

Why is Resource Management so important for Biodiversity Protection

JANEZ POTOČNIK
Co-chair UNEP International Resource Panel (IRP)
Partner SYSTEMIQ

Brussels, 24th June 2021

Who are we?

International Resource Panel - IRP
was launched in 2007 with the idea of creating a science-policy interface on the sustainable use of natural resources and in particular their environmental impacts over the full life cycle

Climate Change



Biodiversity Loss



Resource Efficiency



Panel Co-Chairs:
Janez Potočnik and Izabella Teixeira

SCIENTIFIC PANEL

Internationally
recognized experts on
sustainable resource
management;
Scientific assessments
and advice, networks

Science-Policy interface

Head of Secretariat: Merlyn van Voore

UNE SECRETARIAT

Direction, procedures, support in
development and
implementation of assessments,
outreach

Steering Committee Co-Chairs:
Astrid Schomaker and Mark Radka

STEERING COMMITTEE

Governments from
developing and
industrialized countries;
Strategic guidance,
political support, regional
synergies

Strategic Partners



World Business Council for
Sustainable Development



International
Science Council



WORLD
ECONOMIC
FORUM



PBL Netherlands Environmental
Assessment Agency



SCIENCE
POLICY
BUSINESS
FORUM



WORLD
RESOURCES
INSTITUTE



WORLD
RESOURCES
FORUM



ECLAC



ELLEN MACARTHUR
FOUNDATION



OECD



International
Science Council



YOUTH AND
ENVIRONMENT
EUROPE



PACE
PLATFORM FOR ACCELERATING
THE CIRCULAR ECONOMY

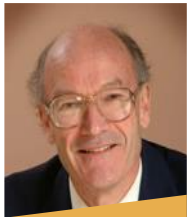


Panel members

Panel Members serve a four-year term, renewable for up to two additional consecutive terms of four years each if circumstances so justify.



Riyanti Djalante
Indonesia
(since 2021)



Paul Ekins
United Kingdom
(since 2013)



Marina Fischer-Kowalski
Austria
(2007)



Stephen Fletcher
United Kingdom
(since 2016)



Maarten Hajer
Netherlands
(since 2010)



Seiji Hashimoto
Japan
(since 2015)



Steve Hatfields-Dodds
Australia
(since 2017)



Stefanie Hellweg
Germany/Switzerland
(since 2016)



Jeff Herrick
USA
(since 2012)



Edgar Hertwich
Austria/Norway
(since 2007)



**Co-Chair
Izabella Teixeira**
Brazil
(since 2017)



Ashok Khosla
India
(since 2007)



Dom Kniveton
United Kingdom
(since 2021)



Joanna Kulczycka
Poland
(since 2020)



S. Vijay Kumar
India
(since 2015)



Reid Lifset
USA
(since 2018)



Yonglong Lu
China
(since 2013)



Keisuke Nansai
Japan
(since 2018)



Nabil Z. Nasr
USA
(since 2014)



Bruno Oberle
Switzerland
(since 2015)



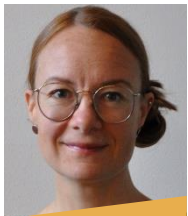
Michael Obersteiner
Austria
(since 2014)



**Co-Chair
Janez Potocnik**
Slovenia
(since 2014)



Antonio Pedro
Mozambique
(since 2015)



Eeva Primmer
Finland
(since 2018)



Anuradha Ramaswami
India/USA
(since 2014)



Heinz Schandl
Austria/Australia
(since 2013)



Mark Swilling
South Africa
(since 2007)



Ester van der Voet
Netherlands
(since 2011)



Helga Weisz
Germany
(since 2018)



Anders Wijkman
Sweden
(since 2014)

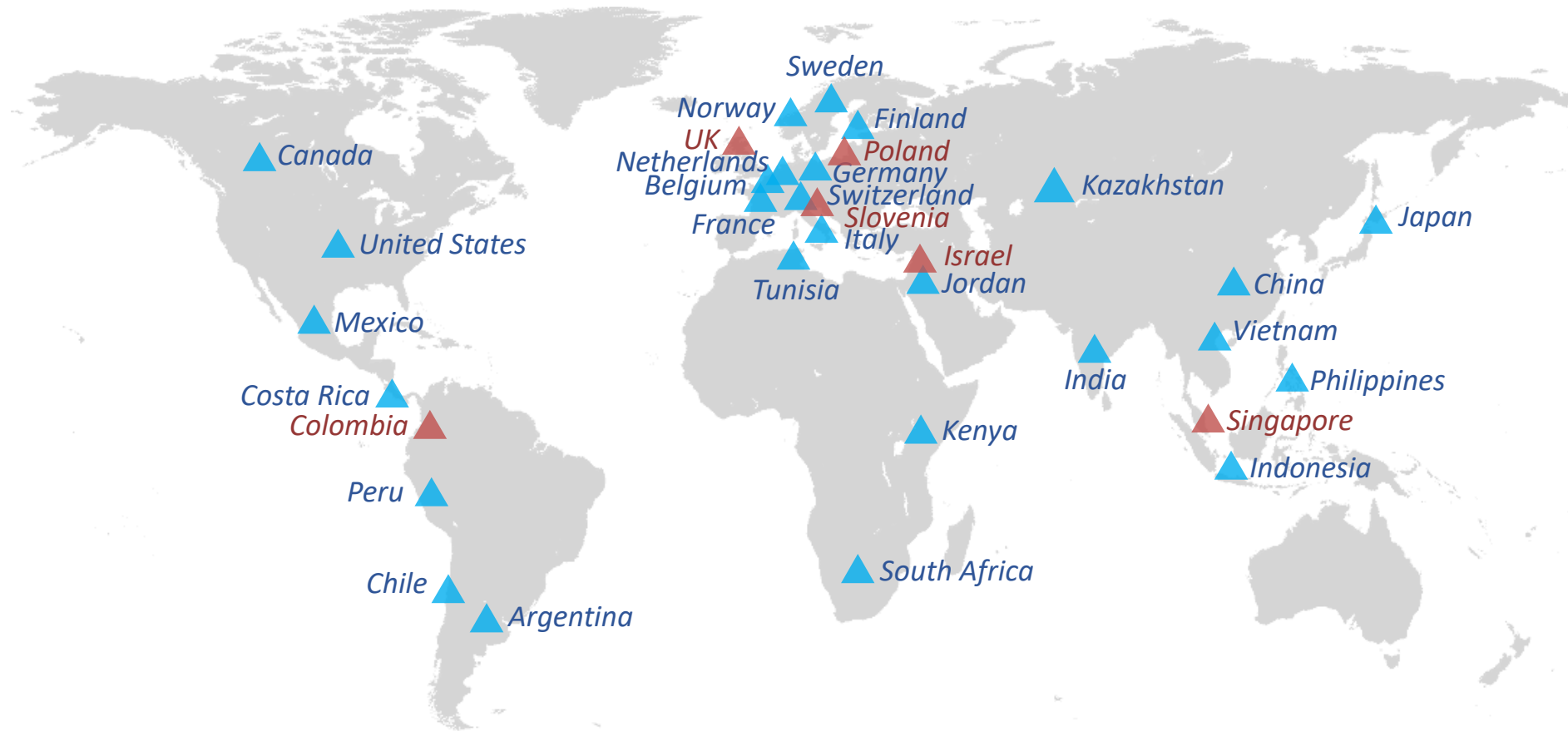


Erinç Yeldan
Turkey
(since 2015)



Bing Zhu
China
(since 2017)

