



BOOSTING SUSTAINABLE DEVELOPMENT
FROM HIGH BIODIVERSITY: PROSPECTS
FOR GREEN AND BLUE GROWTH IN
ORS AND OCTS
LAS PALMAS DE GRAN CANARIA
28TH MAY 2014

BIODIVERSITY ON THE ROAD TO GREEN ECONOMY

ANTÓNIO D ABREU

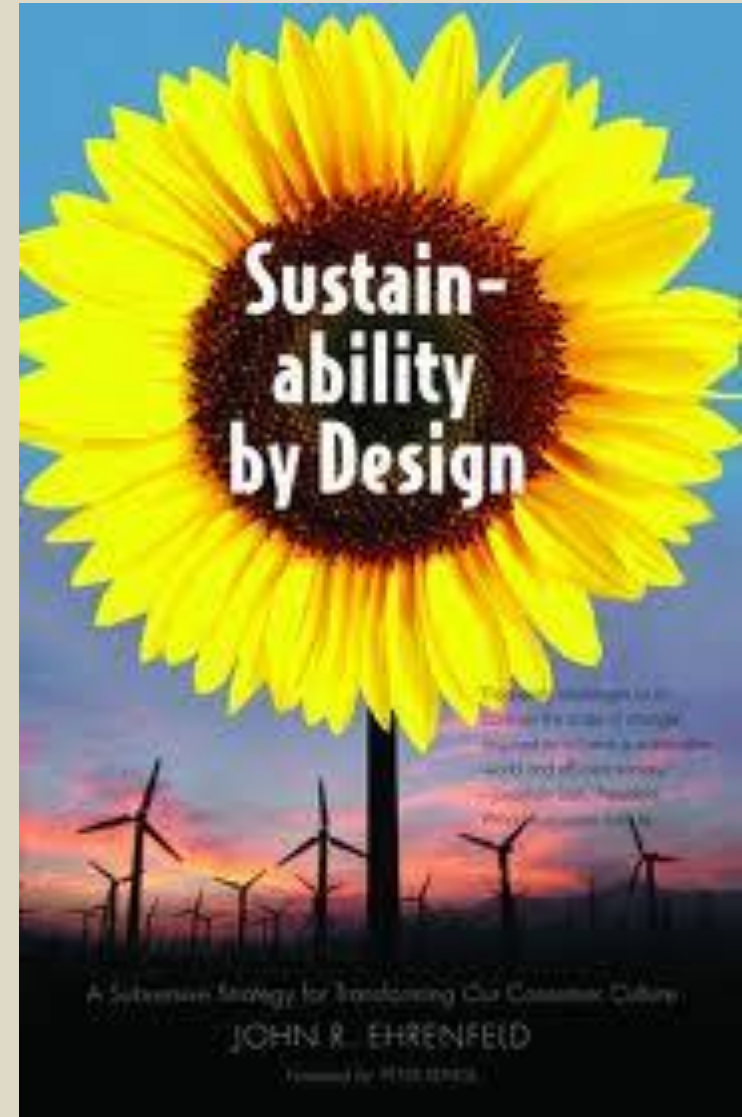
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SUSTAINABLE DEVELOPMENT

Sustainability is the possibility that humans and other life will flourish on the Earth forever

J. Ehrenfeld, 2008



STATE OF BIODIVERSITY

BBC NEWS

Front Page Tuesday, 21 May, 2002, 13:48 GMT 14:48 UK
World **Quarter of mammals**
UK **'face extinction'**
UK Politics
Business
Sci/Tech
Health
Education
Entertainment
Talking Point
In Depth
AudioVideo



WORLD CUP Siberian tigers may vanish within three decades
BBC SPORT
BBC Weather

SERVICES
Daily E-mail
News Ticker

By Corinne Podger
BBC science correspondent

Almost a quarter of the world's mammals face extinction within 30 years, according to a United Nations report on the state of the global environment.

