

Welcome to this week's presentation and conversation
hosted by the
Canadian Association for the Club of Rome,
a Club dedicated to intelligent debate and action on global issues.

Degrowth Toward a Steady-State Economy.

Our speaker today is Dr. Brian Czech, executive director of the Center for the Advancement of the Steady State Economy. From 1999-2017, he served in the headquarters of the US Fish & Wildlife Service. During most of that time (2001-2015), he was also a visiting professor at Virginia Tech. He has written three books, including *Supply Shock: Economic Growth at the Crossroads and the Steady State Solution*. He is a regular contributor at the *Steady State Herald*. Today he will define & describe degrowth & the steady state economy as the sustainable solution to our overshoot of planetary limits. Some over-developed countries will need a reasonable period of degrowth toward a steady state economy. Countries with widespread poverty should be encouraged & assisted to develop in peace & security, free of the forced debt & environmental destruction of corporate exploitation. In other words, moving away from unsustainable, destructive growth will require a tremendous level of “steady statesmanship” in international diplomacy—the greatest challenge of the 21st century.

The presentation will be followed by a conversation, questions, and observations from the participants.

CACOR acknowledges that we all benefit from sharing the traditional territories of local Indigenous peoples (First Nations, Métis, and Inuit in Canada) and their descendants.



Website: canadiancor.com
Twitter: [@cacor1968](https://twitter.com/cacor1968)
YouTube: [Canadian Association for the Club of Rome](https://www.youtube.com/channel/UCrE8qP5d5kKd5kKd5kKd5kK)

2023 Jan 11 Zoom #129

Goals

- Define key terms.
- Introduce some (still newish) concepts.
- Provide a rhetorical framework conducive to moving toward a steady state economy.
- Suggest steps from tiny to huge.

Economic Growth

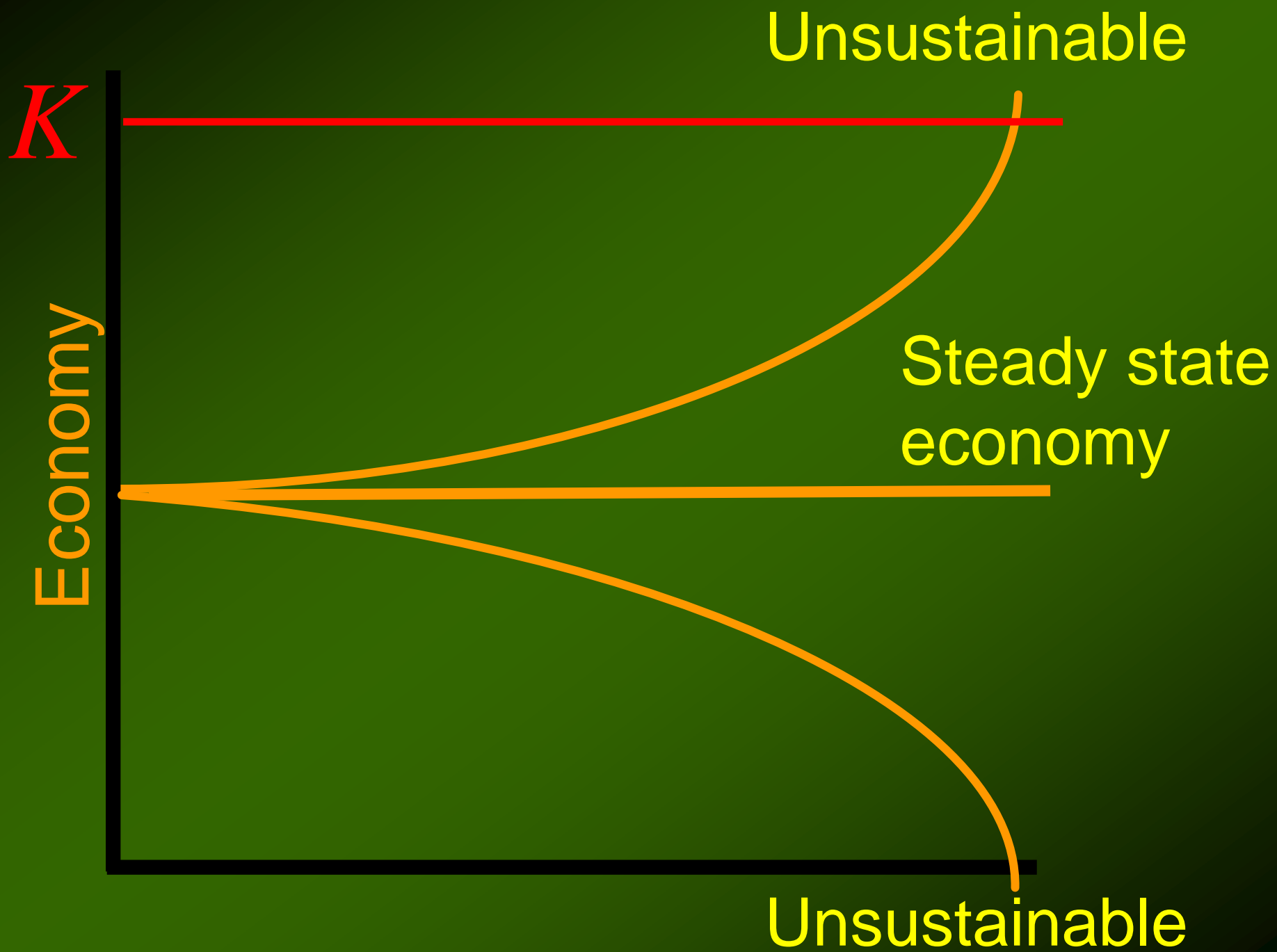
- Increase in the production and consumption of goods and services in the aggregate
- Typically expressed in terms of GDP
- Entails increasing population and/or per capita consumption

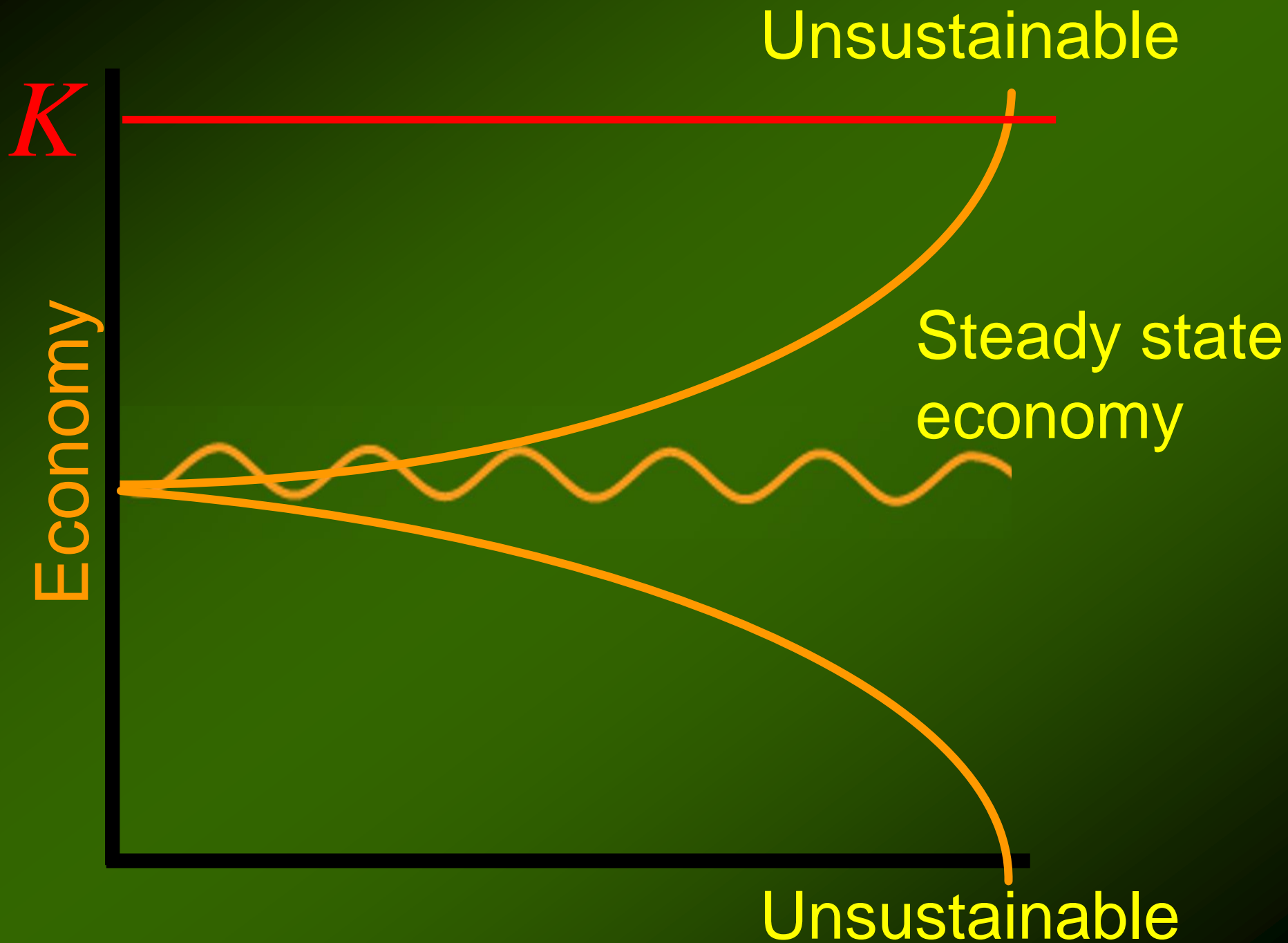
Degrowth

- Decrease in the production and consumption of goods and services in the aggregate
- Typically expressed in terms of GDP
- Entails decreasing population and/or per capita consumption

Steady State Economy

- Stabilized production and consumption of goods and services in the aggregate
- Typically expressed in terms of GDP
- Entails stabilized population and/or per capita consumption





Center for the Advancement of the Steady State Economy



CASSE

www.steadystate.org

Center for the
Advancement of
Degrowth Toward a
Steady State Economy?
(CADTSSE)











