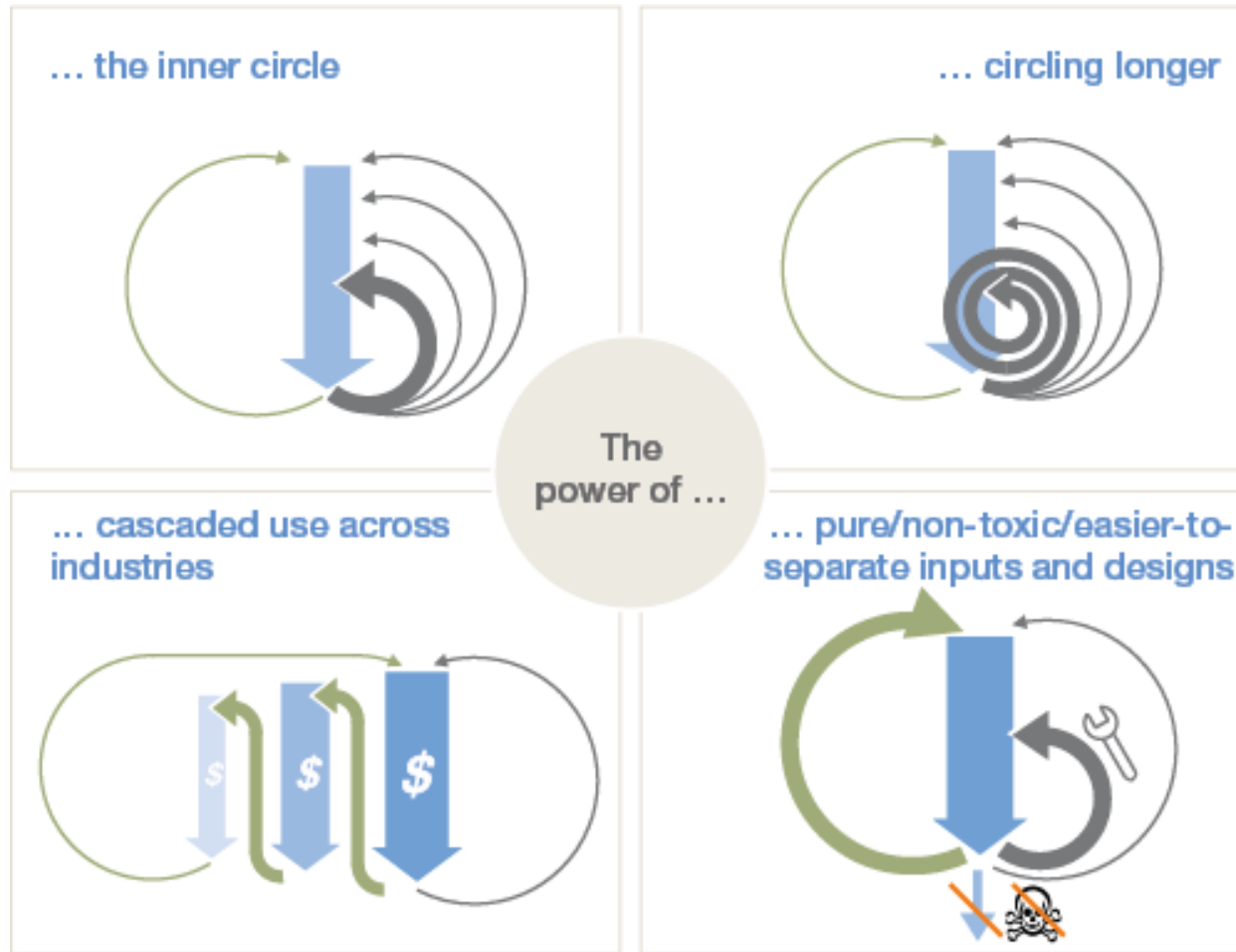


We Need a Plan - Circular Economy



Source: Ellen MacArthur Foundation 2013

Where to Focus in the Circular Economy



Characteristics of CE Products

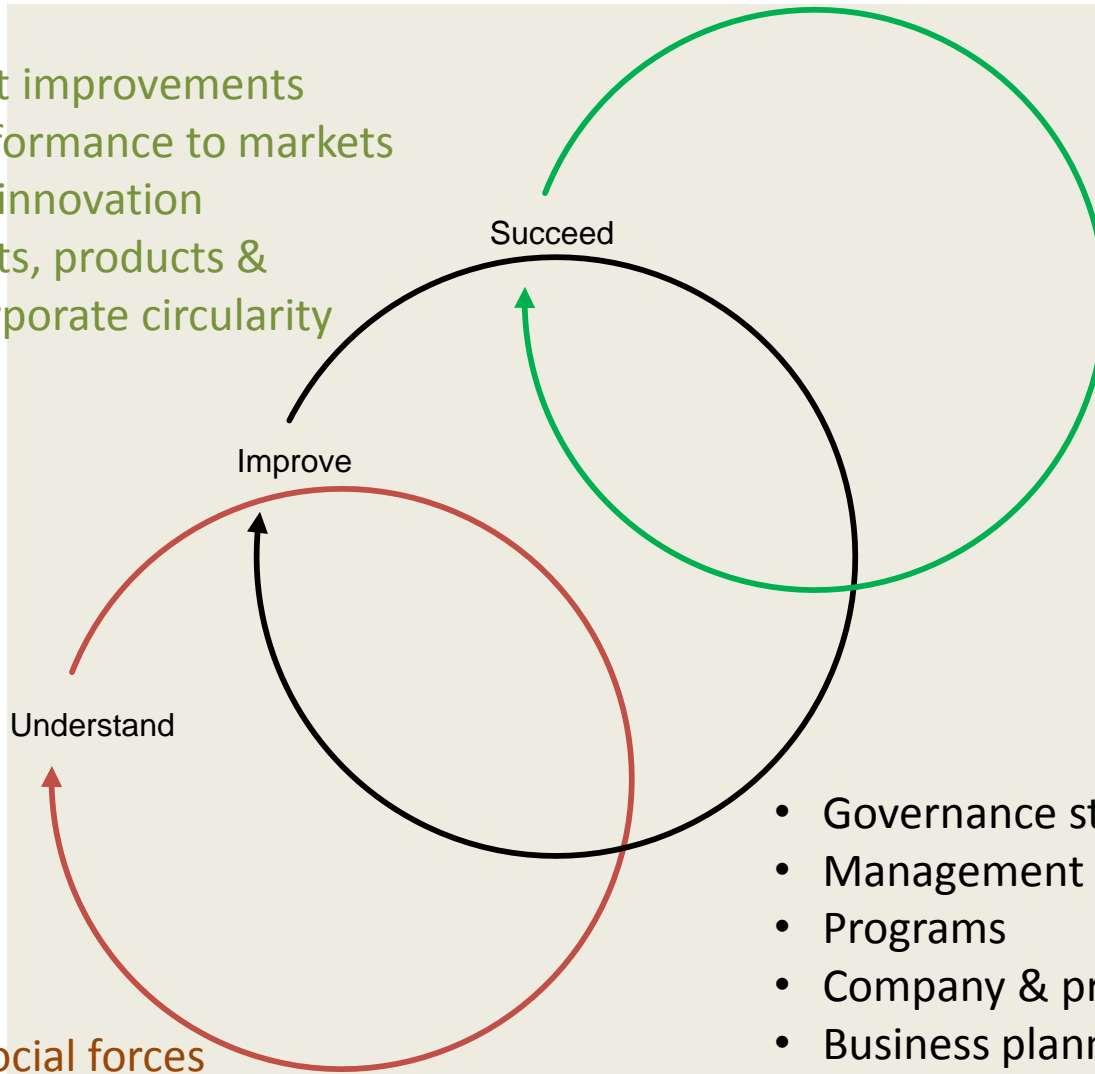
- Biological sound or technically tight loops
- Value change connectivity
- Materials that are responsibly produced/supplied
- Designed with purpose
- Efficient and effective in use
- After purpose fulfilled - designed for disassembly/recovery
- and ...
- Address fundamental needs