CNN.com / SCI-TECH

THE GREEN CENTURY TIME
The Summit Solutions Heroes Photos

Scientists agree world faces mass extinction

August 23, 2002 Posted: 11:43 AM EDT (1543 GMT)

By Gary Strieker
CNN



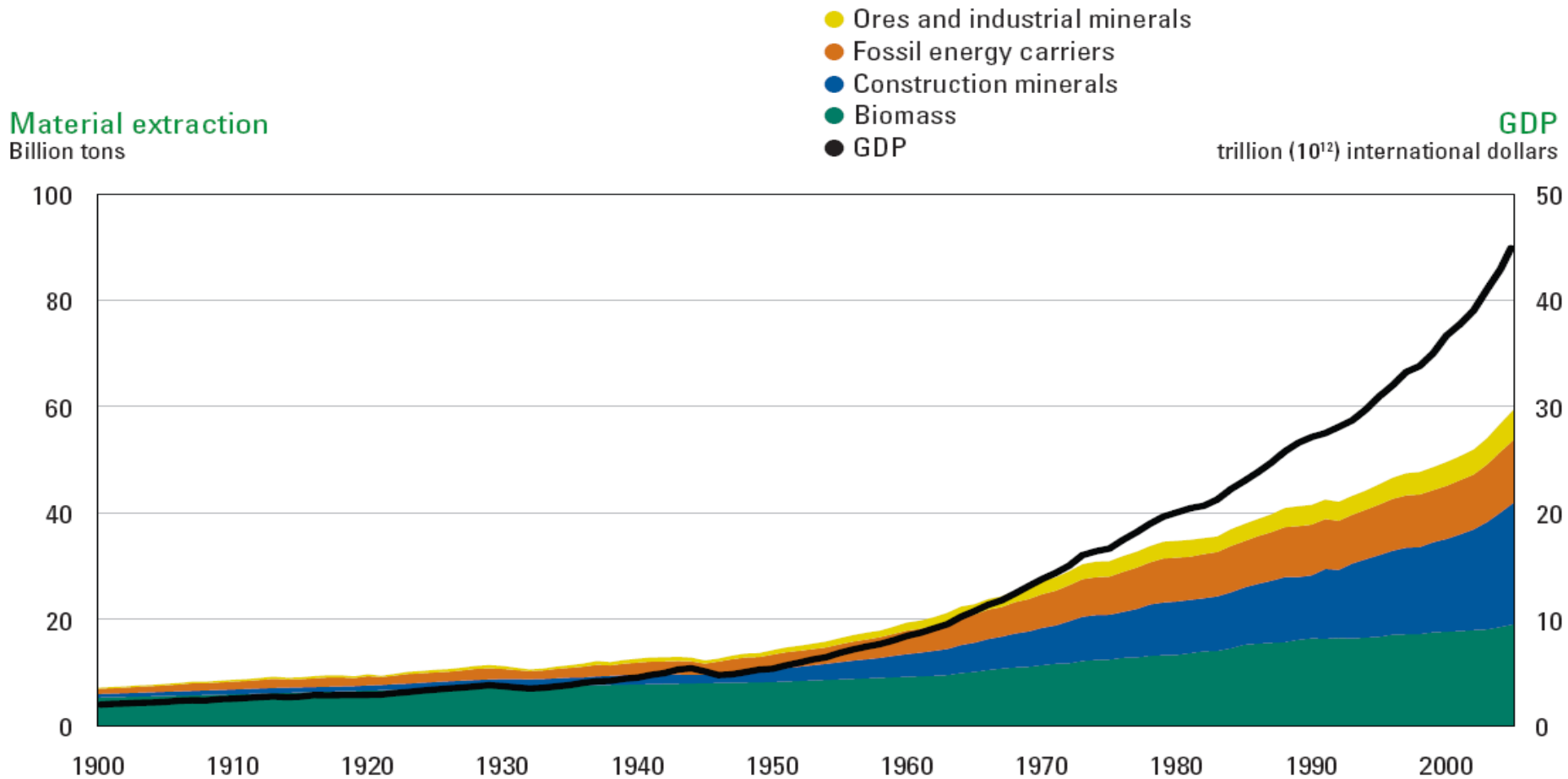
(CNN) – The complex web of life on Earth, what scientists call "biodiversity," is in serious trouble.