Either
Way



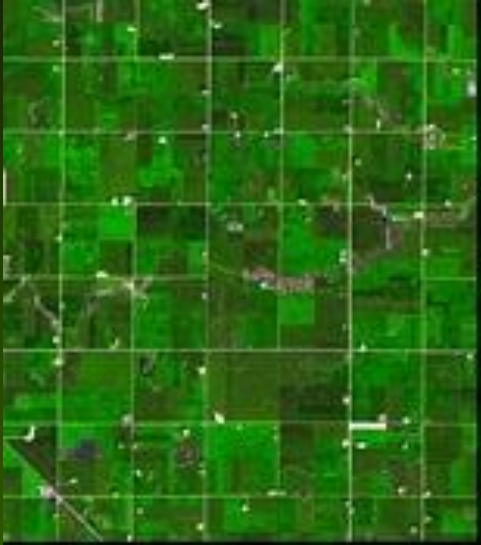
Scenes from the Economy



















USDA



















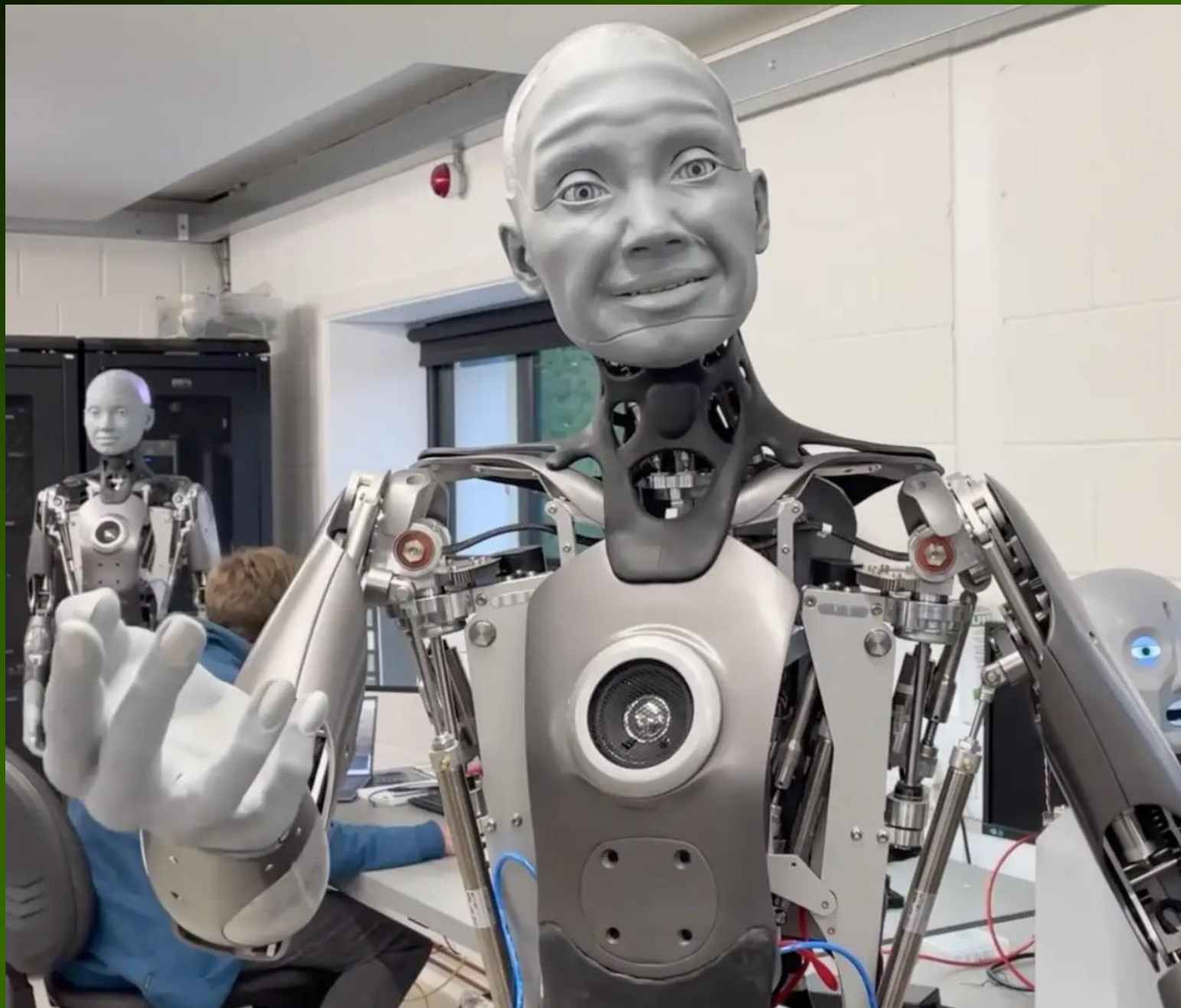














7.62MM PACKING LINKER LINE #4

TK
7.62mm
Ammunition

Remington-Union Metallic Cartridge Co. Winchester

LINE 4

START TIME	
STOP TIME	
TOTAL TIME	
PRODUCTION	

TRASH

WORKER 1: A woman in an orange shirt and black apron is packing green fabric into metal linkers on a conveyor belt.

WORKER 2: A man in a purple cap and white apron is working at a station further down the line.

WORKER 3: A woman in a plaid shirt is packing green fabric into metal linkers.

LINKERS: Three metal linkers are lined up on the conveyor belt.

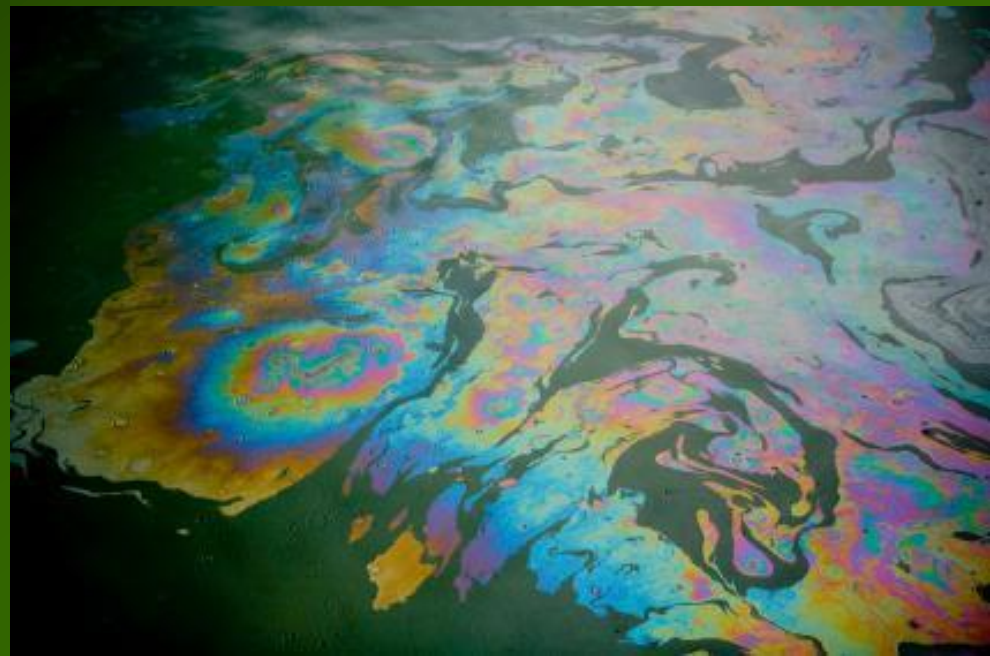
TRASH BIN: A yellow bin containing blue material, likely a cleaning or waste product.

BOXES: Large cardboard boxes filled with green fabric, ready for shipping.







