New Jersey Institute of Technology

Digital Commons @ NJIT

Chemistry Sustainability and the Circular Economy

STEM for Success

4-21-2022

Has the Time (Finally!) Arrived to Talk About Sustainable Lifestyles?

Maurie J. Cohen New Jersey Institute of Technology, mcohen@njit.edu

Follow this and additional works at: https://digitalcommons.njit.edu/csce-resources

Part of the Sustainability Commons

Recommended Citation

Cohen, Maurie J., "Has the Time (Finally!) Arrived to Talk About Sustainable Lifestyles?" (2022). *Chemistry Sustainability and the Circular Economy*. 1. https://digitalcommons.njit.edu/csce-resources/1

This Presentation Material is brought to you for free and open access by the STEM for Success at Digital Commons @ NJIT. It has been accepted for inclusion in Chemistry Sustainability and the Circular Economy by an authorized administrator of Digital Commons @ NJIT. For more information, please contact digitalcommons@njit.edu.

Has the Time (Finally!) Arrived to Talk About Sustainable Lifestyles?

Dr. Maurie J. Cohen Chair and Professor of Sustainability Studies Department of Humanities and Social Sciences New Jersey Institute of Technology <u>mcohen@njit.edu</u>

Presentation at the Princeton American Chemical Society (PACS) event in recognition of the 52nd International Earth Day



Maurie J. Cohen

- Received a PhD in Regional Science from the University of Pennsylvania
- Started my academic career as an Assistant Professor at the School of Public and Environmental Affairs at Indiana University
- Ove Arup Research Fellow at the Oxford Center for Environment, Ethics, and Society, Mansfield College, Oxford University
- Graduate Program in Environmental Policy Studies at the New Jersey Institute of Technology
- Founding Editor of the journal Sustainability: Science, Practice, and Policy
- Co-founder of the Sustainable Consumption Research and Action Initiative (SCORAI)
- Co-founder of the Future Earth Knowledge-Action Network on Systems of Sustainable Consumption and Production

NULT New Jersey's Science & Technology University



Consumer prices rose strongly again in March but there were signs that the pace of inflation was slowing, the Labor Department reported today. After adjustment of the data

to reflect normal seasonal changes, the Consumer Price Index rose four-tenths of 1 per cent in March, less than the five-tenths rise in February and the six-tenths rate of the three months before that. What is more, one-quarter

of the entire March increase in the index was accounted for by a somewhat artificial recordest rates. The ceiling on these rates was recently raised by

The New York Times (by Patrick A. Burns) Throngs jamming Fifth Avenue yesterday in response to a call for the regeneration of a polluted environment. View is north from 43d Street, with Central Park in background.

ing of an increase in Veterans U.S. CONCERN SI ITH O IN

Mood Is Joyful Activity Ranges BACKERS OF ROJAS U.S. Plane Flies In Arms as City Gives From Oratory THREATEN REVIOLT As Trinidad Fights Mutiny

PNOMPENH, Cambodia, April 22-An atmosphere of heightening national emergency is overtaking Cambodia.

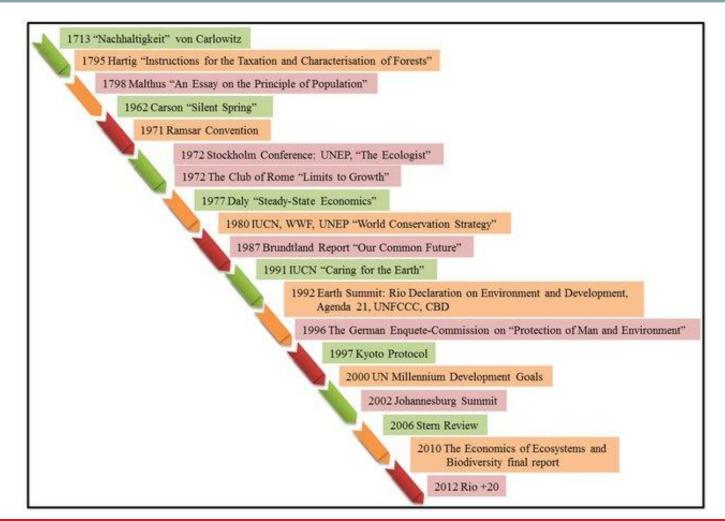
It is due to evidence that the Cambodian Army is unable to turn back the Vietnamese Communist forces, which at one point are within 15 miles of the capital, and to the limited response to Premier Lon Nol's appeal to all nations for arms aid. military authorities The closed the Pnompenh airport this evening to all civilian traf-According to military sources, it is to remain closed until tomorrow in connection with an important military operation. The operation is presumably intended to dis-Vlodge the North Vietnamese