Organ Pipe Cactus National

Actual and past production and consumption patterns are changing and dramatically threatening all life support systems in this planet

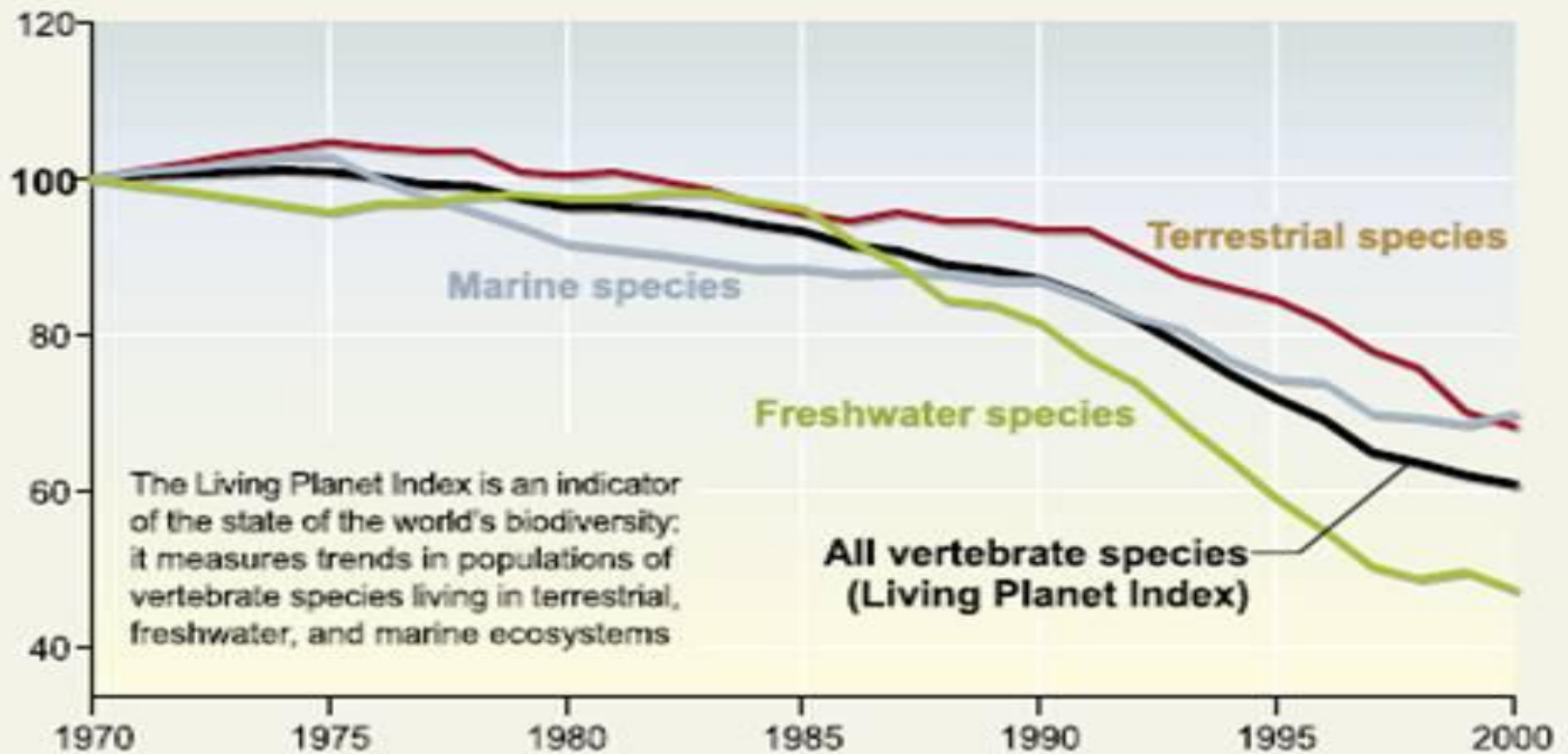
Increasing human impact in the natural systems