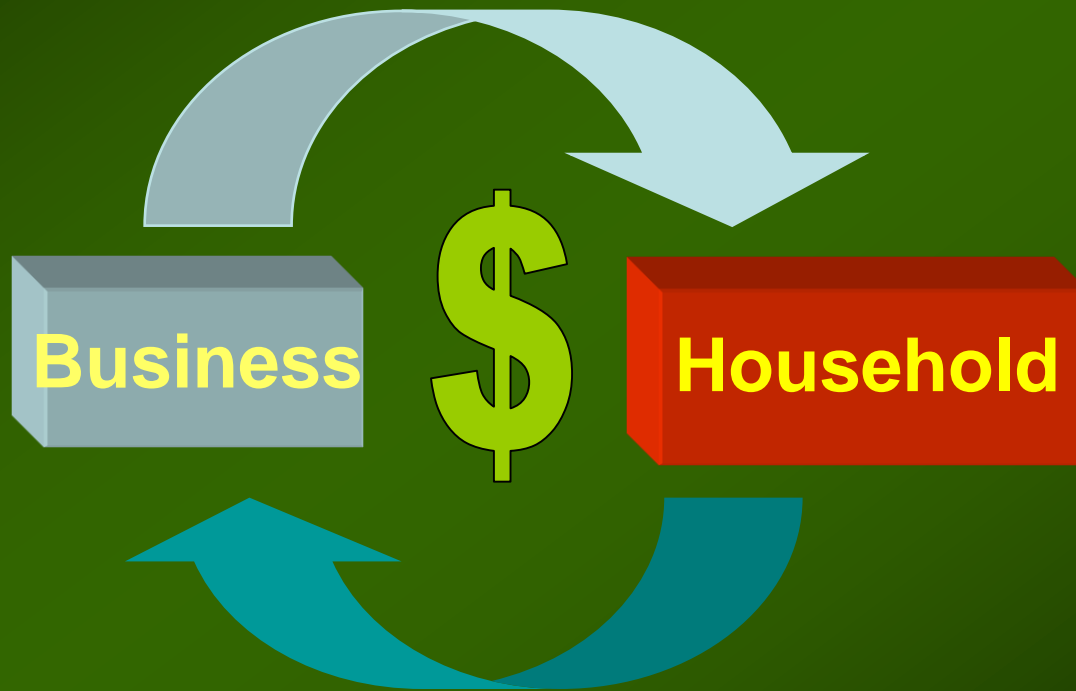


Economic Growth Theory

- Solow model
- Lucas model
- Romer model

$$Y = f(K, L)$$

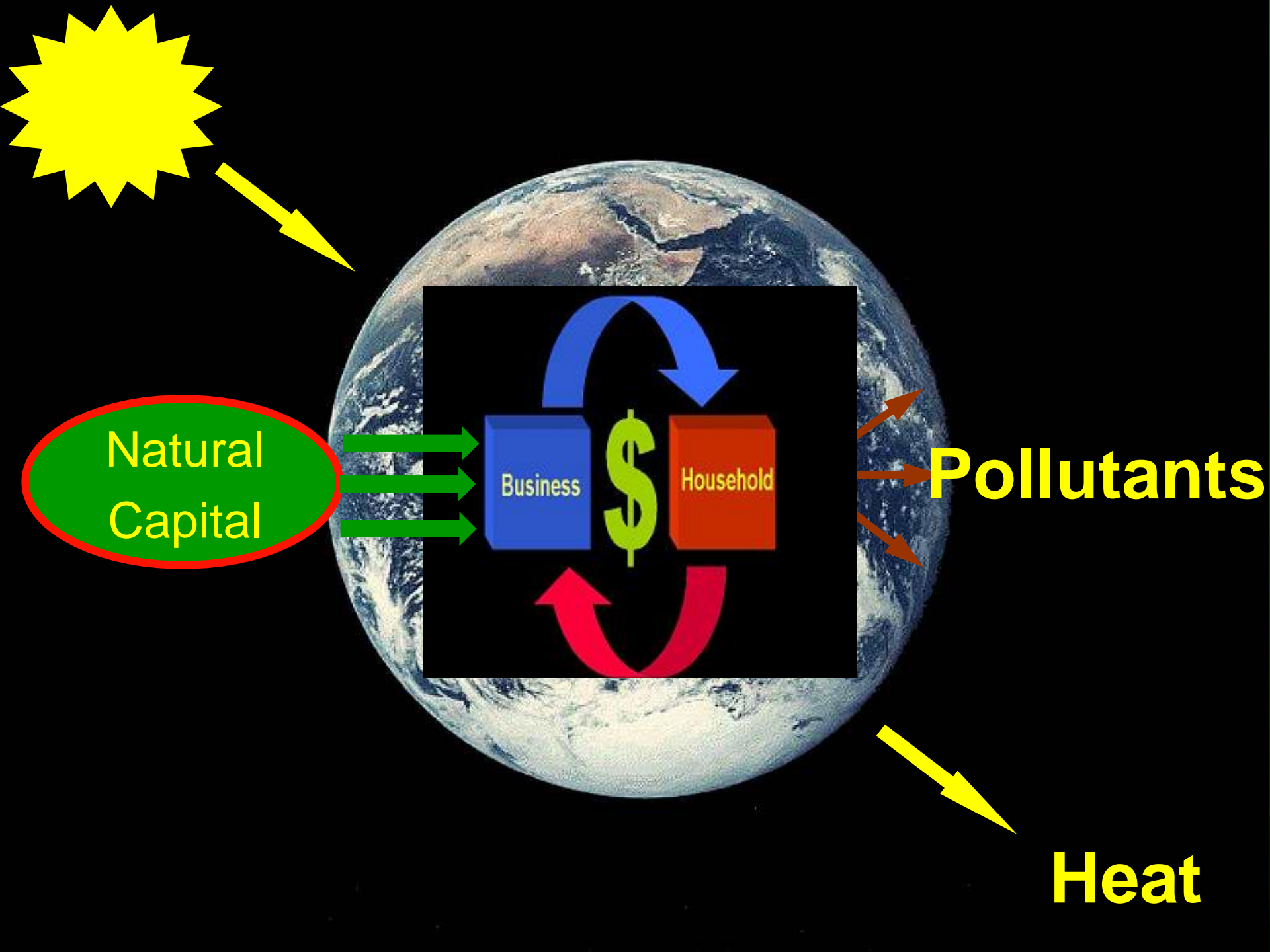
Circular Flow of Money



SS



H



Natural
Capital

Business

\$

Household

Pollutants

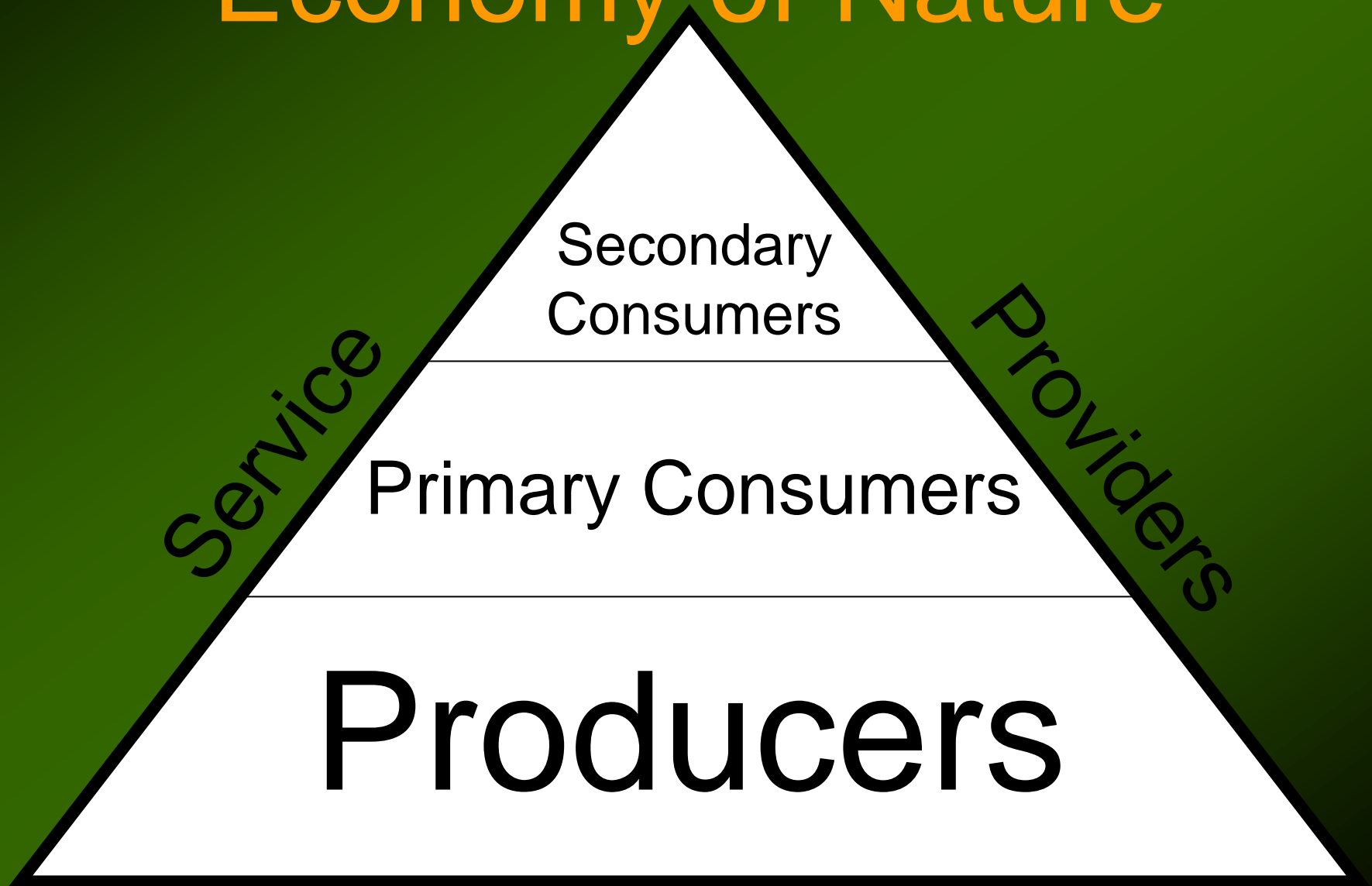
Heat



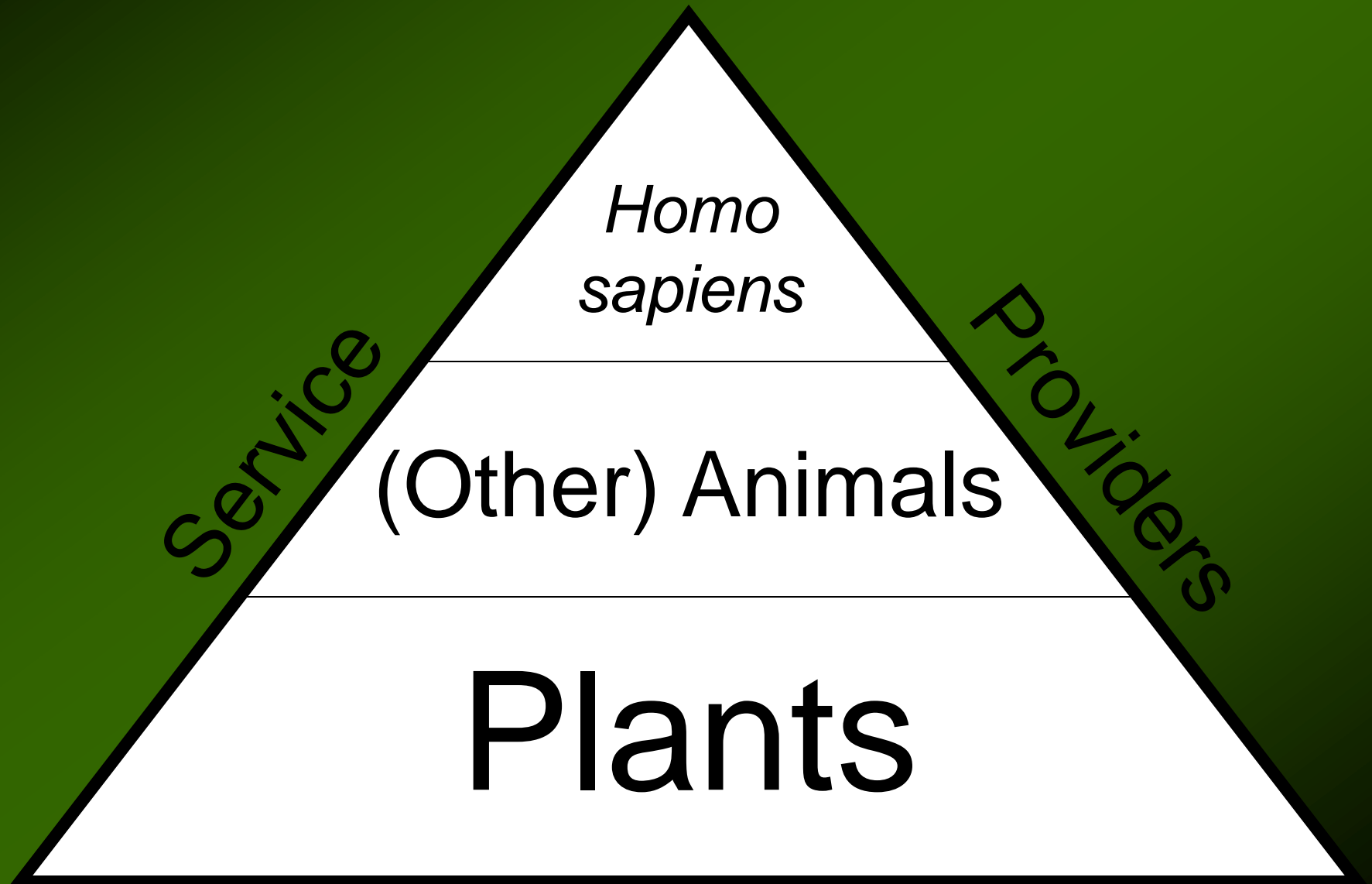
Economy

Trophic Theory of Money

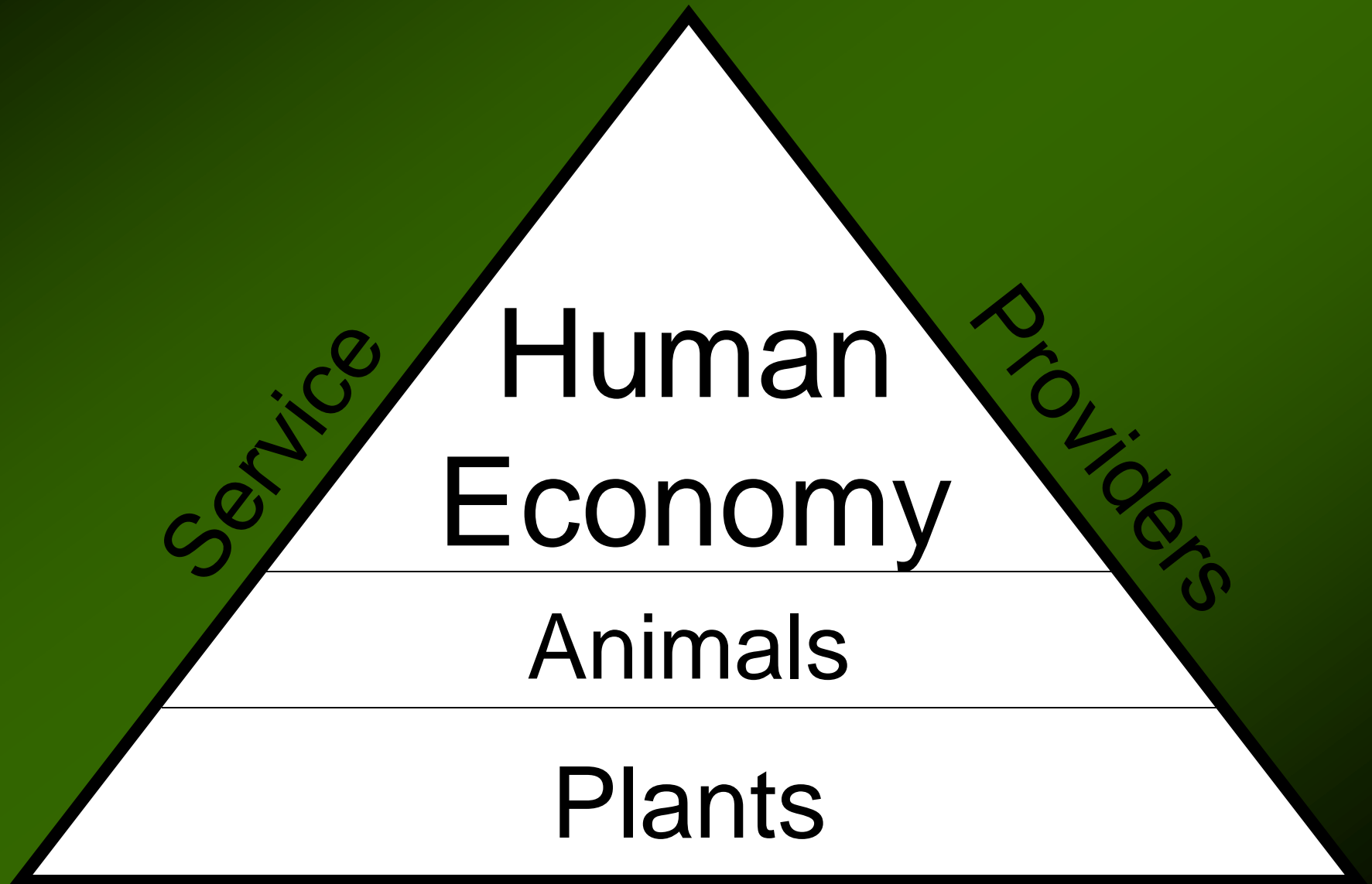
Trophic Levels in the Economy of Nature



Humans Included



Economic Growth



Service

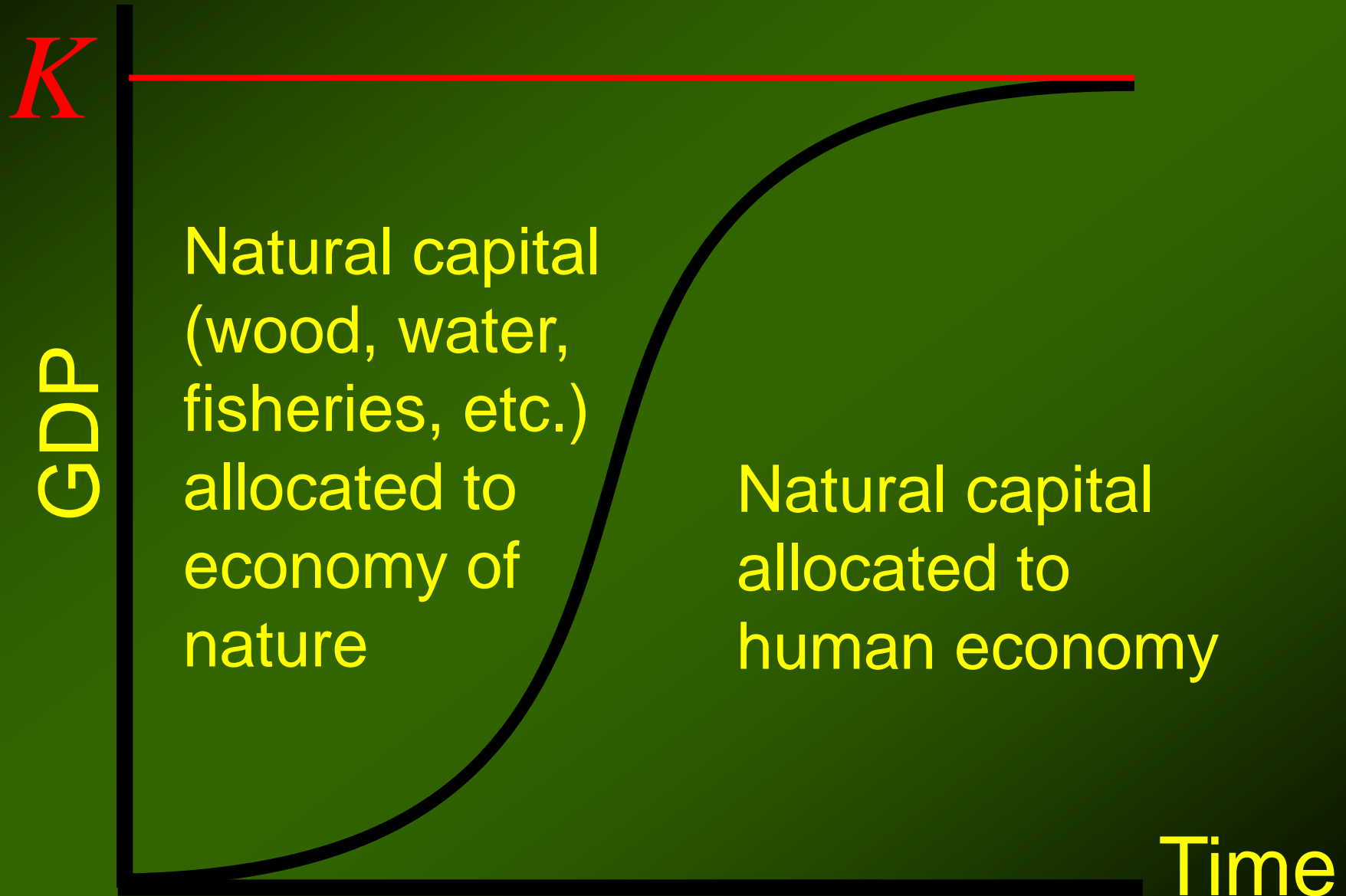
Human
Economy

Animals

Plants

Providers

Natural Capital Allocation



Wildlife Society Bulletin

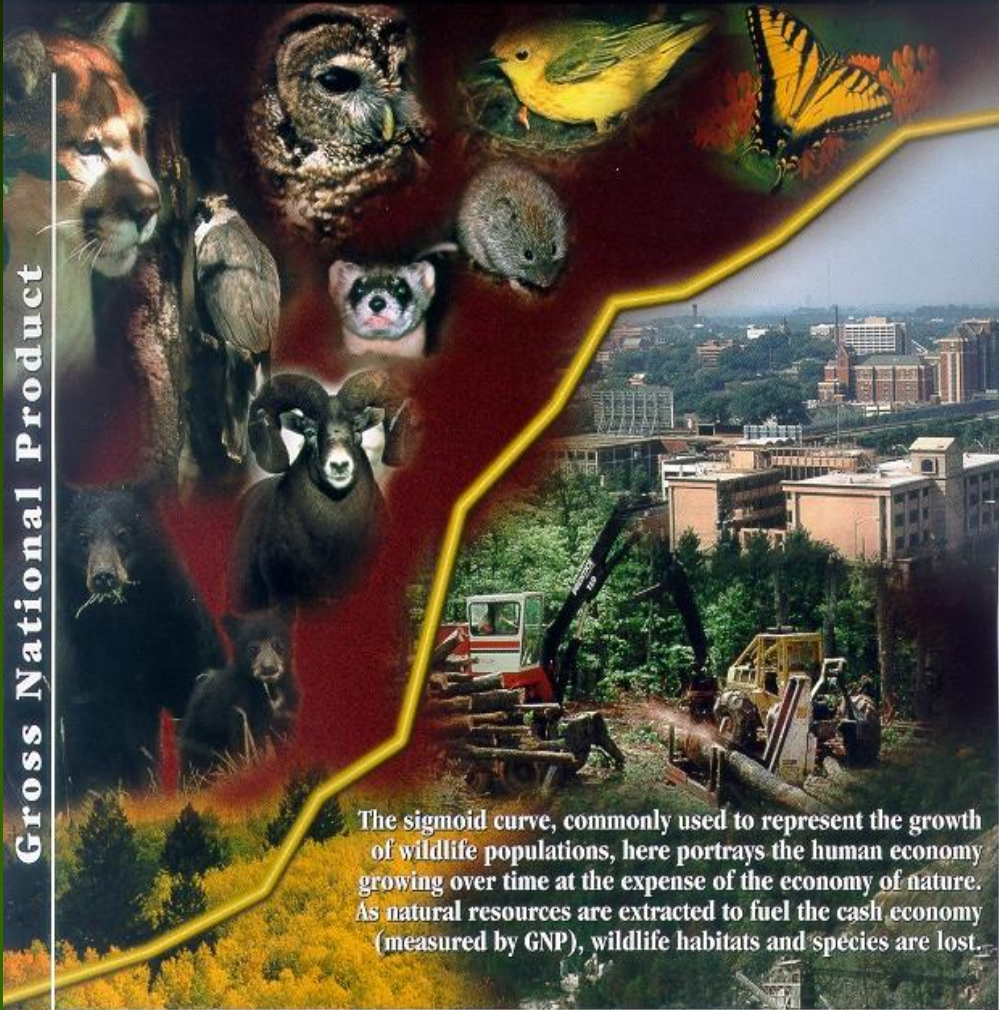
Perspectives on wildlife conservation and sustainable use

Volume 28, Number 1

Published by The Wildlife Society (ISSN-0091-7648)

Spring 2000

Gross National Product