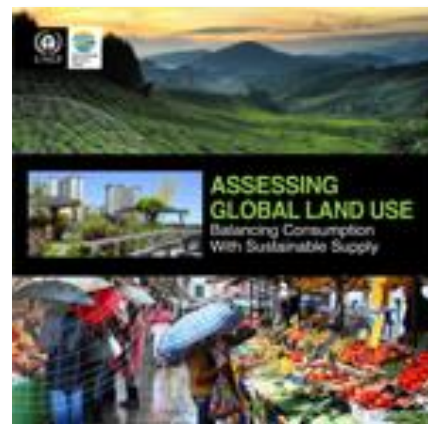
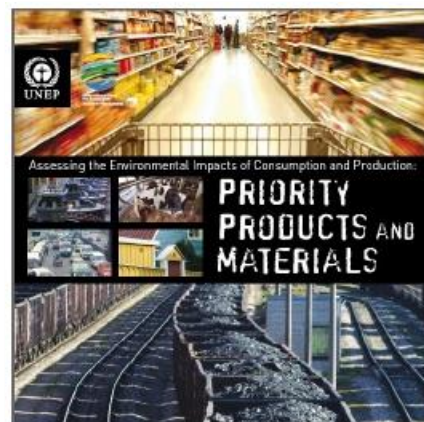
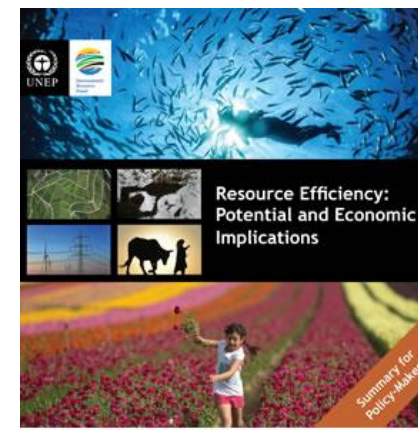
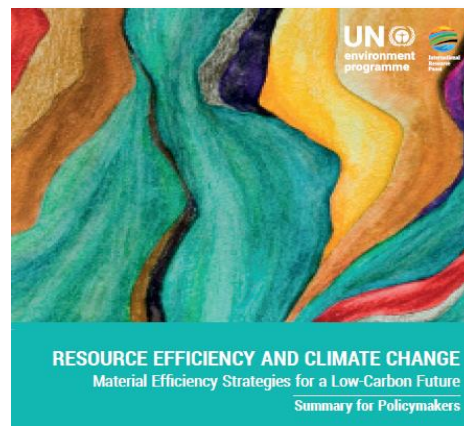
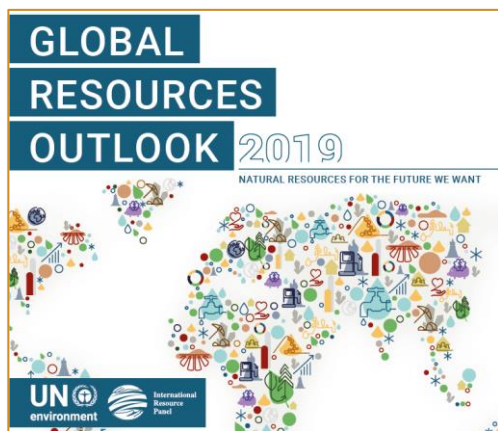
Steering Committee Members + *Observers*



(27 + 6) Governments + European Commission + UN Environment Programme

More than 30 published reports between 2011-2020

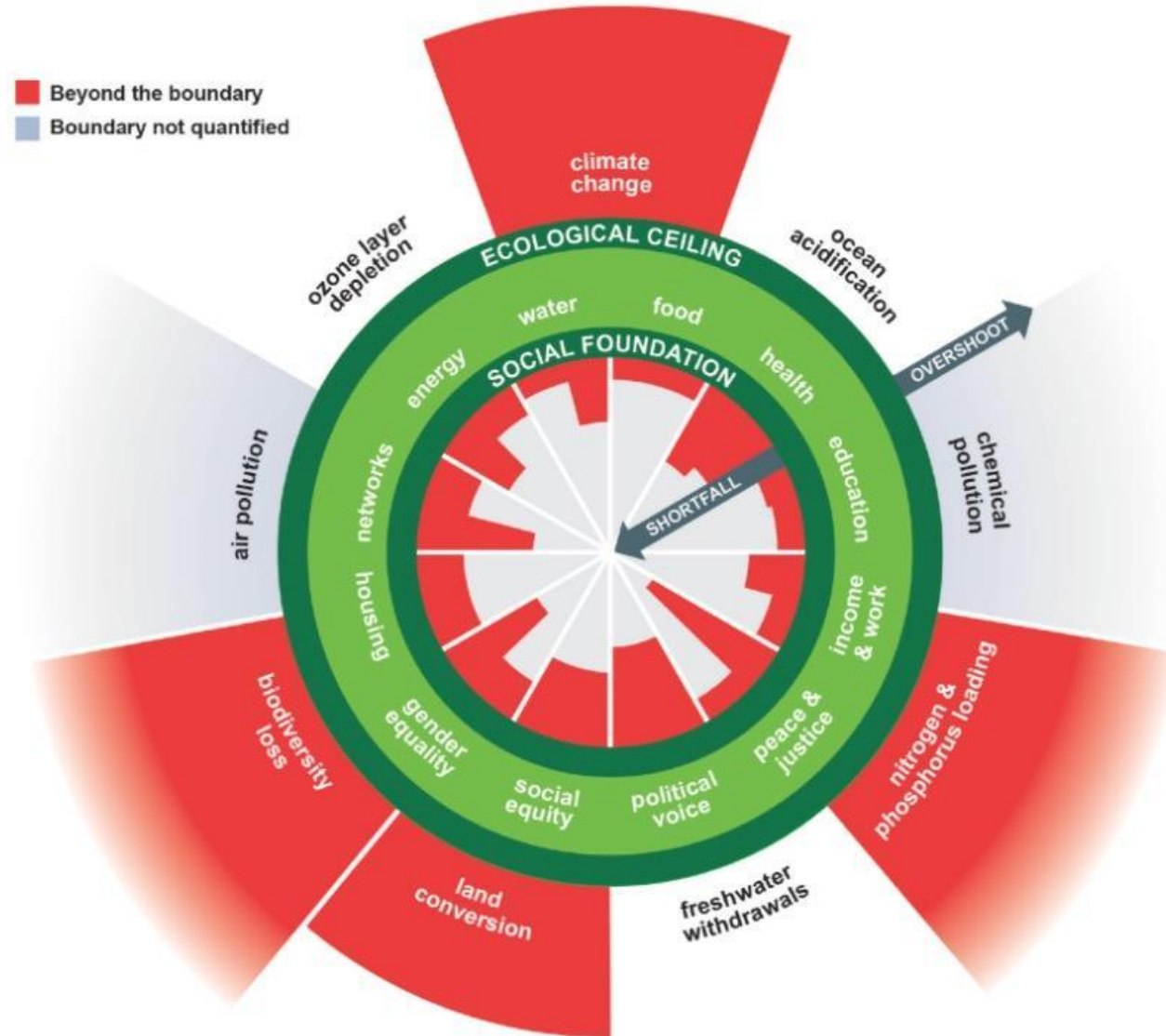
IRP
flagship
report



And many more at:

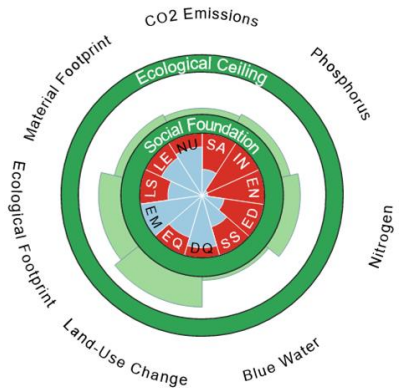
<http://www.resourcepanel.org/reports>

Humanity is living far out of balance

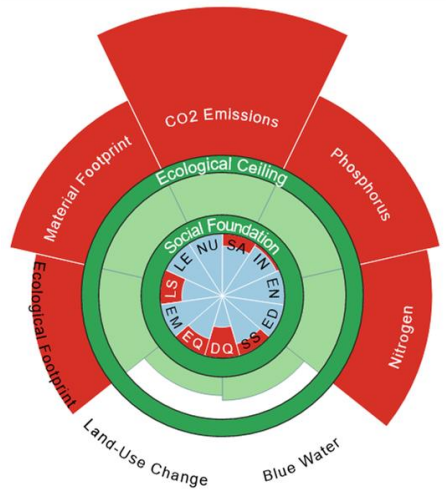


Divergent national contexts

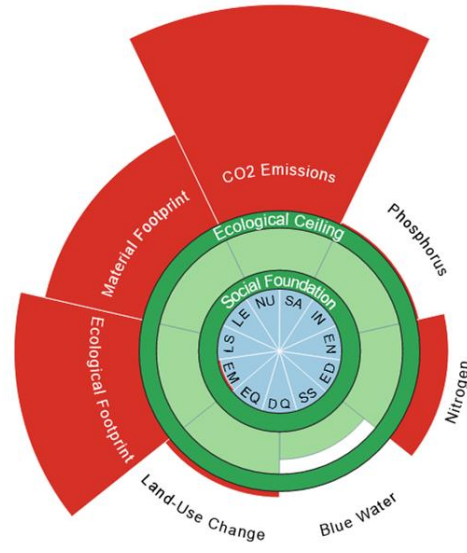
goodlife.leeds.ac.uk



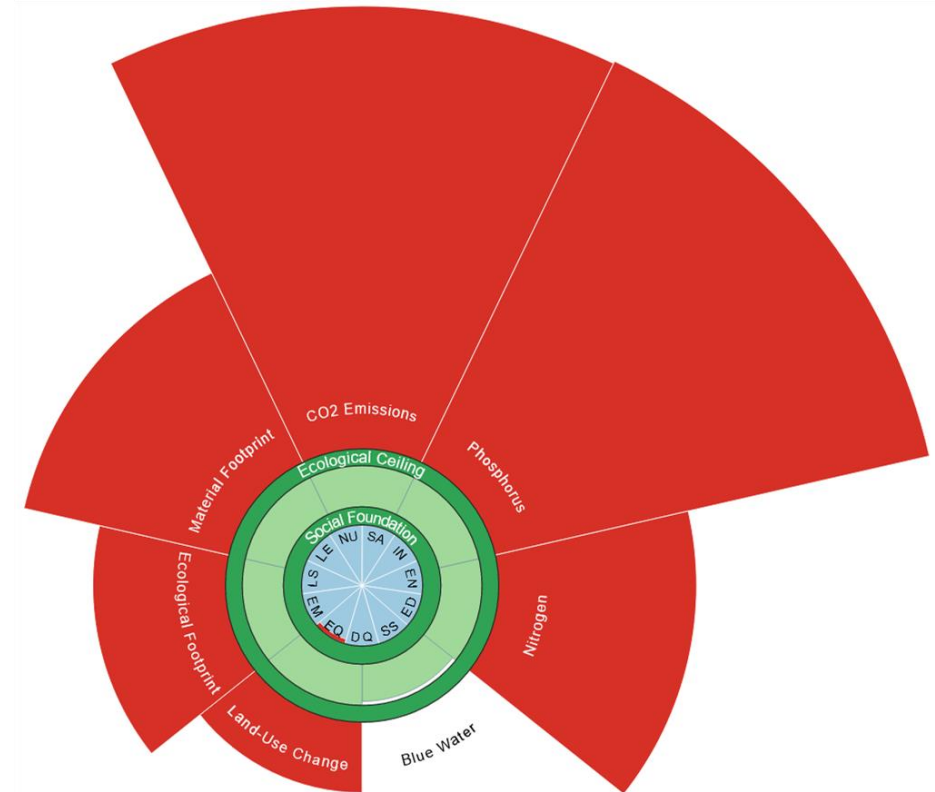
Malawi
\$1,000 pc



China
\$17,200 pc

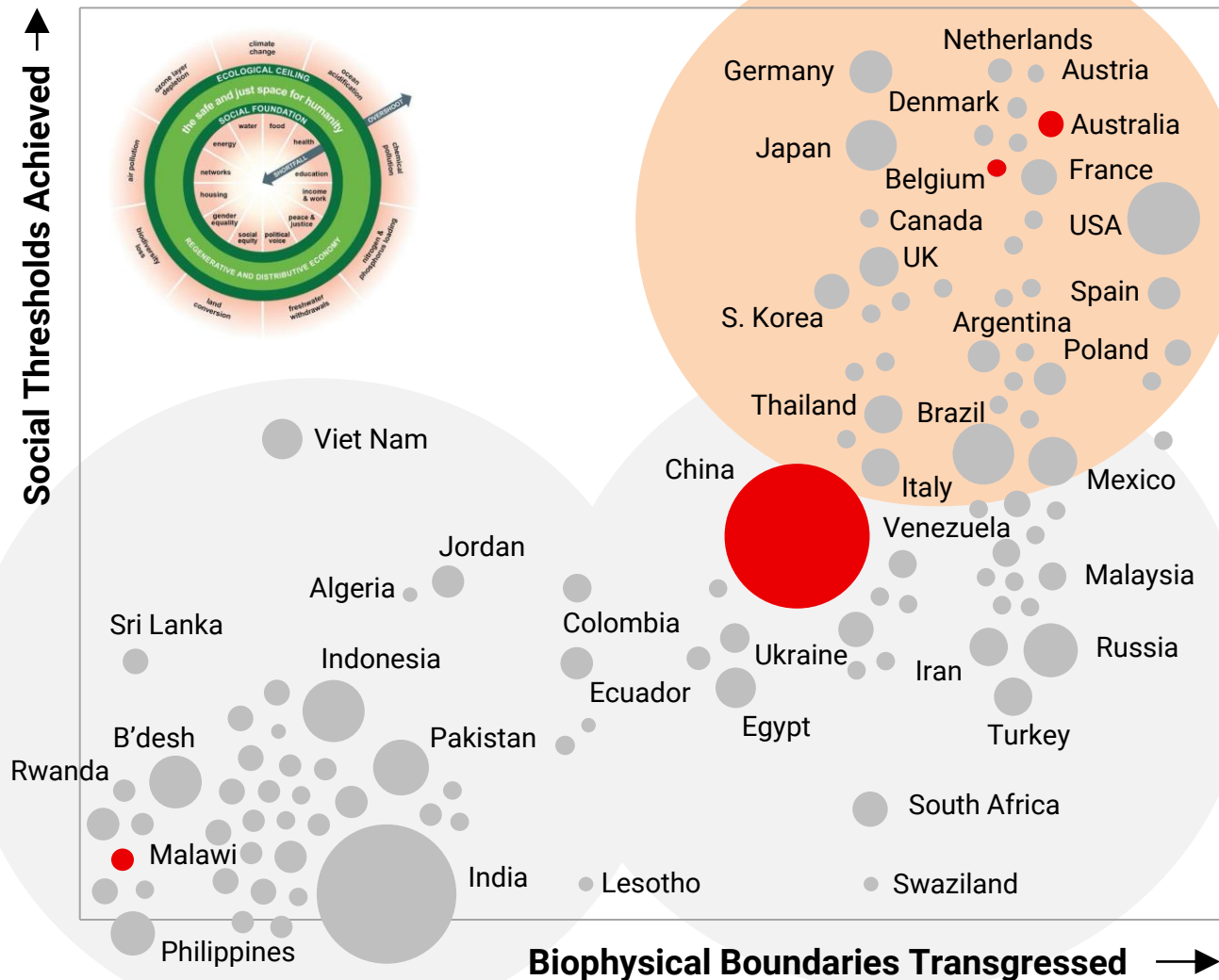


Belgium
\$54,000 pc



Australia
\$54,900 pc

Humanity's sweetspot



colonialism

military power

trade & finance rules

resource extraction

climate-change impacts