Figure 1. Global material extraction in billion tons, 1900–2005



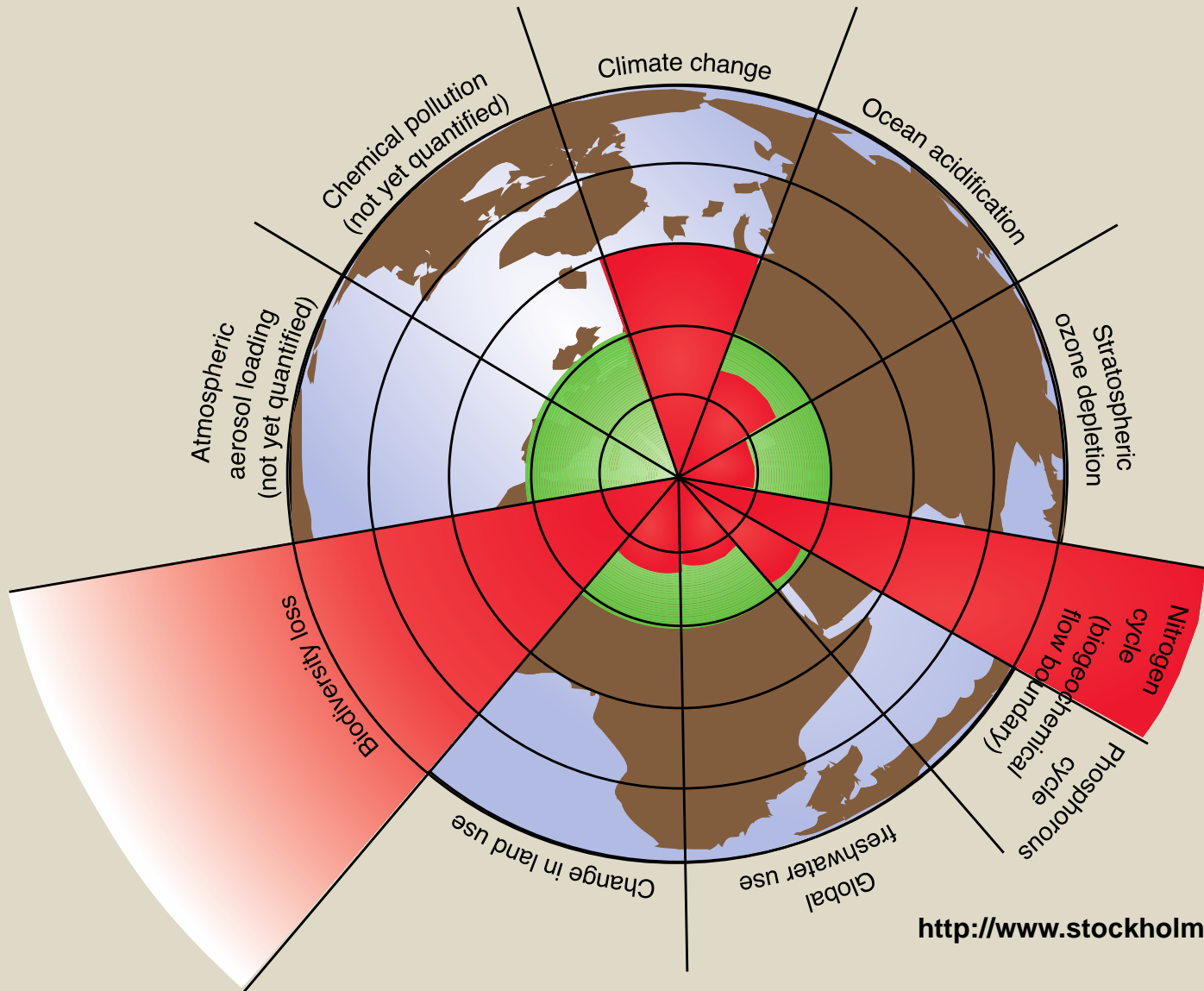
Increasing human impact in the natural systems