The sigmoid curve, commonly used to represent the growth of wildlife populations, here portrays the human economy growing over time at the expense of the economy of nature. As natural resources are extracted to fuel the cash economy (measured by GNP), wildlife habitats and species are lost.

Time

Fisheries

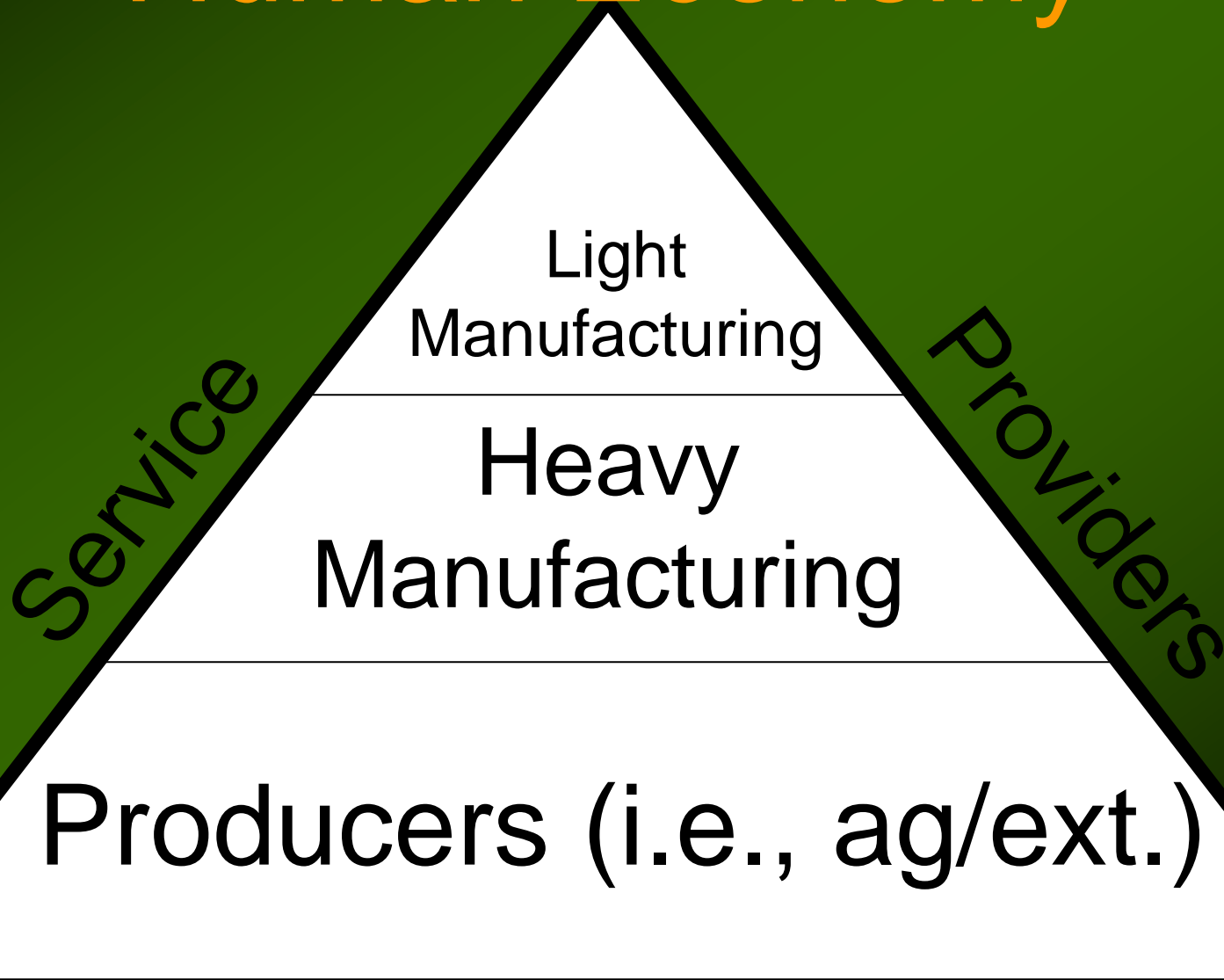
Volume 30
Series Logo



Biodiversity Conservation IS a Steady State Economy



Trophic Levels in the Human Economy



“The trophic theory of money is that money originates via the agricultural surplus that frees the hands for the division of labor into manufacturing and service sectors.”

“The trophic theory of money is that money originates via the agricultural surplus that frees the hands for the division of labor into manufacturing and service sectors.”

(Czech 2019)

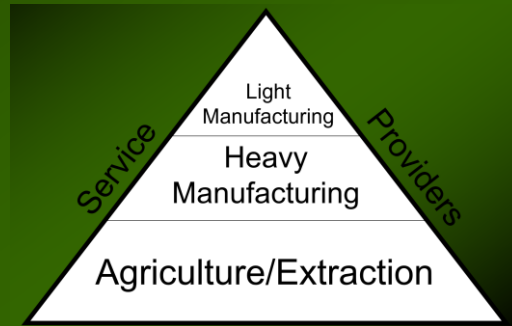
Before Any of This...