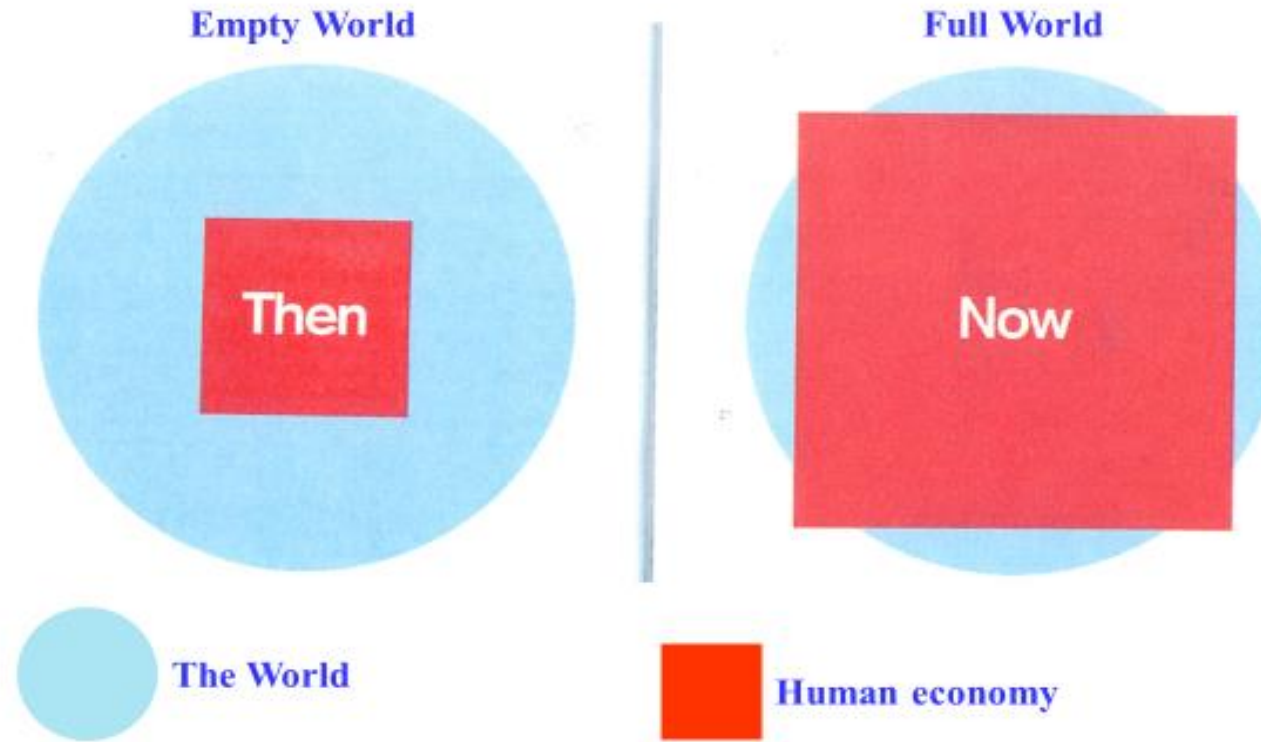


*For the first time in a human history we face the emergence of a single, tightly coupled human **social-ecological system of planetary scope.***

*We are more **interconnected** and **interdependent** than ever.*

*Our individual and collective **responsibility** has enormously increased.*

From “Empty” World to “Full” World



Source: Club of Rome: Simplified after Herman Daly

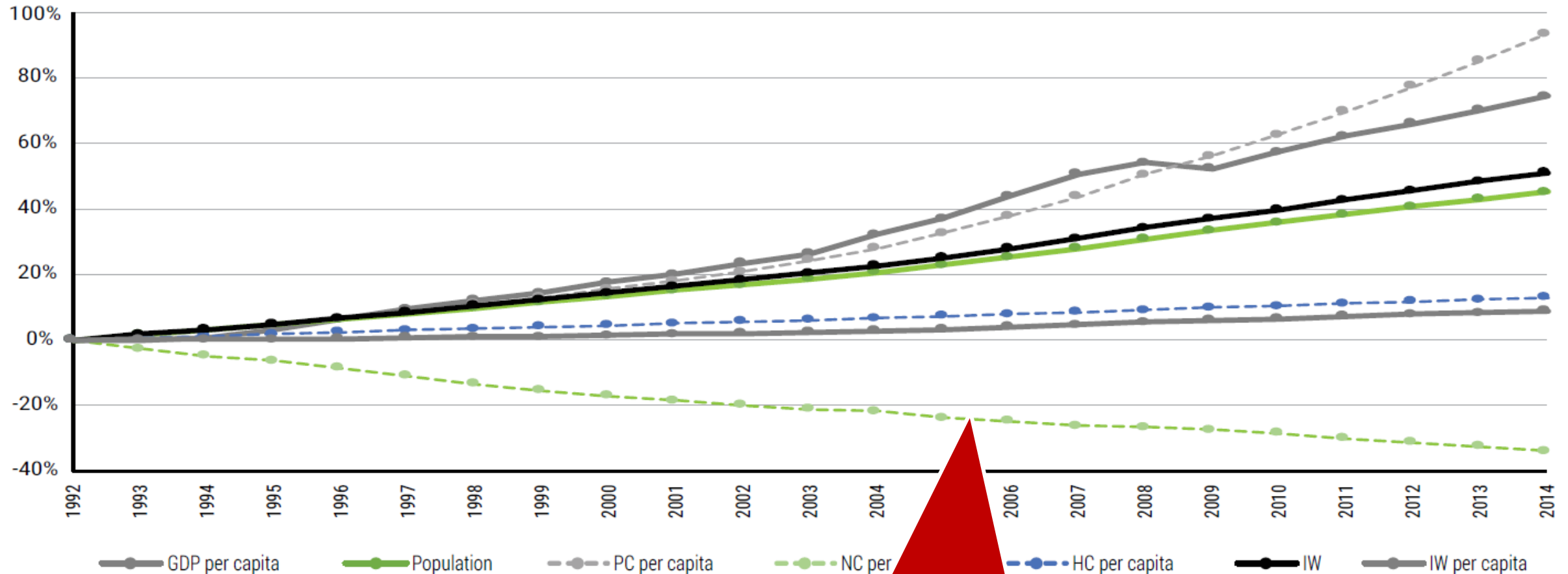
*Labour and Infrastructure limiting
factors of human wellbeing*