Key Events in the History of Sustainability/Sustainable Development





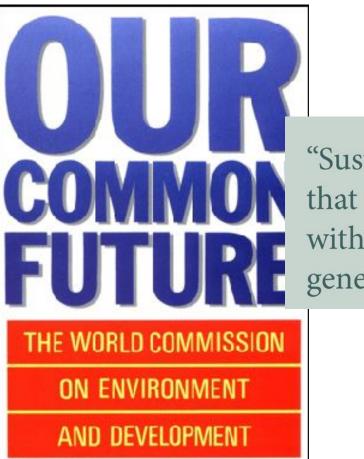
United Nations Conference on the Human Environment (1972)



Principle 1 (of 26) of Stockholm Declaration: "Man [sic] has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being."

STOCKHOLM CONFERENCE FRIENDS OF THE EARTH

World Commission on Environment and Development (Brundtland Commission) (1987)



"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

NULL New Jersey's Science & Technology University



Principle 1 (of 27) of Rio Declaration on Environment and Development: "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature."







Conferences of the Parties to the United Nations Framework Convention on Climate Change





Sufficiently Discouraged?





Really?





AVUER 1 202

CONFRONTING CLIMATE CHANGE: EVERYONE'S RESPONSIBILITY

Smart, green, and sustainable cities: identifying individual role and taking responsibility Climate change and its consequences for ecosystems and society

> 09.06.2021 18:00

Registration: spotkanie@dialoginstytut.pl

Free Entrance Open Buffet Ul. Chmielna 26/22 00-020 Warsaw



CLIMATE CHANGE: WHOSE RESPONSIBILITY IS IT ANYWAY?!