Is Plenty of This....



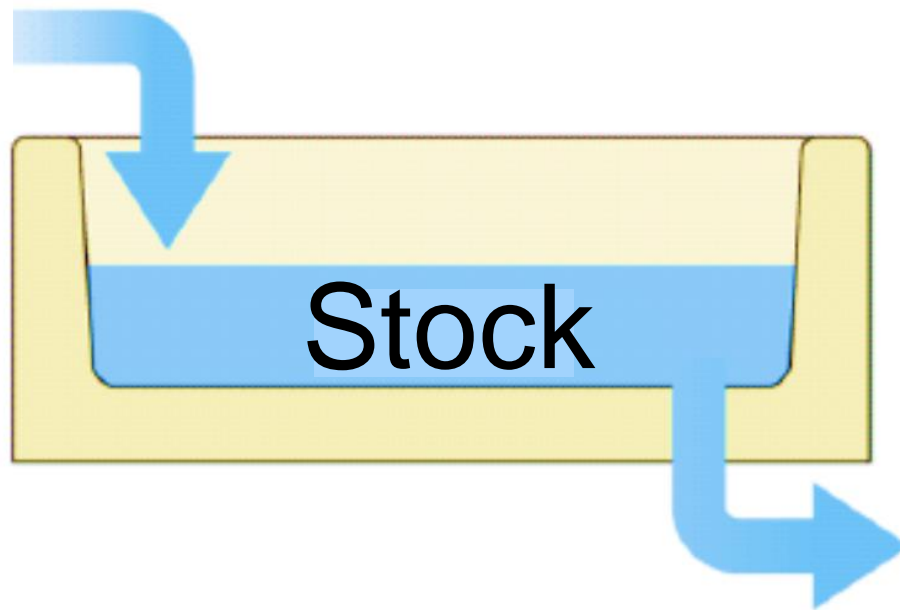
The primary corollary is that the quantity of money – and GDP – indicates the amount of agricultural surplus and related activity at the trophic base of the economy and, therefore, the environmental impact of the economy.



Environmental Impact

Stock and Flow

Flow



Flow

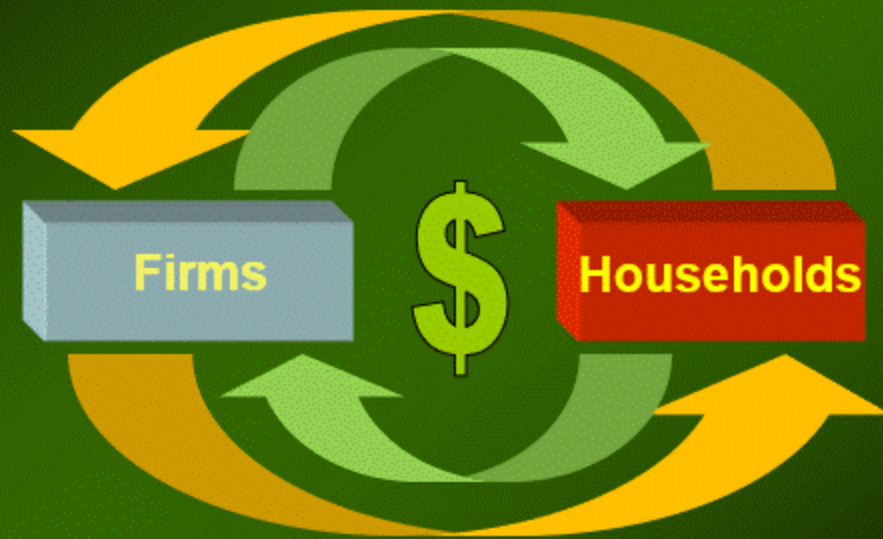
GDP is the monetary value of all final goods and services produced annually within a country's borders.

Fundamental Identity of National Income Accounting

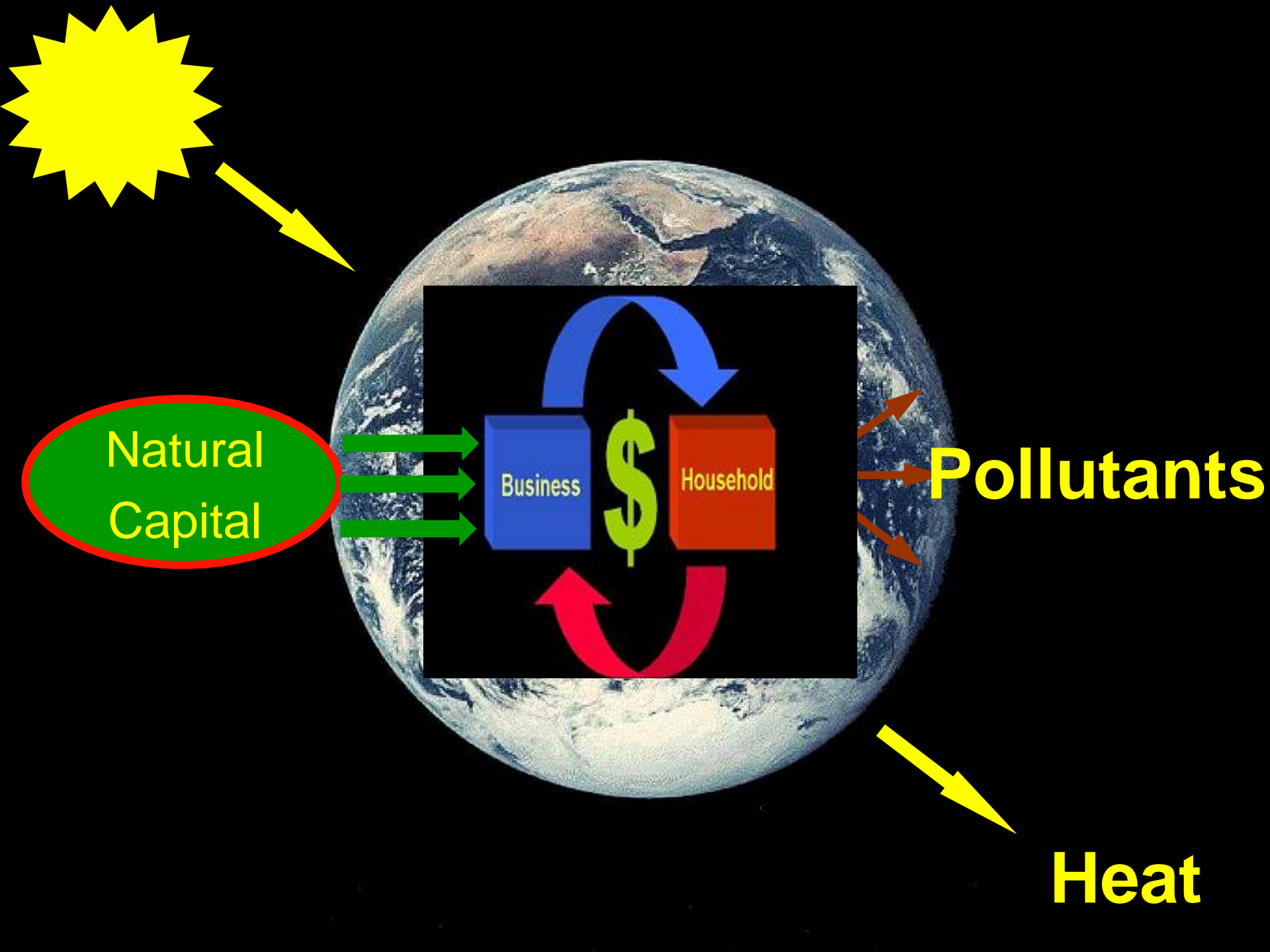
Production = Income = Expenditure



Classic Inflation



- Real sector
- Monetary sector



Natural Capital

Business

\$

Household

Pollutants

Heat



Economy



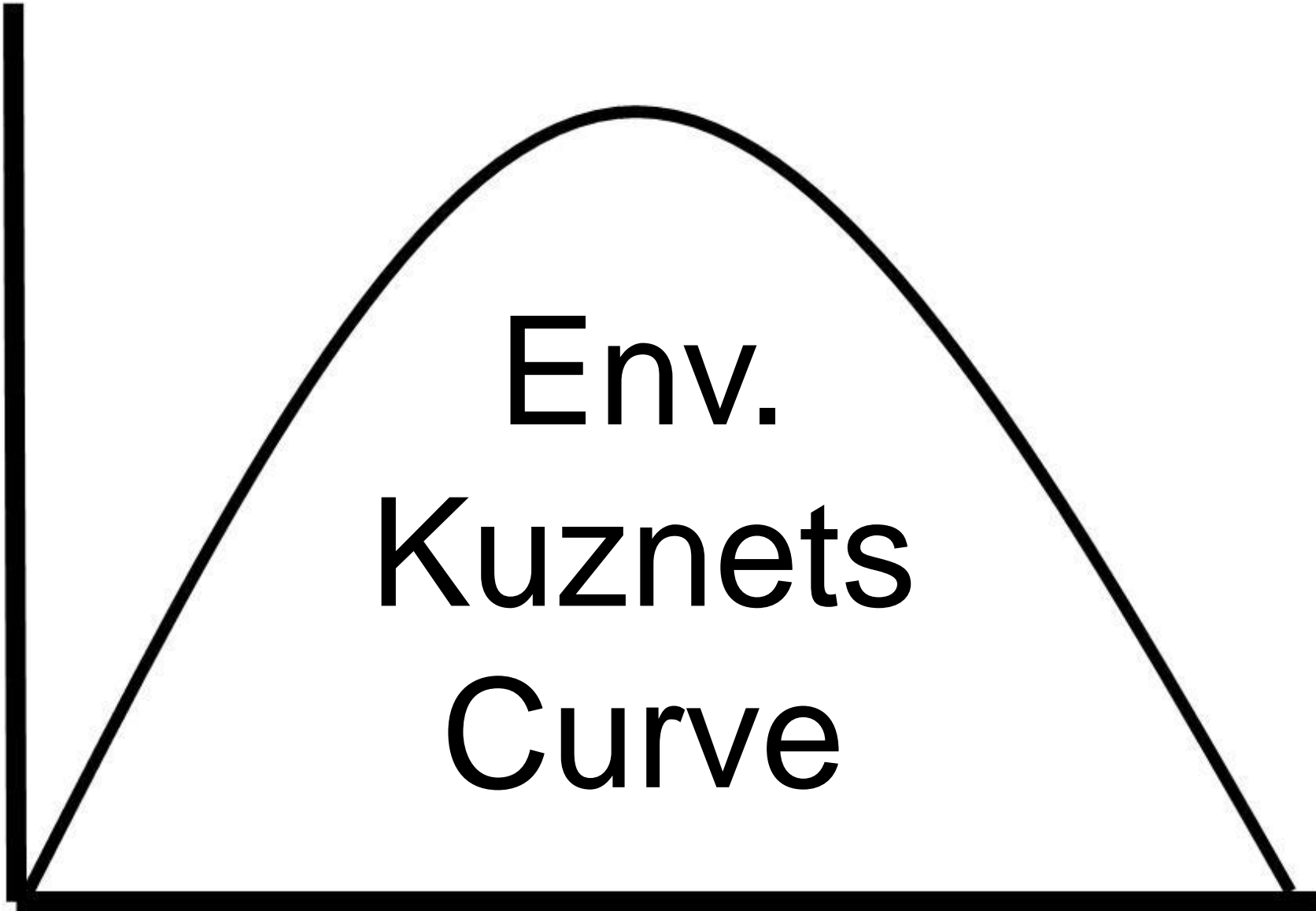
Environmental Threat



And yet
we hear...