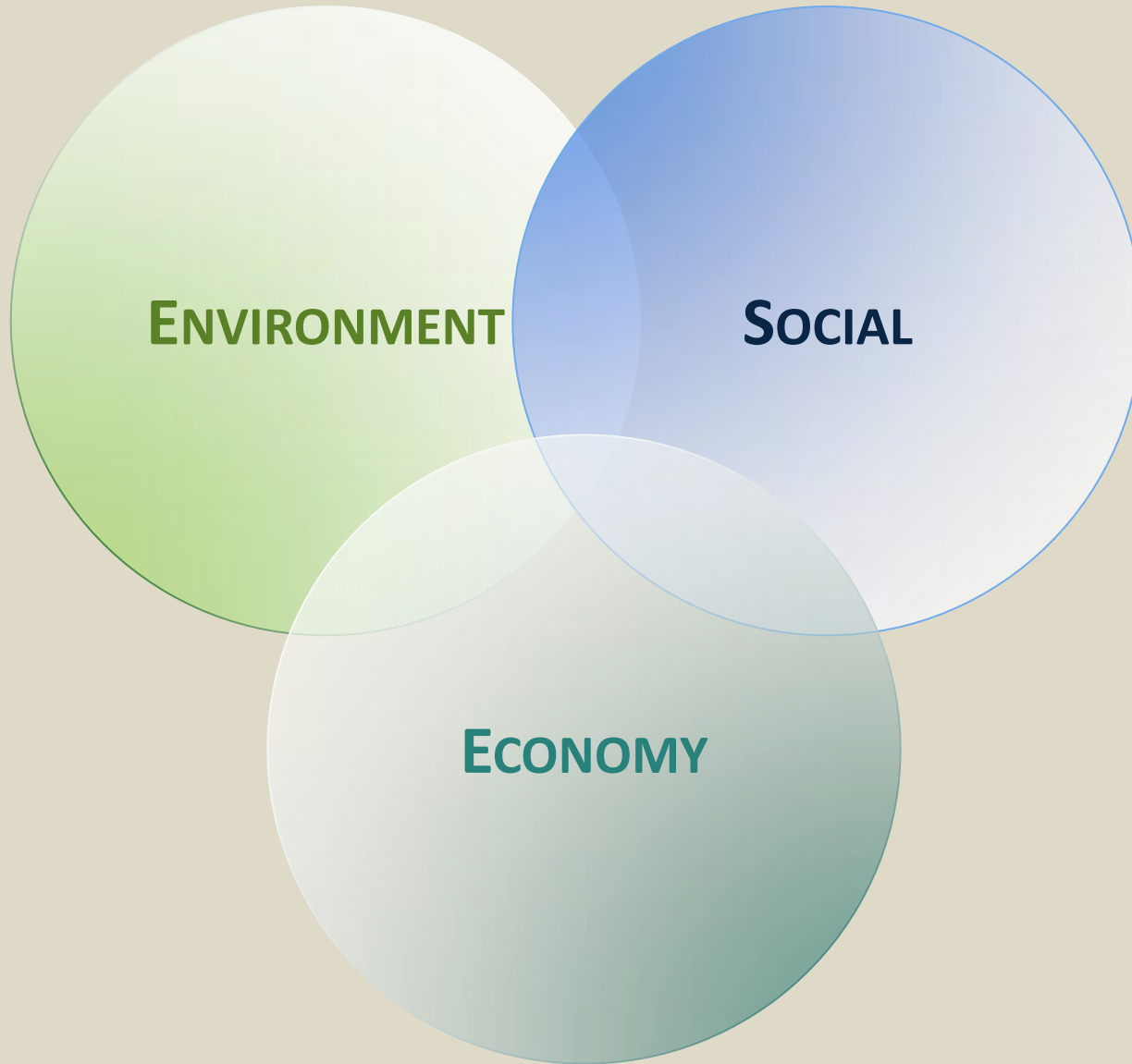
Population Index = 100 in 1970



Source: WWF, UNEP-WCMC

PLANETARY BOUNDARIES





ENVIRONMENT

SOCIAL

ECONOMY



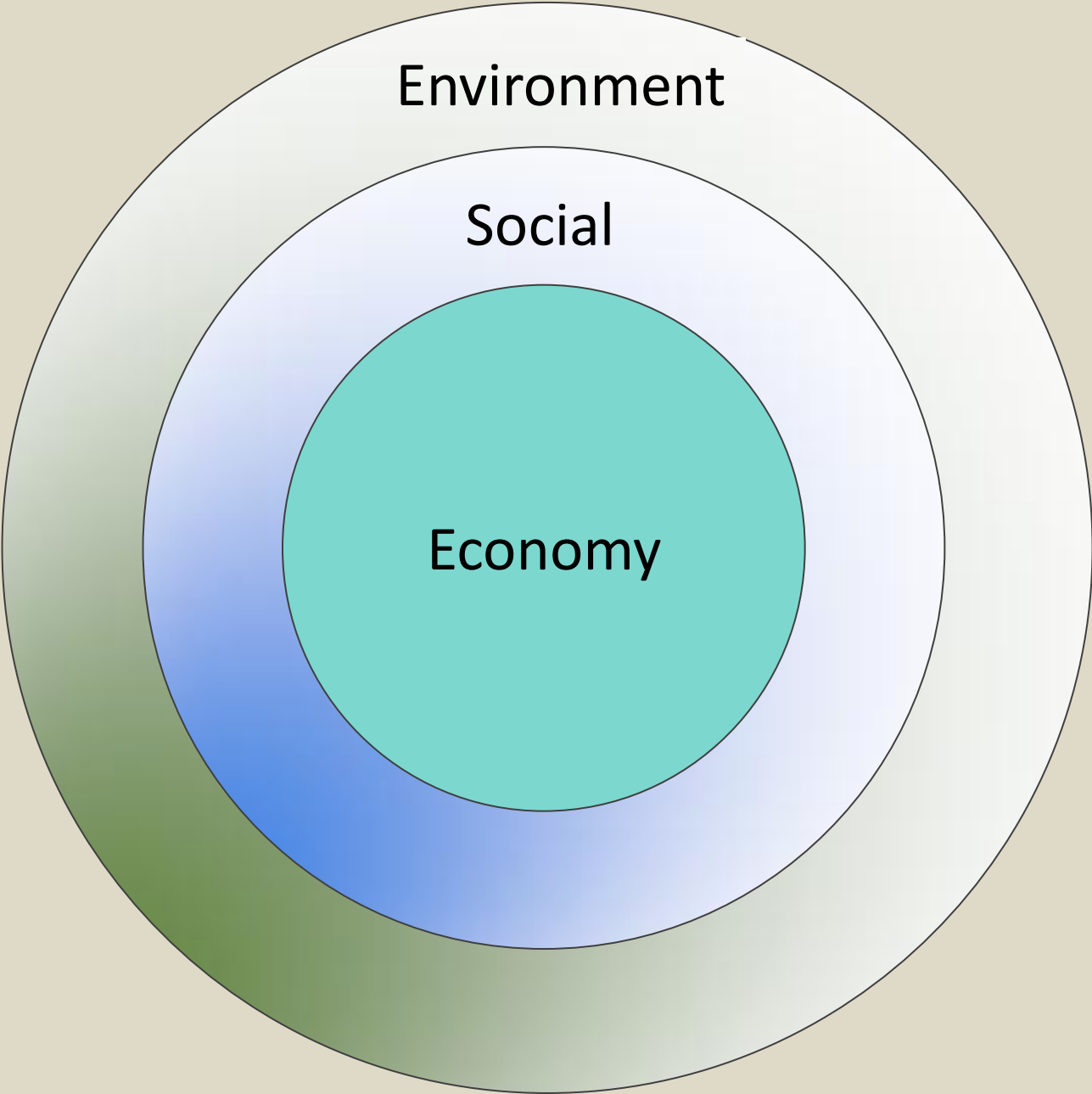
ENVIRONMENT



SOCIAL



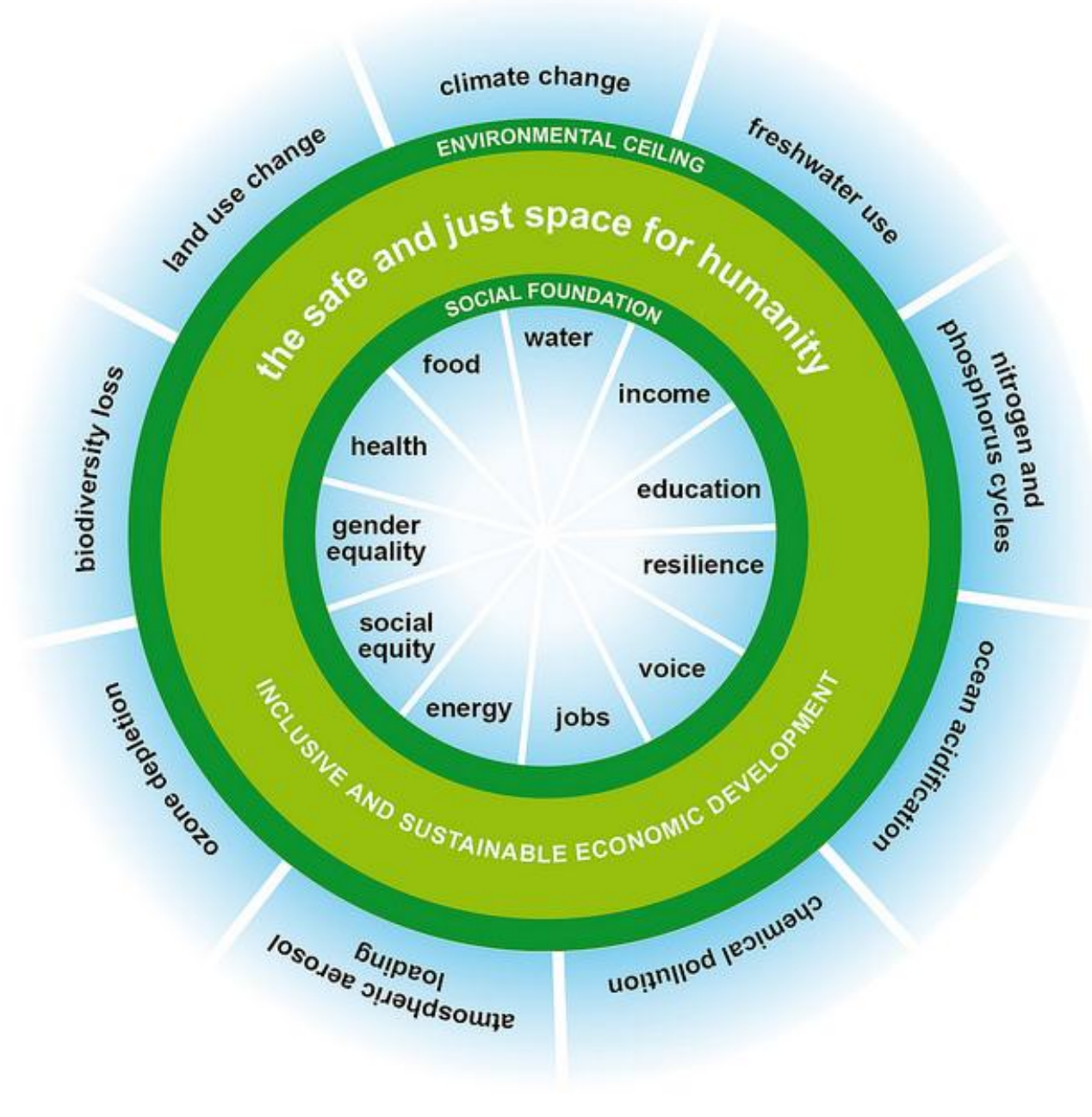
ECONOMY



Environment

Social

Economy



RATIONALE

There is an urgent need of understanding the global socio-ecological system, where biodiversity plays a central and decisive role

GLOBAL BIODIVERSITY OUTLOOK 3

We can no longer see the continued loss of biodiversity as an issue separate from the core concerns of society:

- poverty,*
- health,*
- prosperity and security of present and future generations*
- climate change*

Each of these concerns is undermined by current trends in the state of our ecosystems, and each will be greatly strengthened if we finally give biodiversity the priority it deserves.

GREEN ECONOMY

Green growth means fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies.

To do this, it must catalyze investment and innovation which will underpin sustained growth and give rise to new economic opportunities.

(OECD, 2011)



Table 1. Basic characteristics of the current economic model, the green economy model, and the ecological economics model [8].