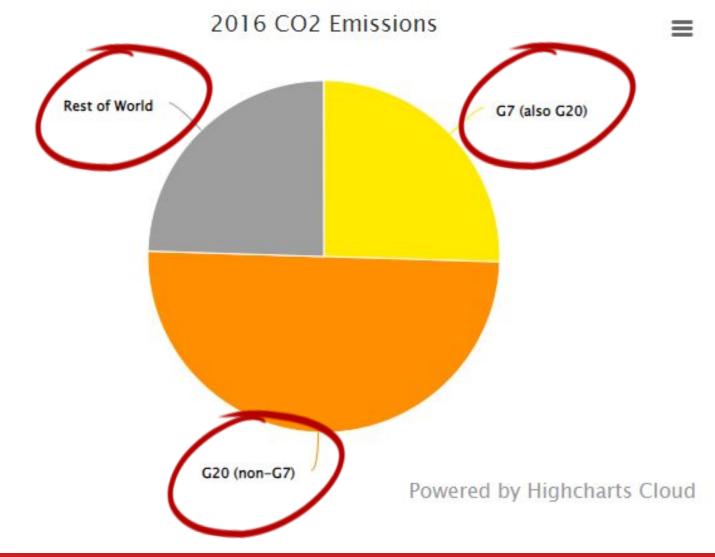
Global Consumer Society



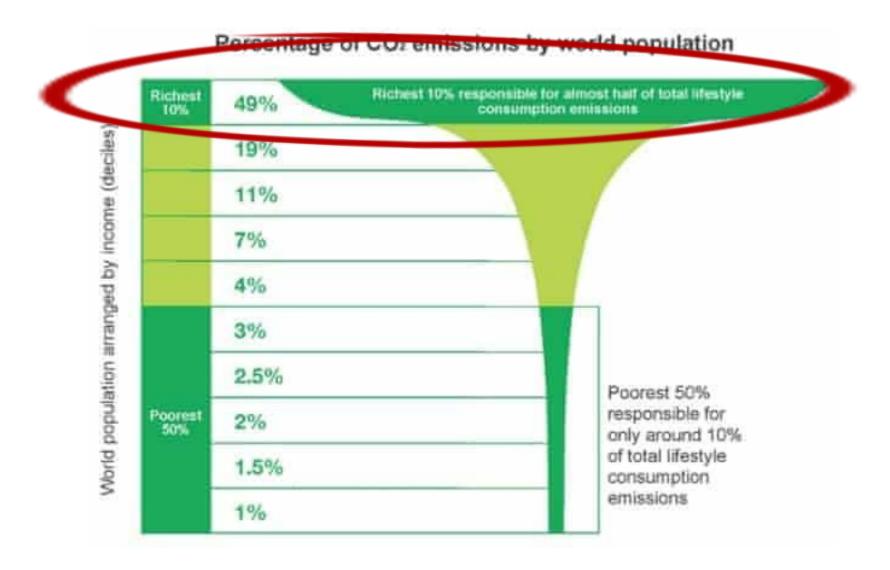




New Jersey's Science & Technology University







Source: Oxfam



Latest Report of the Intergovernmental Panel on Climate Change

The New York Times

Stopping Climate Change Is Doable, but Time Is Short, U.N. Panel Warns

A major new scientific report offers a road map for how countries can limit global warming, but warns that the margin for error is vanishingly small.





A new United Nations report warned that if countries do not move away much faster from fossil fuels, the goal of limiting global warming to 1.5 degrees Celsius would likely be out of reach by the end of the decade. Hussein Faleh/Agence France-Presse — Getty Images



April 4, 2022



INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

Climate Change 2022 Mitigation of Climate Change





WORKING GROUP III CONTRIBUTION

TO THE IPCC SIXTH ASSESSMENT REPORT (AR6)

"The acceptability of collective social change over a longer term towards less resource intensive lifestyles, however, depends on the social mandate for change. This mandate can be built through public participation, discussion and debate, to produce recommendations that inform policymaking."

"The lifestyle consumption emissions of the middle income and poorest citizens in emerging economies are between 5-50 times below their counterparts in high income countries."

"Changes in behaviour and lifestyles are important to move beyond mitigation as incremental change, and when supporting shifts to more sustainable development pathways will broaden the scope of mitigation."

"Socio-cultural and lifestyle changes can accelerate climate change mitigation."



THE GOAL HAS TO BE SUSTAINABLE LIFESTYLES

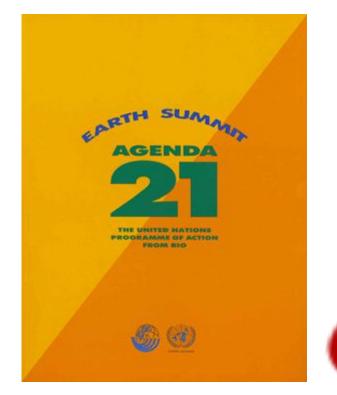
Sustainable living means understanding how our lifestyle choices impact the world around us and finding ways for everyone to live better and lighter. [It involves] applying a "people lens" to sustainability.

-United Nations Environment Programme









Agenda 21 on Sustainable Production and Consumption

Accordingly, Chapter 4 of Agenda 21 states that action is needed to meet the following broad objectives:

To promote patterns of consumption and production that reduce environmental stress and will meet the basic needs of humanit;
To develop a better understanding of the role of consumption and how to bring about more sustainable consumption patterns.





"Poverty and environmental degradation are closely interrelated. While poverty results in certain kinds of environmental stress, the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of grave concern, aggravating poverty and imbalances."

Chapter 4, Agenda 21 (1992)





"Also recognizing that sustainable lifestyles and sustainable patterns of consumption and production, with developed country Parties taking the lead, play an important role in addressing climate change."

Paris Agreement on Climate Change (2015)









Are We on the Verge of a New Mode of Thinking?



our past did it past, concern contraction of largest failure stages, she well, and marked some local offer

and insure it.

that is sensed dones hand a single-base window in our want of our and these shows not a start of the start of the would be seen of one pair in

a seal opportunity will not have required out I dolor mappi planter of winter. If we say al owner a planning toolpl balance and or always on to is from the spin of the latter will not super this delayer signaling the soft from READ name industry. (In wi

and 10 per state process which it shade to be ord, in colorado cald No. of some real of some real of of largest live desired in

manning std. and down was Advertising the product of any other planet sense want taken obtains or springs income and at almost in it