*Natural resources and Environmental
sinks limiting factors of human
wellbeing*

Inclusive Wealth (IW) Index (and its components) evolution - 1992 to 2014

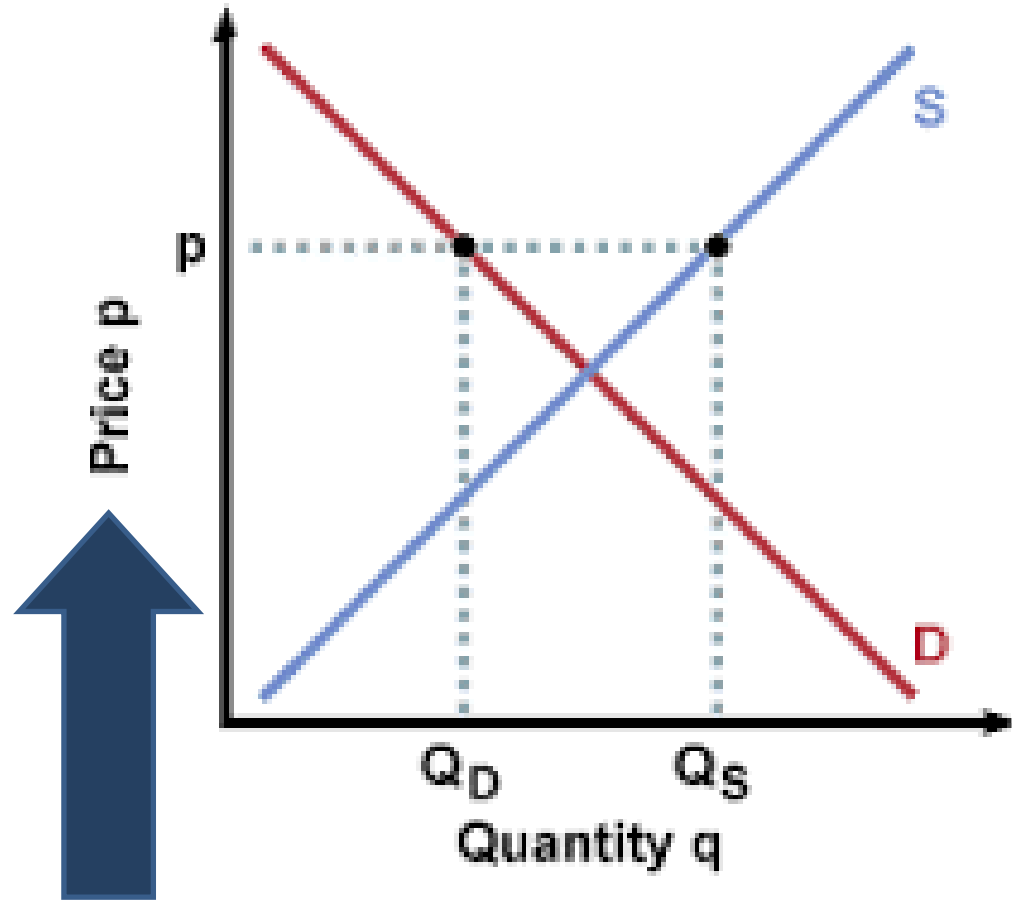
Source: UN, 2018 Inclusive Wealth Report 2018



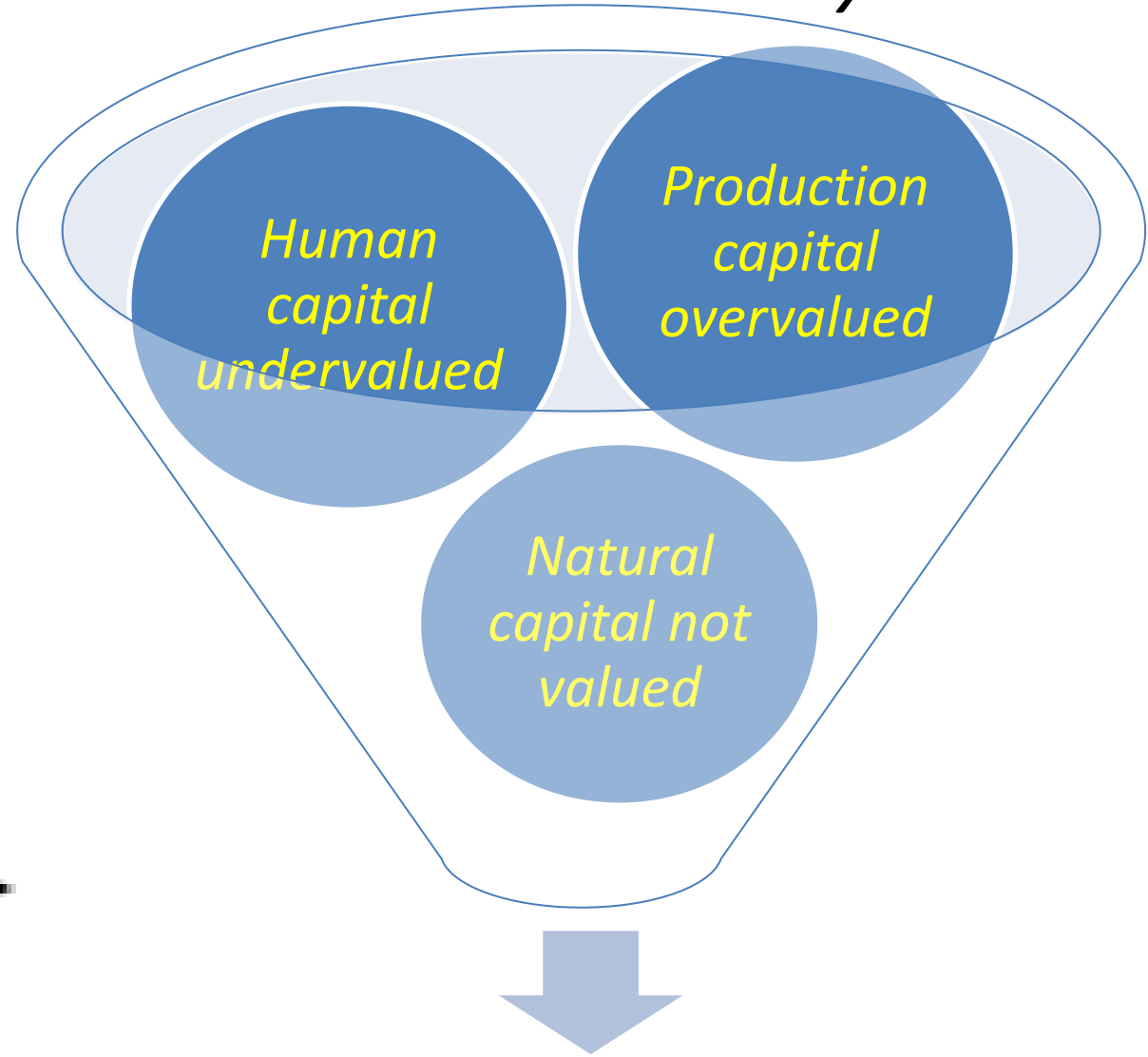
IW – Inclusive Wealth
PC – Production capital
HC – Human capital
NC – Natural capital

Growth of GDP in the past decades has been achieved at the cost of depleting natural capital and indebting future generations