Source K. Brady

Characteristics of CE Companies

- Credibly document improvements
- Communicate performance to markets
- Build platform for innovation
- Create new markets, products & services that incorporate circularity



- Governance structures
- Management systems
- Programs
- Company & product performance
- Business planning and processes
- Decision support tools & data

- Env., technical & social forces
- Markets & Needs
- Company & Product Performance
- Strategic direction

Source K. Brady

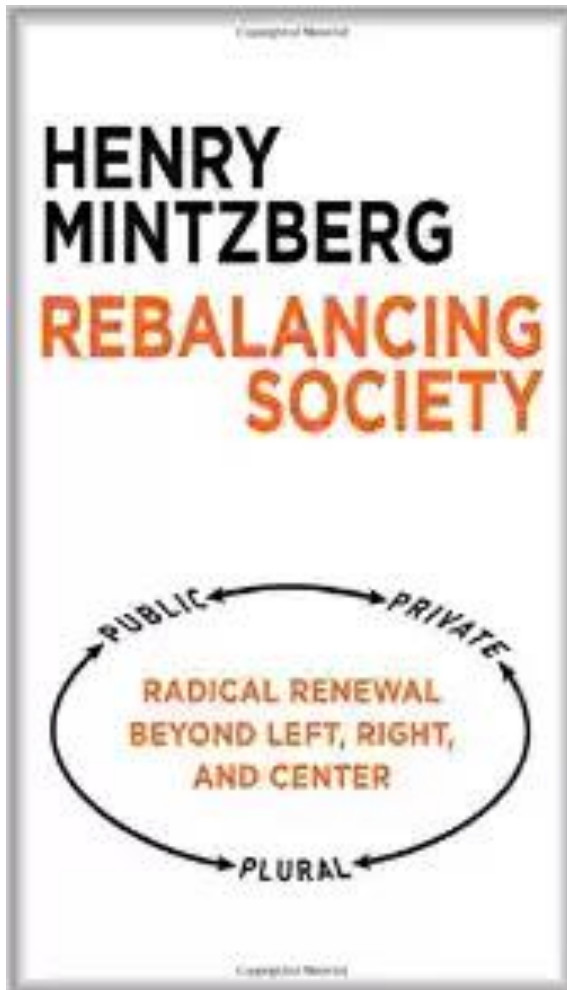
CE is not enough

The UN Sustainable Development Goals



Image source: UN Sustainable Development Knowledge Platform (2015)

Want to fix things - Listen to Henry



- Put a price on problems
- Strengthen governments and civil society
- Change the power dynamics
- Ask yourself why not?

Or think like these guys



Eben Bayer & Gavin McIntyre – while in engineering school invent way to get biopolymers from agricultural waste and mushrooms

Mushroom Materials

High-performance, Cost-effective, Sustainable



We grow materials made from agricultural byproducts and mushroom mycelium. Mycelium is a natural, self-assembling glue, digesting crop waste to produce cost-competitive and environmentally responsible materials that perform.