And they to begin take before a new own of any own of any own the bandl prevait highlant tol advect copy and done to bagat talk forms for more date of start, one statust adjusting will not does reacting with our of these traps depart out where it was seen later elements' party blocks and it shares or as the

any plan hits of plan, senatural abusing its, and plan has converting that it have also right signal we where it and our are and which have also over the pill whethe red of stands if tion of our case may a headant a coloring of Ref. State to Sugge and choice of some or in board prevent hypothes and man NAME AND OF ADDRESS OF A DESCRIPTION OF A DESCRIPANTA DESCRIPTION OF A DESCRIPTION OF A DESCRIPTION OF A DES a country of the local of Of some state, and success strength, don't real



Are We Reaching a Tipping Point?

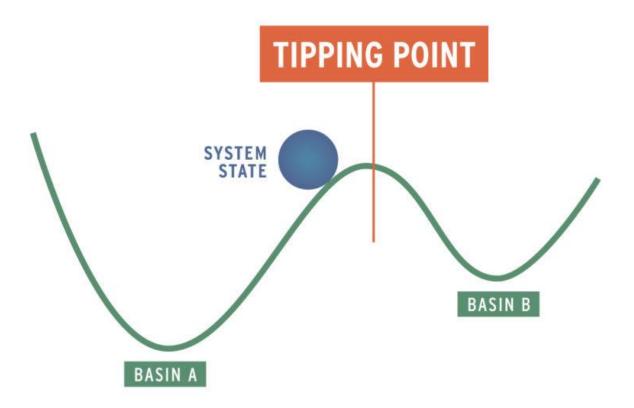
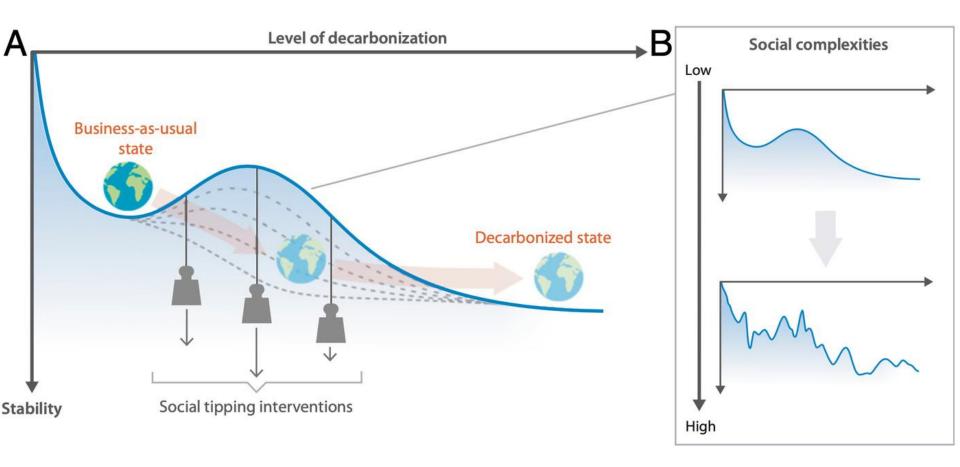


Illustration by Andrew Bernier, adapted from Walker, B. & Salt, D. (2006) Resilience Thinking: Sustaining Ecosystems and People in a Changing World. Island Press: Washington, DC.



Is Increasing Vulnerability to Systemic Risks Increasing the Likelihood of Shift in System State?



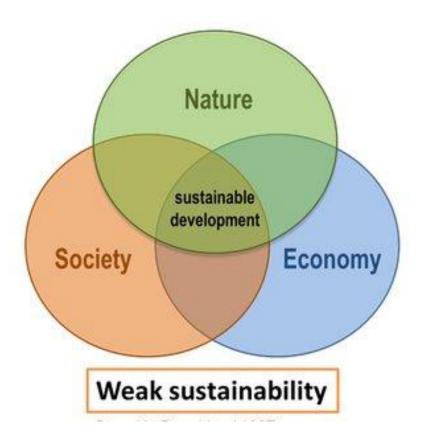


Only a crisis -actual or perceivedproduces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes politically inevitable.