Producers/Consumers
Rational Behaviour

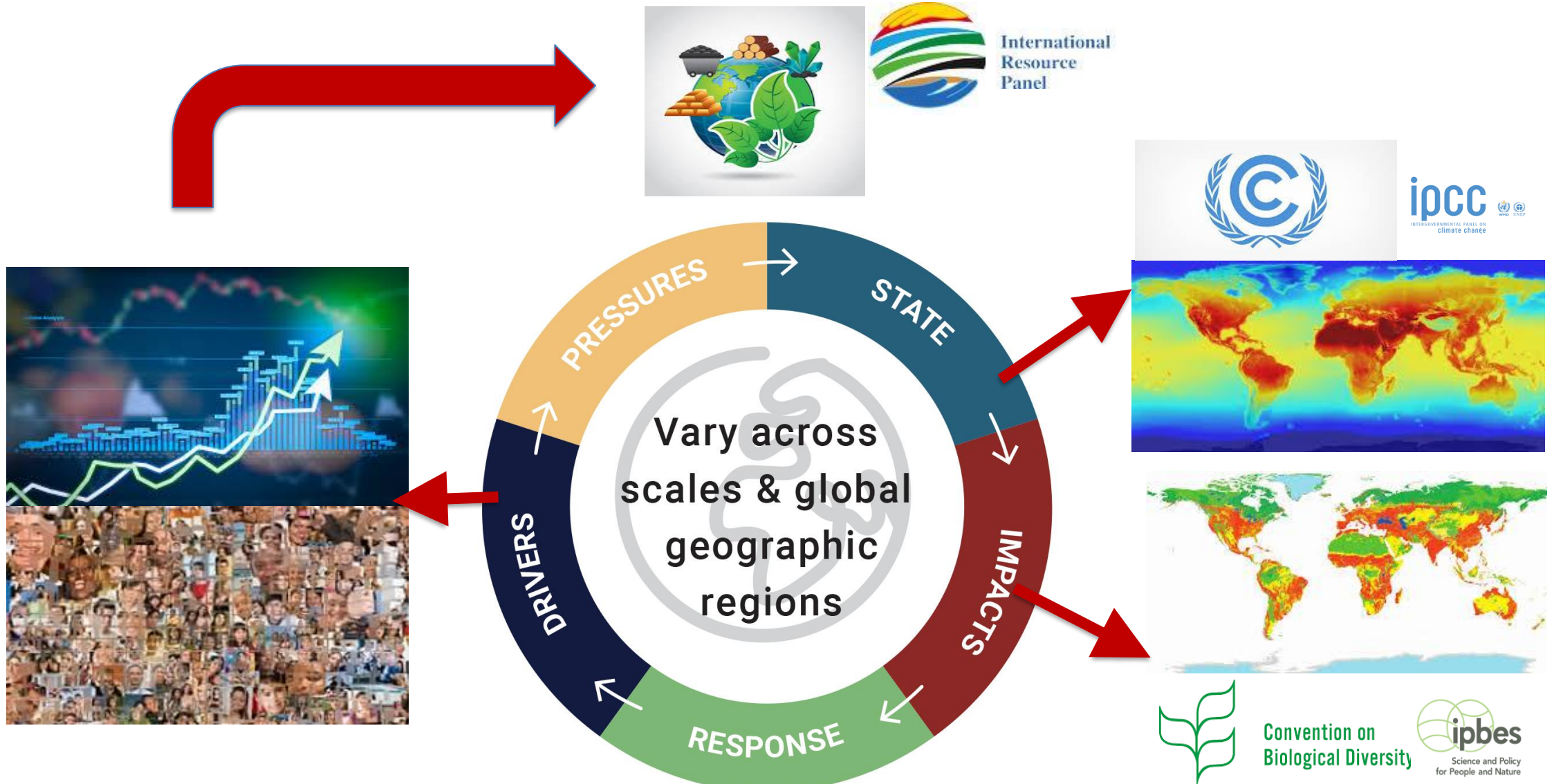


Market Economy



*Economic, social and environmental
(in)balance*

Natural resources are the *bridge* between economy and competitiveness on one hand and climate change, biodiversity loss, pollution and health implications on the other



Natural Resources:

Provide the foundation for the goods, services and infrastructure that make up our current socio-economic systems



Biomass

Biomass (wood, crops, including food, fuel, feedstock and plant-based materials)



Fossil fuels

Fossil fuels (coal, gas and oil)



Metals

Metals (such as iron, aluminum and copper...)



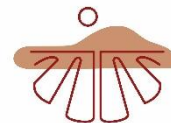
Non-metallic minerals

Non-metallic minerals (including sand, gravel and limestone)