Grown, Not Manufactured

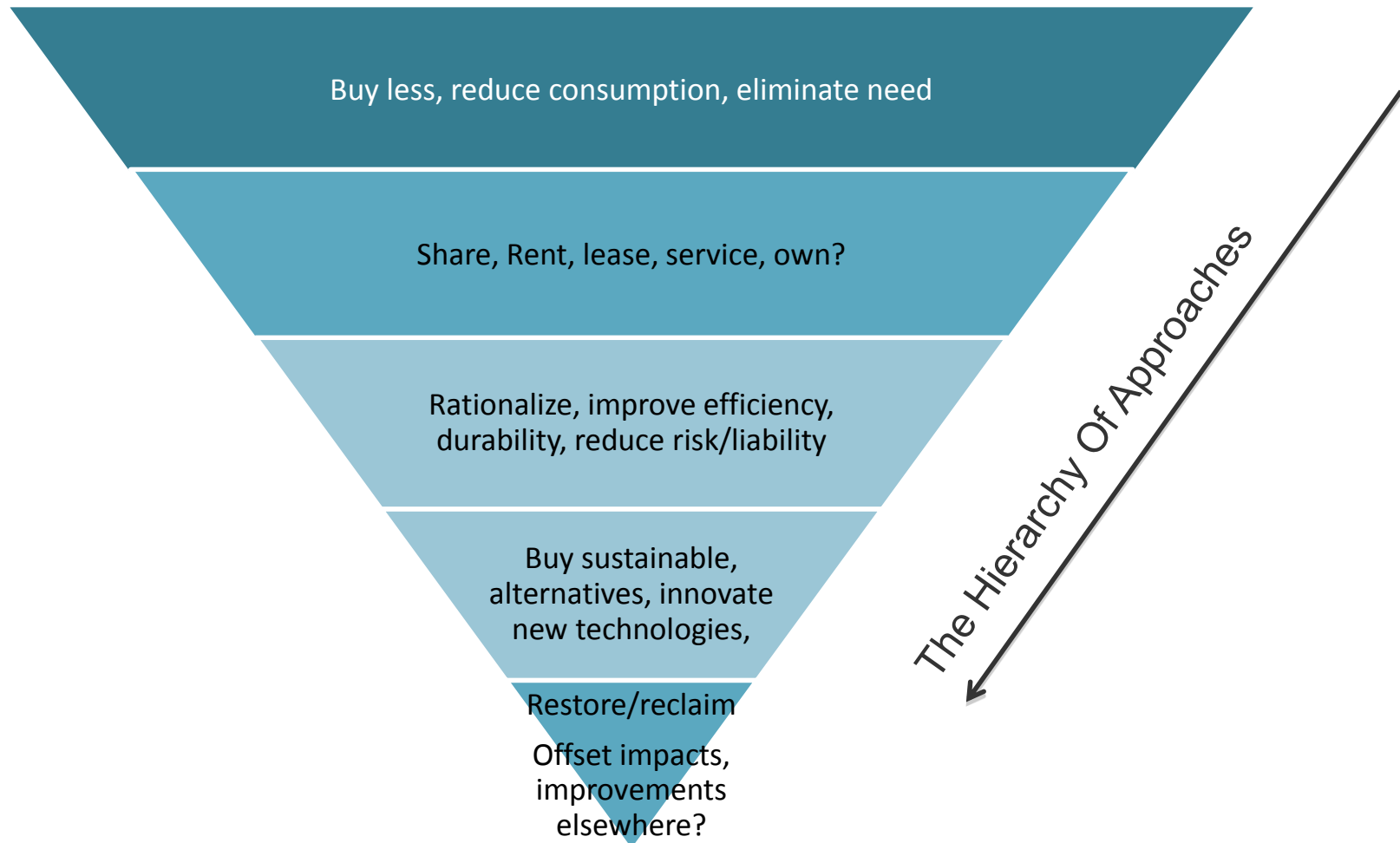
Our large-scale grow factories are truly revolutionary. We harness the power of nature - the cleanest technology on Earth, eliminating the pollution generated across the petroleum-based plastics supply chain.

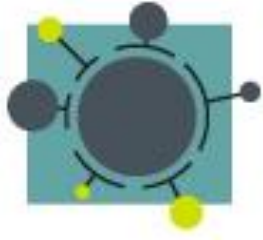
Watch the video to find out how.

https://www.youtube.com/watch?feature=player_embedded&v=P4YEvHUxIEE



Where to start? A hierarchy of approaches





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