GDP or Per Capita GDP

Environmental Threat



Env.
Kuznets
Curve

GDP or Per Capita GDP

Technological Progress

- New technology, generally
- Increasing production or efficiency resulting from invention and innovation



“The world can, in effect, get along without natural resources.”

Robert Solow



“Natural resources originate from the mind, not the ground, and therefore are not depletable.”



Robert L. Bradley, Jr., 2002

Types of Technological Progress

Explorative

Extractive

End-Use



Tracking the Sources



Consider the Sources



(i.e., after consumption, investment)

Consider the Sources



Catch-22?

Consider the Sources



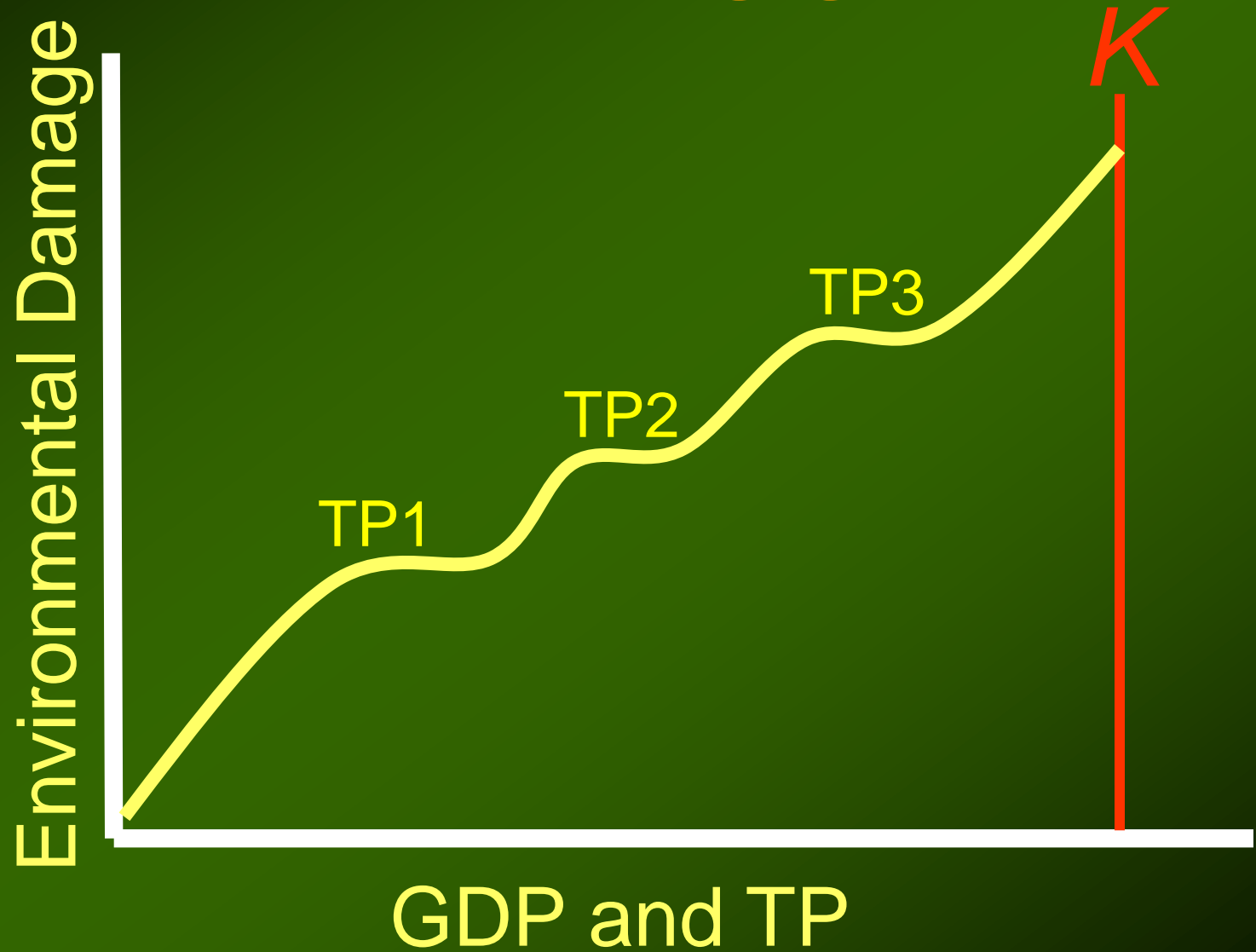
Consider the Sources



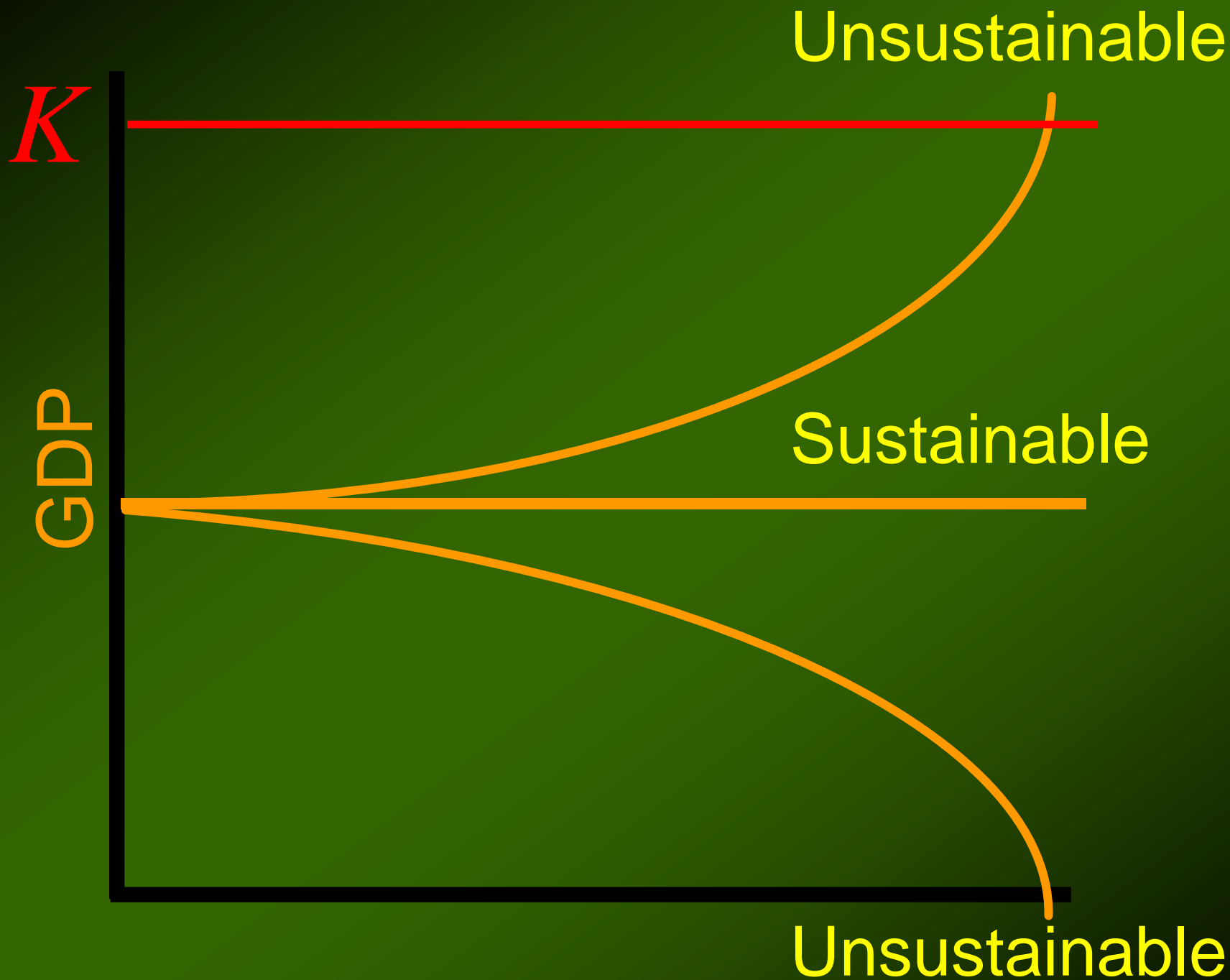
Economies of Scale

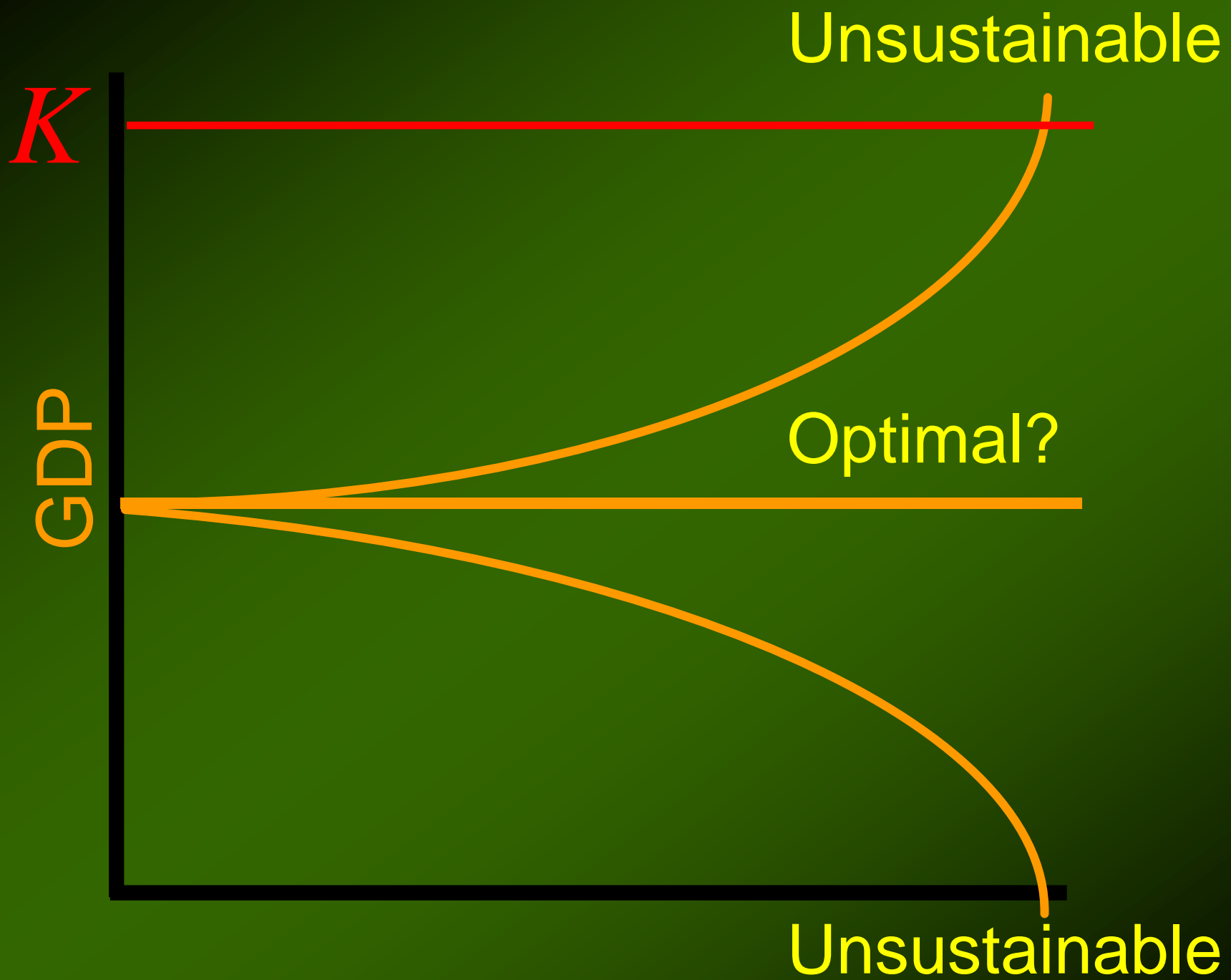
- Reductions in average cost of product resulting from increased level of output
 - Economies of scale operate:
 - Internally (e.g., Weyerhaeuser)
 - Externally (e.g., timber industry)
 - Macroeconomically (“total factor productivity”)
 - Existing levels of technology
 - Increased efficiency but concomitantly with increase in aggregate production
- } (Ruttan 2001)