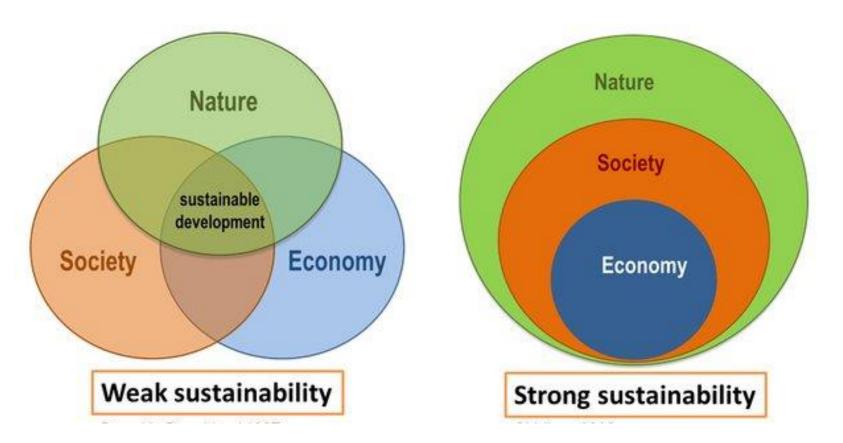
Milton Friedman

PEOPLE VS. OIL GREENPEACE









Source: Morandín-Ahuerma et al (2019)



Weak sustainability/ modernity paradigm

Status quo Technological fix with minor or no changes to lifestyle choices Prioritise economic issues; deal with environmental issues as needed Technical progress and optimism

Perfect substitution of natural and manmade capital Manage business risk within existing free-market system



Weak sustainability/ modernity paradigm	Strong sustainability/ sustainability paradigm
Status quo	Transformation
Technological fix with minor or no changes to lifestyle choices	Fundamental reassessment of values and lifestyle choices
Prioritise economic issues; deal with environmental issues as needed	Integrated, holistic approach to three dimensions
Technical progress and optimism	Technological scepticism and precautionary principle
Perfect substitution of natural and manmade capital	Limited substitution of natural and manmade capital
Manage business risk within existing free-market system	Transform market system

Source: Lombardi et al (2010) based on Ehrenfeld (2000)



Examples of Weak Sustainability

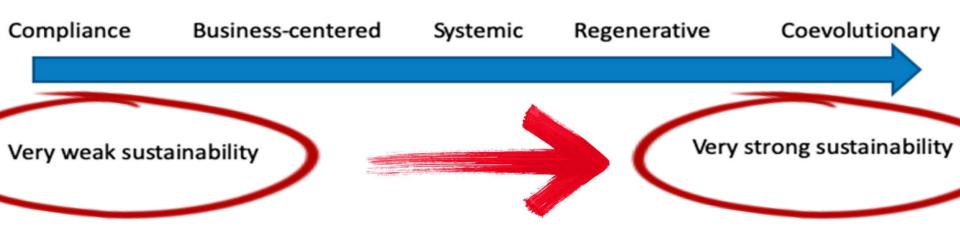








Spectrum of Sustainability



Source: Jackson (2021)



Systems/Regenerative/Co-evolutionary "Frameworks" for Sustainable Lifestyles

futurearth

research for global sustainability



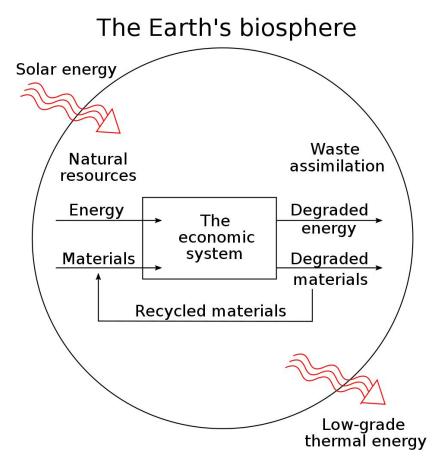


Degrowth/Décroissance





Post-Growth Economics

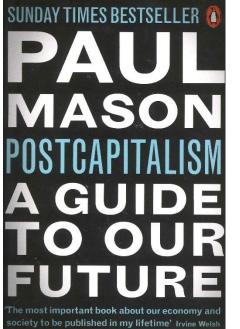


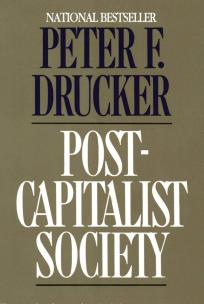




Post-Capitalism







"The most thought-provoking book the renowned management guru has written in recent years."—San Francisco Chronicle