Materials



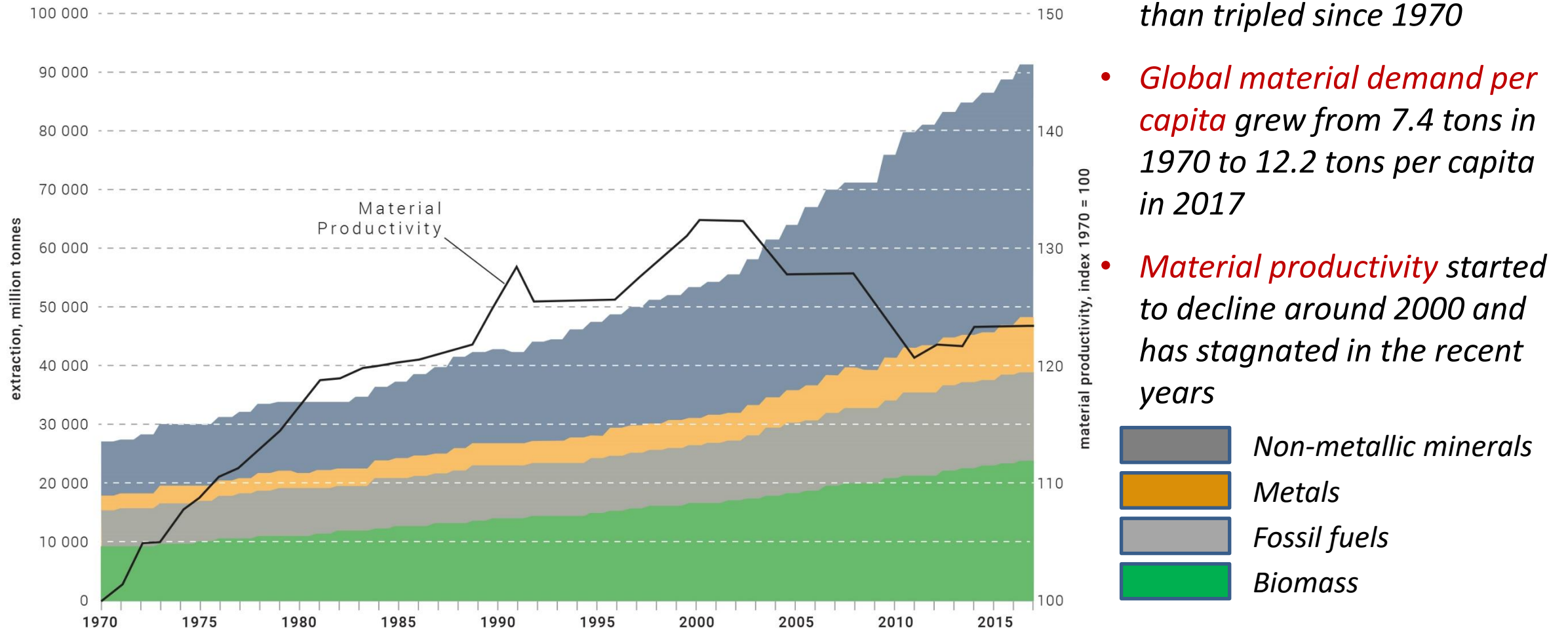
Water and Land



Global material use

Material demand per capita and Material productivity

Global material extraction and material productivity, 1970 - 2017

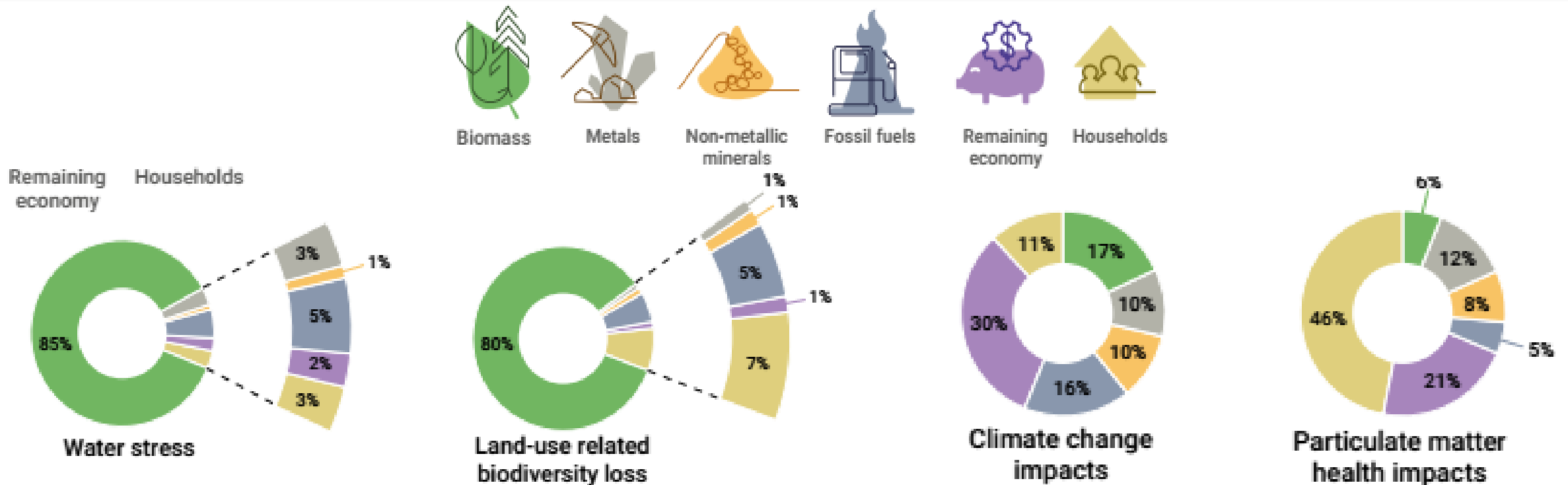


*Environmental impacts in the
value chain*
***extraction and processing
phase***

90% of global **biodiversity loss** and
water stress

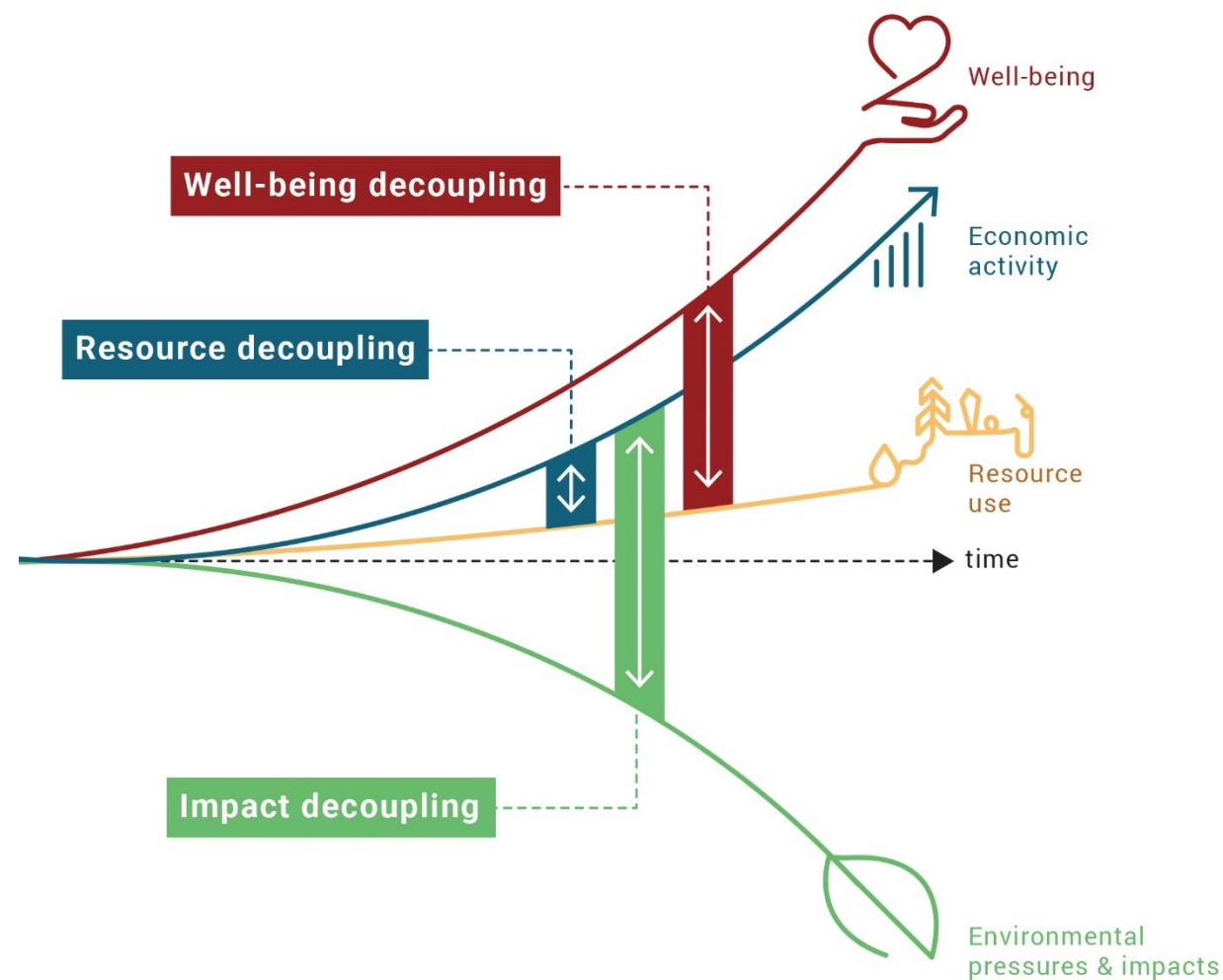
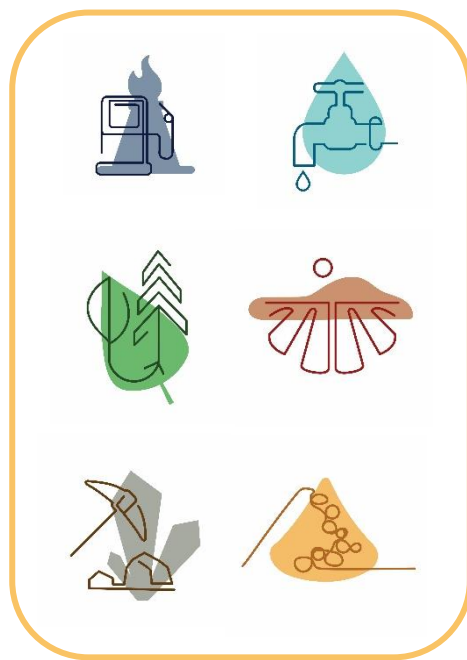
50% of global **climate change**
impacts

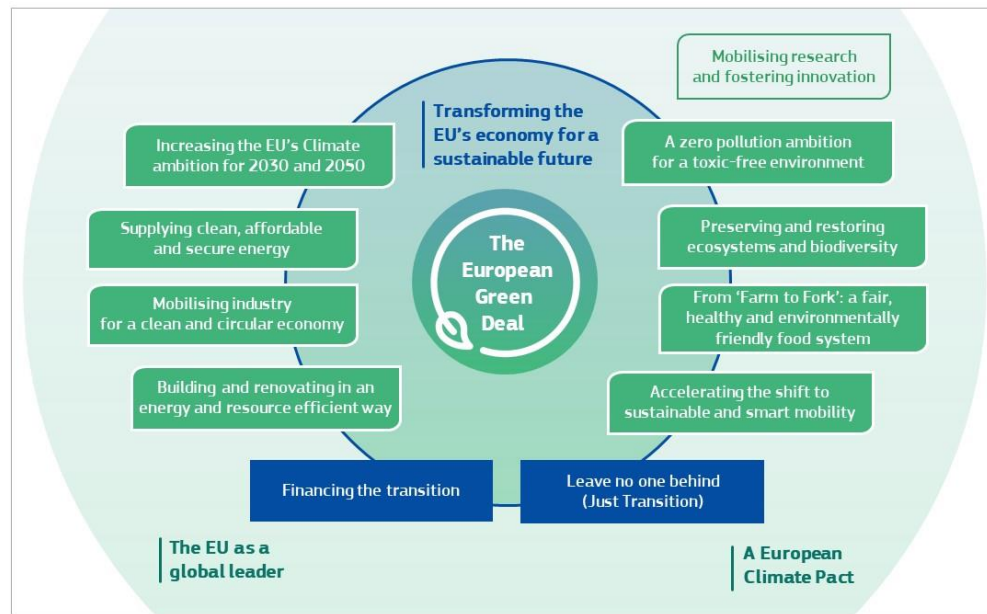
1/3 of **air pollution** **health impacts**