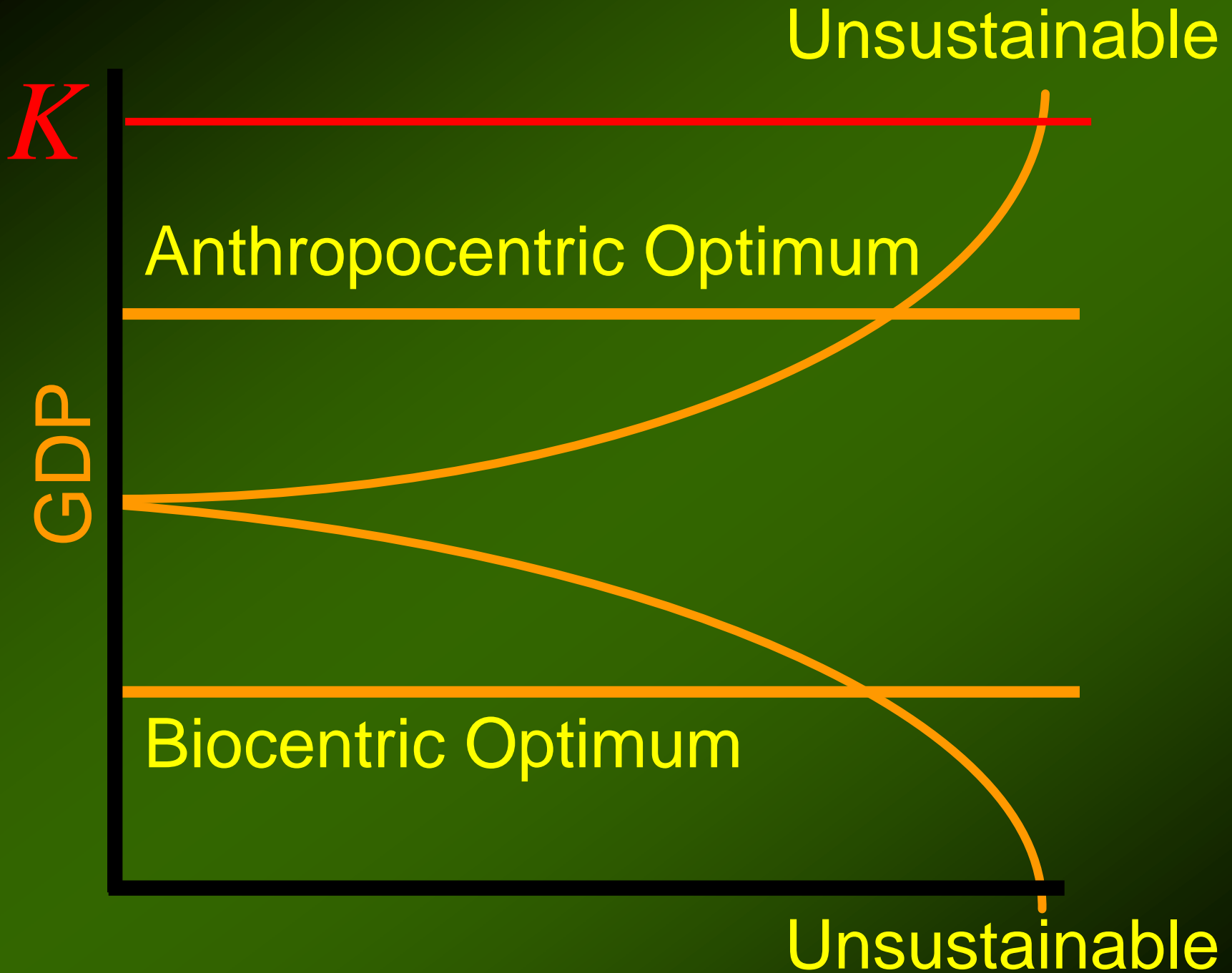
“Chicken-Egg Spiral”