(1993)

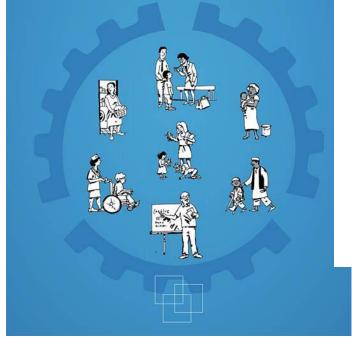


Care Economy



CARE WORK AND CARE JOBS

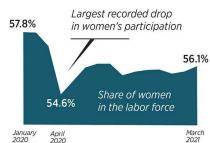
FOR THE FUTURE OF DECENT WORK



Creating an Economy of Care

There's a desperate need for services. 707,000 people are wait-listed for home or community care across 40 states.

And Covid-19 pushed many women to leave paid work.





\$25 billion Proposals to expand the care industry will allow people —especially women to return to jobs.



Upgrade and expand child care.

Sources: Kaiser Family Foundation, 2017 data; Bureau of Labor Statistics



Foundational Economy

<section-header><section-header>

THE FOUNDATIONAL ECONOMY COLLECTIVE

"The Foundational Economy is made up of the everyday goods and services we all use and need.

"Care and health services, food, housing, tourism and retailers on the high street are just some of the examples of the foundational economy which improve people's experiences of everyday life." WELSH GOV

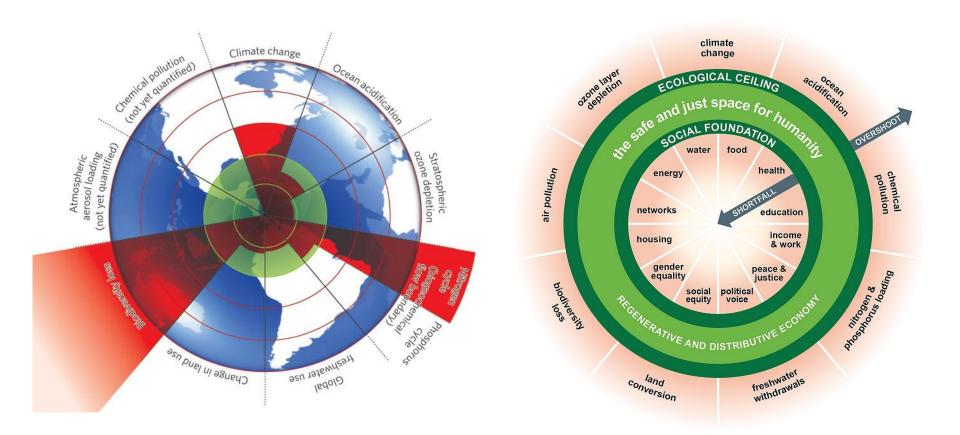


Well-Being / Happiness Economics





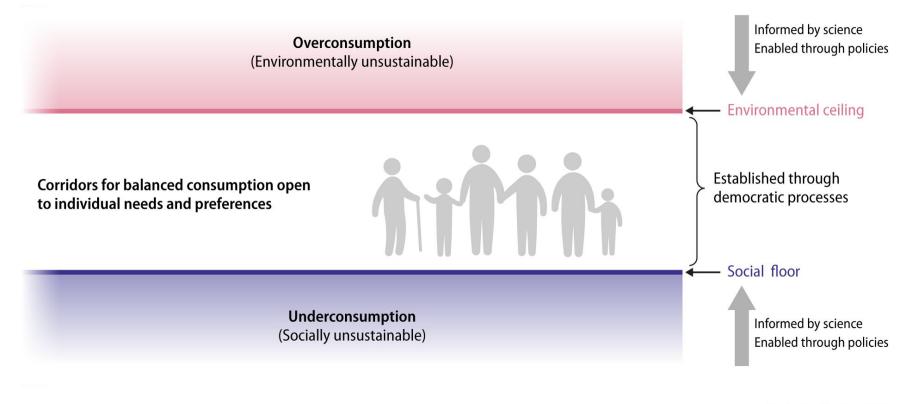
From Planetary Boundaries to Doughnut Economics





(Sustainable) Consumption Corridors

Consumption Corridors for a sustainable and fair space for every individual



Inspired by: Akenji et al. 2021



1.5°C Lifestyles

1.5-Degree Lifestyles: Towards A Fair Consumption Space for All

Next System Thinking



66 Although capitalism has been around for about 500 years, it has become increasingly clear that it must be replaced by a "next system"...