If current trends would continue, global material consumption is predicted to double by 2060

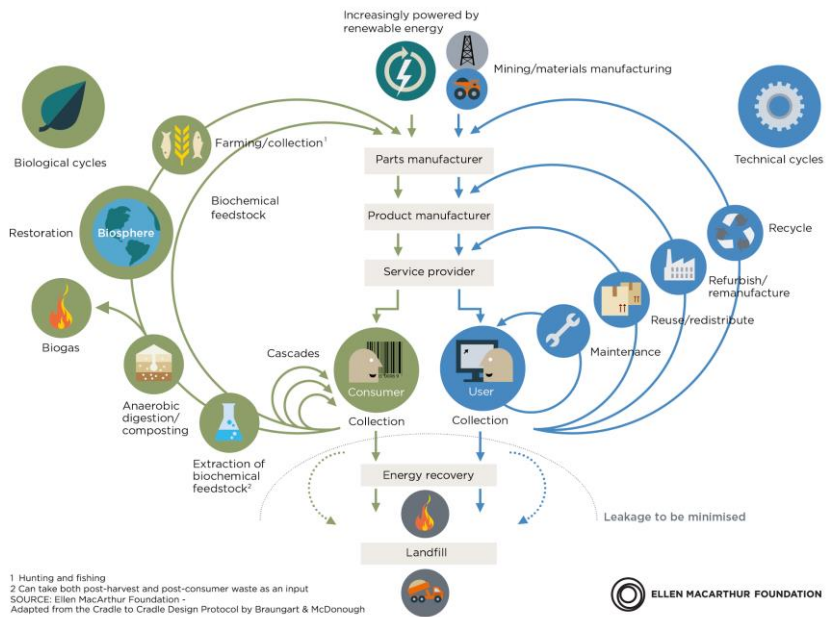
Decoupling





- It is “a *new growth strategy* that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and *where economic growth is decoupled from resource use.*”
- It is a clear vision, a kind of *inter-generational agreement*, a program for the future generations, which builds around sustainability

CIRCULAR ECONOMY - an industrial system that is restorative by design



Circular Economy is essential part of EGD.
*It should be seen as an **instrument for deliver decoupling** of economic growth from resource use and environmental impacts and as a **part of the bigger picture of economic, societal and cultural transformation** needed to deliver the SDGs.*

From Product Maximisation to Providing Human Needs

It is not not about owing it is about using

We do not need cars

...

We need mobility

We do not need light bulbs

...

We need light

We do not need chairs

...

We need to sit

We do not need refrigerators

...

We need chilled and healthy food

We do not need CDs

...

We want to listen to the music

We do not need pesticides

...

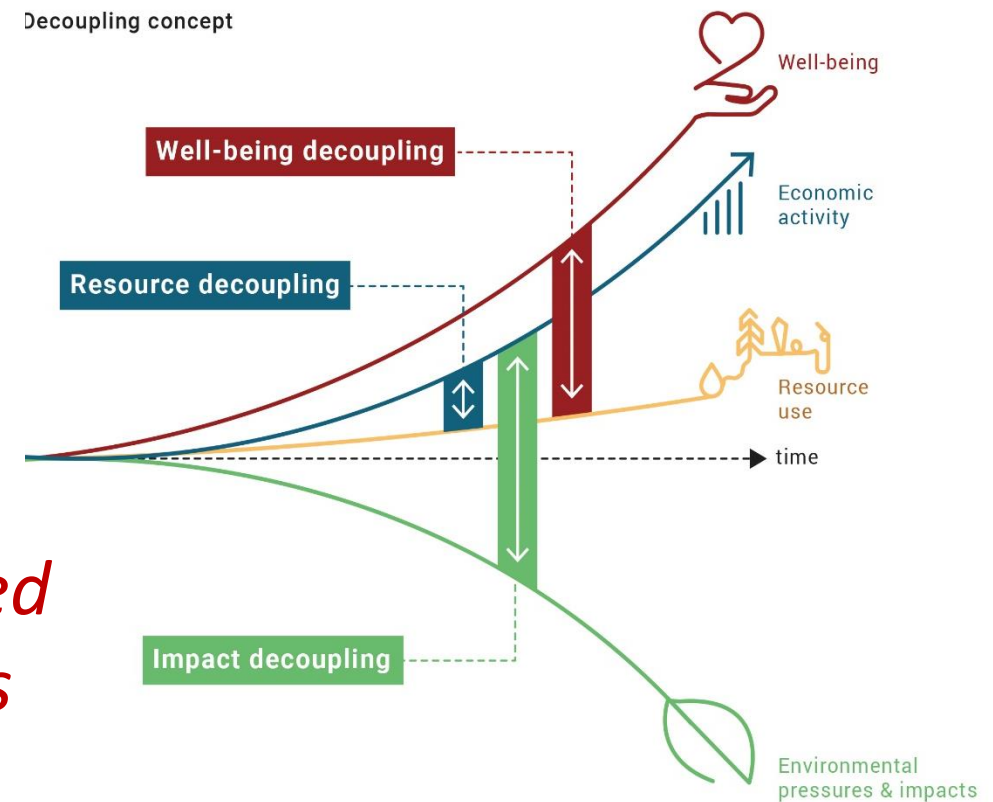
We want healthy plants



Ownership and product (under)utilisation - Consumer

It is not not about owing it is about using

- *Problem: Preferences from consumers to own products like houses, cars, refrigerators, cloth ... are driving consumption in a massive lock-in in underutilization*
- *Solution: Explore the opportunity that the young generation has less ownership biased constraints and provide alternative options*



There has never been a better moment for

Europe to move from the history of “resource-driven imperialism” into an era of responsible use of natural resources, mitigating its resource fragility and strengthening preparedness and resilience

This would also clearly position EGD and give it a real historic and strategic weight.

Circular Economy is not a new concept



It is the oldest concept on the earth.

Nature is a “bio-economy” organized on the principles of the circular economy.

Nothing is lost and everything has its purpose.

It makes sense to embrace it and finally start to behave accordingly.

In essence there is only question to answer:

Do we agree that we humans are part of the nature too?

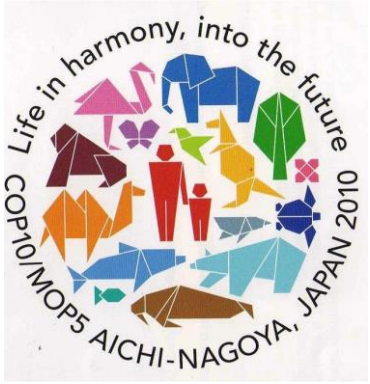
To answer this question we probably do not need the help of the most famous Belgium detective, but his advice is always useful

HERCULE POIROT



When asked why he is speaking about himself always in a third person he replied something like that:

If one is such a genius like me, it is very important to establish a healthy distance to himself.



CBD COP X - Nagoya 2010

After 2009 Copenhagen UNFCCC failure brought optimism and new hope into multilateralism

Strategic Plan for Biodiversity 2011-2020, including 20 Aichi Biodiversity Targets

Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

Nagoya Protocol on Access and Benefit Sharing

(The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity)

CBD COP XI - Hyderabad 2012

Implementation of the Strategy for Resource Mobilization.



XI Conference of Parties
CONVENTION ON BIOLOGICAL DIVERSITY
HYDERABAD INDIA 2012



UN
environment
programme



50
1972-2022



International
Resource
Panel

BUILDING BIODIVERSITY

The Natural Resource
Management Approach