	Current Economic Model	Green Economy Model
Primary policy goal	More: Economic growth in the conventional sense, as measured by GDP. The assumption is that growth will ultimately allow the solution of all other problems. More is always better.	More but with lower environmental impact: GDP growth decoupled from carbon and from other material and energy impacts.
Primary measure of progress	GDP.	Still GDP, but recognizing impacts on natural capital.
Scale/carrying capacity/role of environment	Not an issue, since markets are assumed to be able to overcome any resource limits via new technology, and substitutes for resources are always available.	Recognized, but assumed to be solvable via decoupling.
Distribution/poverty	Given lip service, but relegated to "politics" and a "trickle-down" policy: a rising tide lifts all boats.	Recognized as important, assumes greening the economy will reduce poverty via enhanced agriculture and employment in green sectors.
Economic efficiency/allocation	The primary concern, but generally including only marketed goods and services (GDP) and market institutions.	Recognized to include natural capital and the need to incorporate the value of natural capital into market incentives.
Property rights	Emphasis on private property and conventional markets.	Recognition of the need for instruments beyond the market.
Role of government	Government intervention to be minimized and replaced with private and market institutions.	Recognition of the need for government intervention to internalize natural capital.
Principles of governance	Laissez-faire market capitalism.	Recognition of the need for government.

Robert Constanza, Gar Alperovitz, Herman E. Daly, Joshua Farley, Carol Franco, Tim Jackson, Ida Kubiszewski, Juliet Schor and Peter Victor, 2013. Building a Sustainable and Desirable Economy-in-Society-in-Nature. ANU Press. Australia <http://epress.anu.edu.au>

Table 1. Basic characteristics of the current economic model, the green economy model, and the ecological economics model [8].

	Current Economic Model	Green Economy Model	Ecological Economics Model
Primary policy goal	More: Economic growth in the conventional sense, as measured by GDP. The assumption is that growth will ultimately allow the solution of all other problems. More is always better.	More but with lower environmental impact: GDP growth decoupled from carbon and from other material and energy impacts.	Better: Focus must shift from merely growth to “development” in the real sense of improvement in sustainable human well-being, recognizing that growth has significant negative by-products. More is not always better.
Primary measure of progress	GDP.	Still GDP, but recognizing impacts on natural capital.	Index of Sustainable Economic Welfare (ISEW), Genuine Progress Indicator (GPI), or other improved measures of real welfare.
Scale/carrying capacity/role of environment	Not an issue, since markets are assumed to be able to overcome any resource limits via new technology, and substitutes for resources are always available.	Recognized, but assumed to be solvable via decoupling.	A primary concern as a determinant of ecological sustainability. Natural capital and ecosystem services are not infinitely substitutable and real limits exist.
Distribution/poverty	Given lip service, but relegated to “politics” and a “trickle-down” policy: a rising tide lifts all boats.	Recognized as important, assumes greening the economy will reduce poverty via enhanced agriculture and employment in green sectors.	A primary concern, since it directly affects quality of life and social capital and is often exacerbated by growth: a too rapidly rising tide only lifts yachts, while swamping small boats.
Economic efficiency/allocation	The primary concern, but generally including only marketed goods and services (GDP) and market institutions.	Recognized to include natural capital and the need to incorporate the value of natural capital into market incentives.	A primary concern, but including both market and nonmarket goods and services, and effects. Emphasis on the need to incorporate the value of natural and social capital to achieve true allocative efficiency.
Property rights	Emphasis on private property and conventional markets.	Recognition of the need for instruments beyond the market.	Emphasis on a balance of property rights regimes appropriate to the nature and scale of the system, and a linking of rights with responsibilities. Includes larger role for common-property institutions in addition to private and state property.
Role of government	Government intervention to be minimized and replaced with private and market institutions.	Recognition of the need for government intervention to internalize natural capital.	Government plays a central role, including new functions as referee, facilitator, and broker in a new suite of common-asset institutions.
Principles of governance	Laissez-faire market capitalism.	Recognition of the need for government.	Lisbon principles of sustainable governance.

TOWARDS GREEN ECONOMY AND ECOLOGICAL ECONOMICS MODEL

- Ensuring resilience
- Securing sectoral and inter-sectoral investment
- Changing monitoring and measurement Indexes, assessment tools and practices
- Connecting biodiversity with real, fair and attractive jobs

SCIENCE & KNOWLEDGE

- Inventory
- Conservation status
- Carrying capacity
- Management
- Monitoring
- Assessment – goods and services
- Communication, awareness and information

Thanks for your attention