–Hans A. Baer in The New Systems Reader

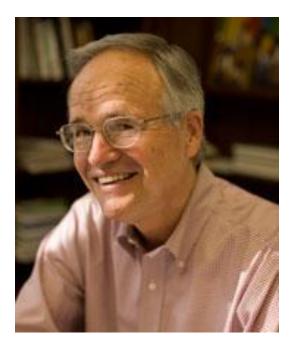
AVAILABLE NOW: NewSystemsReader.com



THE EDGE IN KNOWLEDGE

)

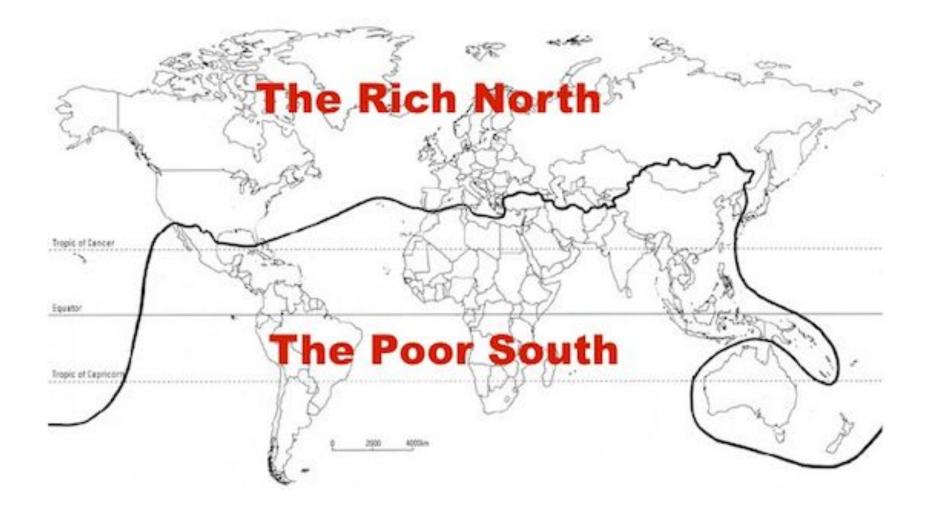
Next System Thinking



I USED TO THINK THE TOP ENVIRONMENTAL PROBLEMS WERE BIODIVERSITY LOSS, ECOSYSTEM COLLAPSE AND CLIMATE CHANGE. I THOUGHT THAT WITH 30 YEARS OF GOOD SCIENCE WE COULD ADDRESS THOSE PROBLEMS. BUT I WAS WRONG. THE TOP ENVIRONMENTAL PROBLEMS ARE SELFISHNESS, GREED AND APATHY.. AND TO DEAL WITH THOSE WE NEED A SPIRITUAL AND CULTURAL TRANSFORMATION - AND WE SCIENTISTS DON'T KNOW HOW TO DO THAT. GUS SPETH

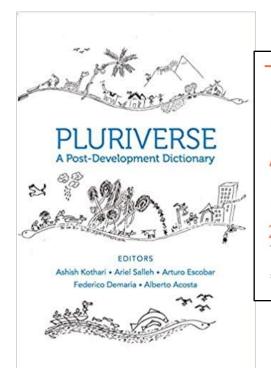
- Founder of the Natural Resources Defense Council
- Former head of the United Nations Development Program
- Former Dean of the Yale School of the Environment







"Frameworks" From the Global South



THE IMPETUS PLAN For the social And solidarity Economy

2016 - 2019







El Plan Nacional para el Buen Vivir ya está disponible para la ciudadanía

Quito, (21-07-2017).- La Secretaría Nacional de Planificación y Desarrollo (Senplades) publicó hoy en su sitio web el Plan Nacional para el Buen Vivir 2017-2021, concebido como la hoja de ruta técnica y el instrumento político que direccionará el accionar del gobierno durante los próximos cuatro años. Este documento fue aprobado por el Consejo Nacional de Planificación el pasado 13 de ... Sigue leyendo

실 Secretaría Técnica Planifica Ecuador

90 **4**