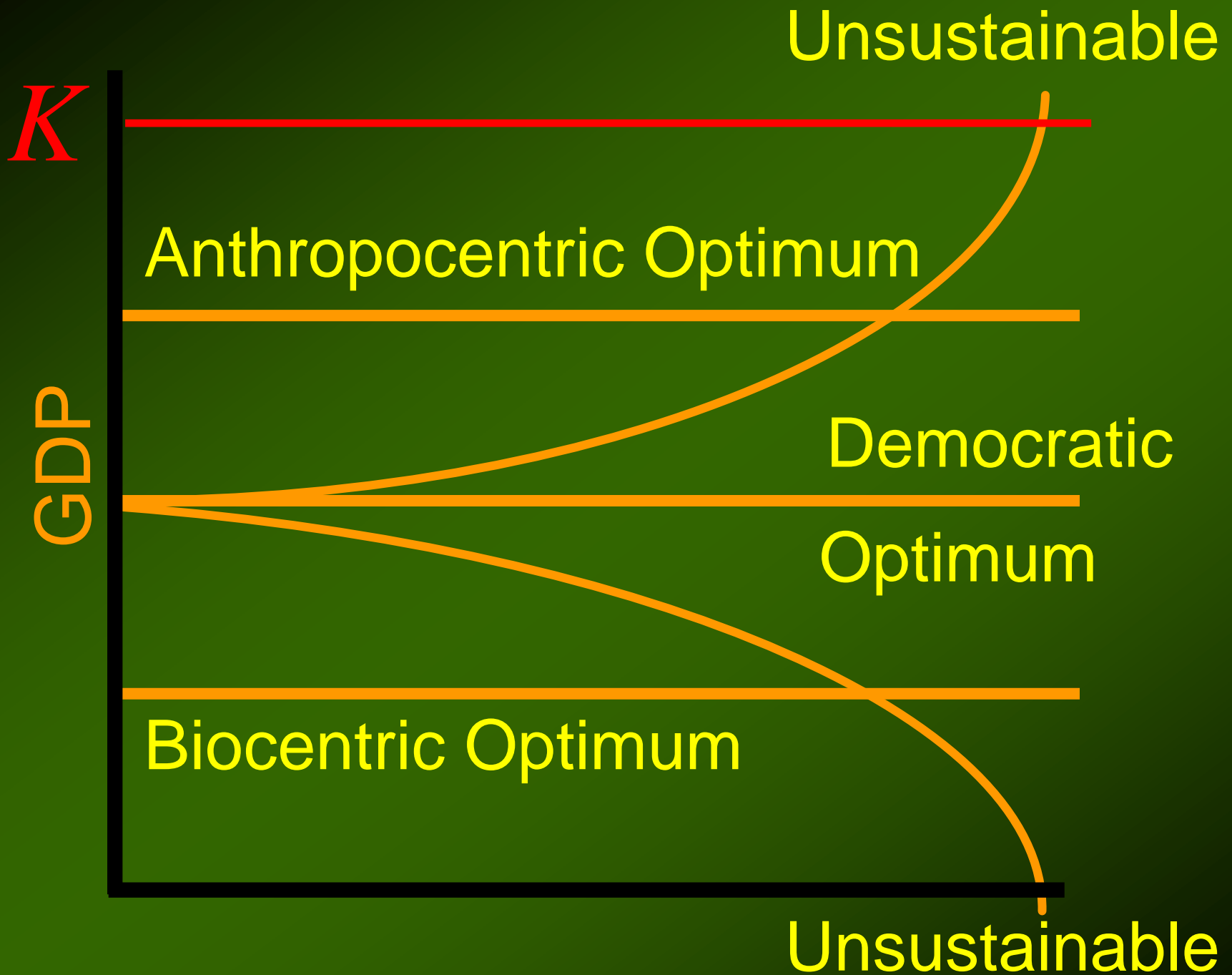


A Few Words About Optimum Scale

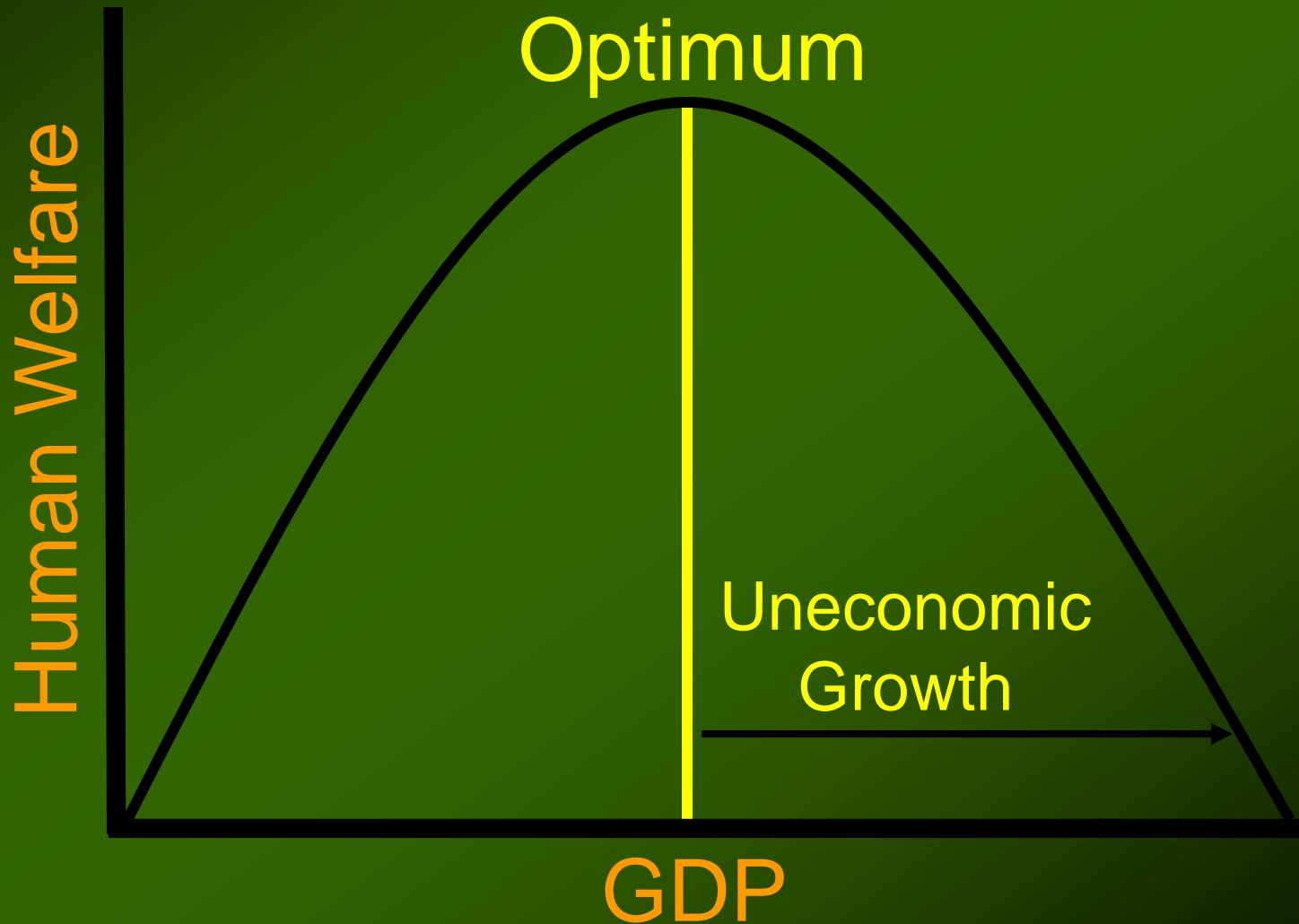




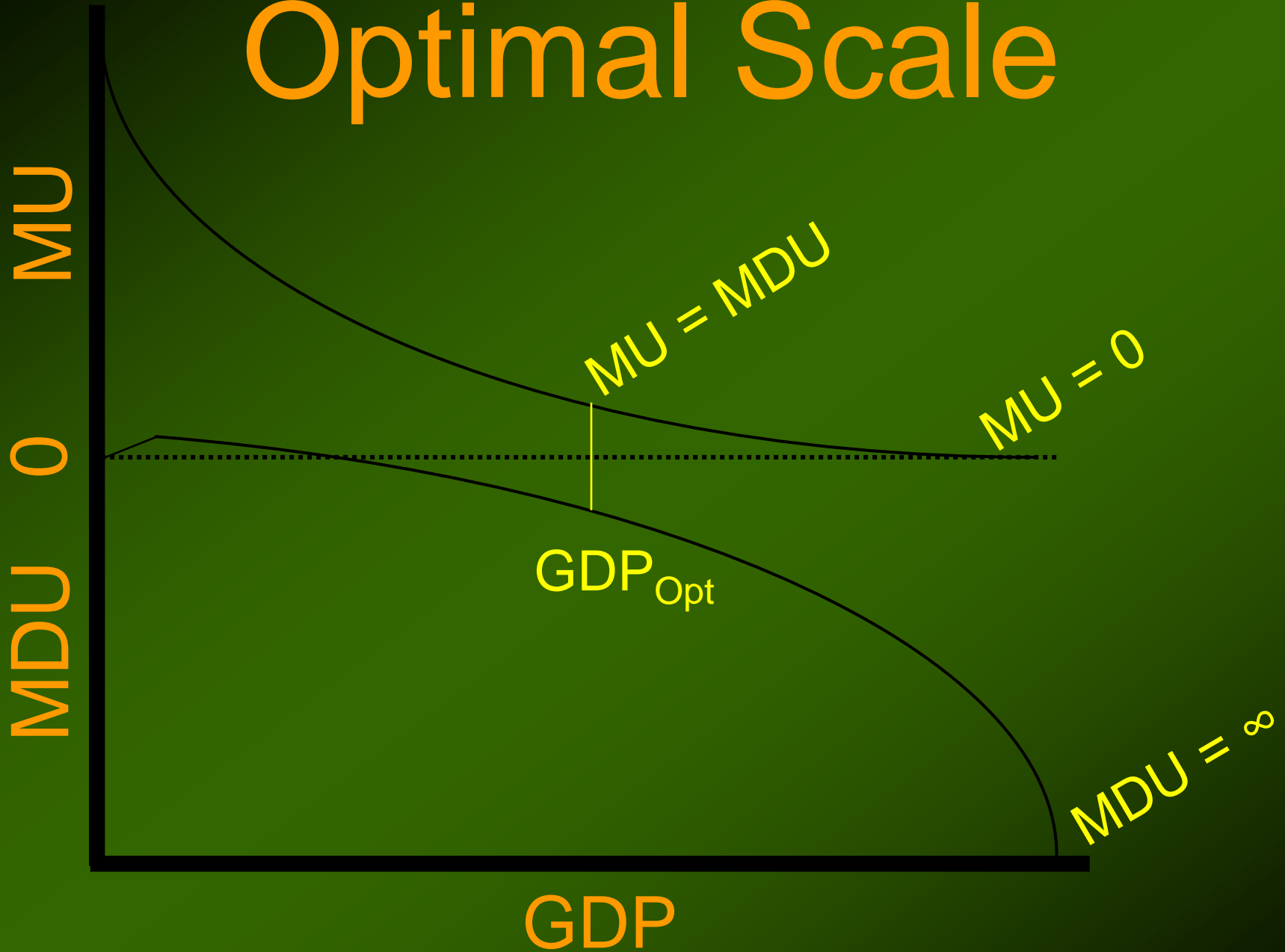




All Things Considered



Optimal Scale



Some Useful Metrics

- GDP
- Ecological Footprint
- Genuine Savings
- Living Planet Index
- Millennium Assessment Accounts
- Measure of Economic Welfare
- Human Development Index
- Index of Sustainable Economic Welfare
- Genuine Progress Indicator
- Gross National Happiness

Policy Innovation

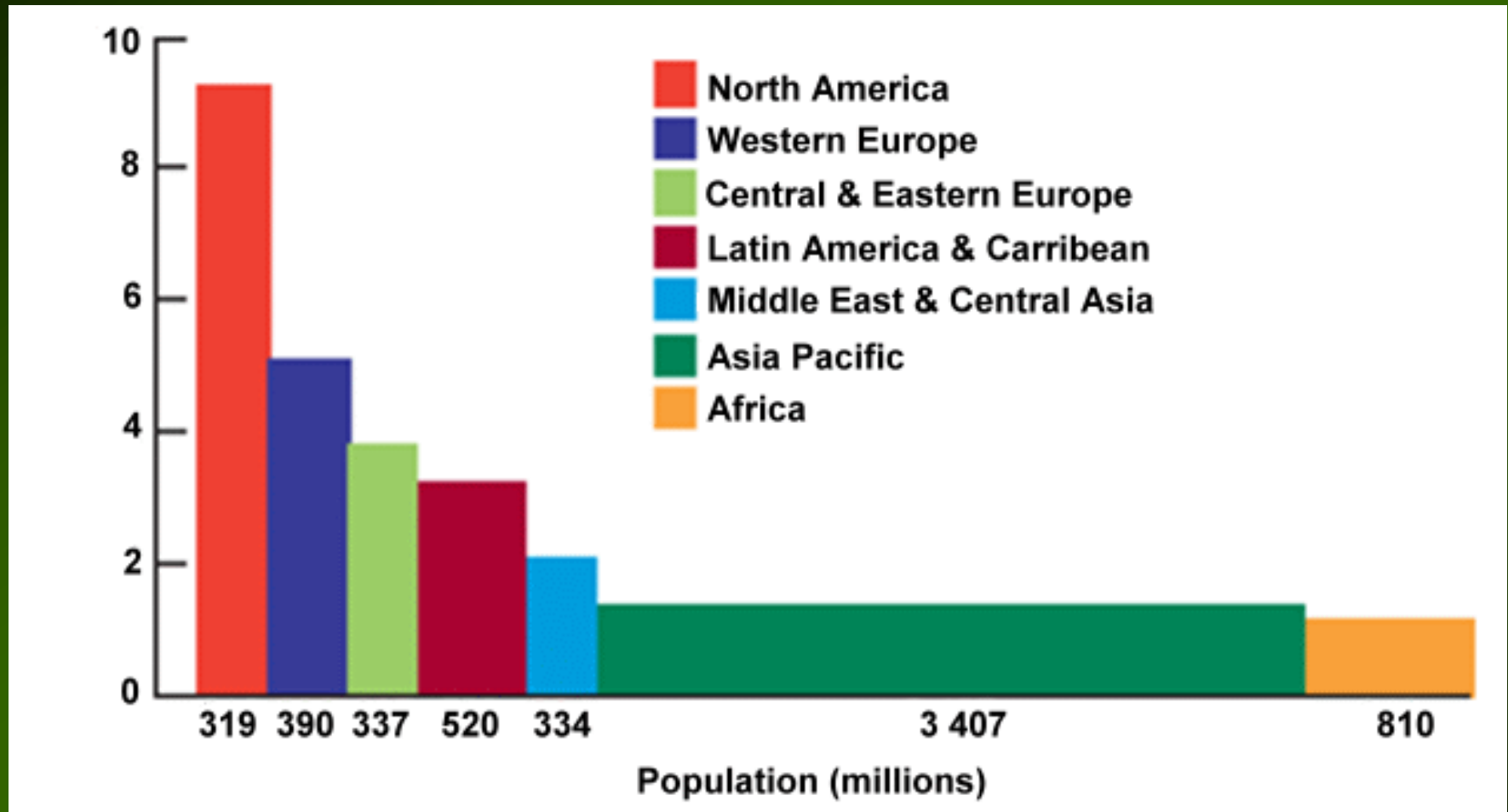
- Full Seas Act (FSEA)
- Reform of pro-growth policies and missions
- Resource cap-and-trading
- Tax incentives for population stabilization
- Salary caps and minimum wages
- Transition out of fractional-reserve banking
- Adoption of appropriate indicators
- Steady statesmanship

Steady Statesmanship in International Diplomacy

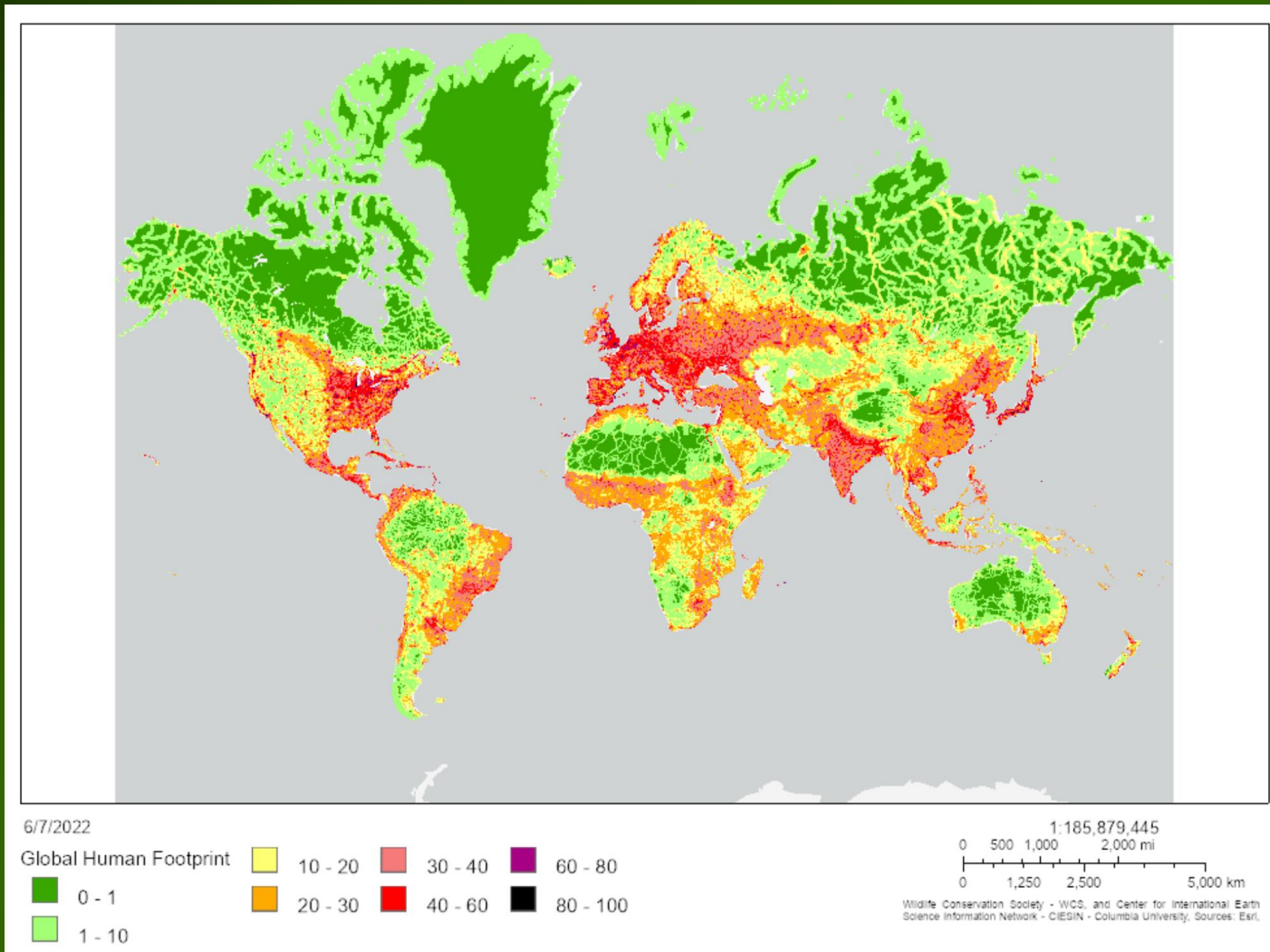
United Nations: A Table for Steady Statesmanship?



Use the Ecological Footprint

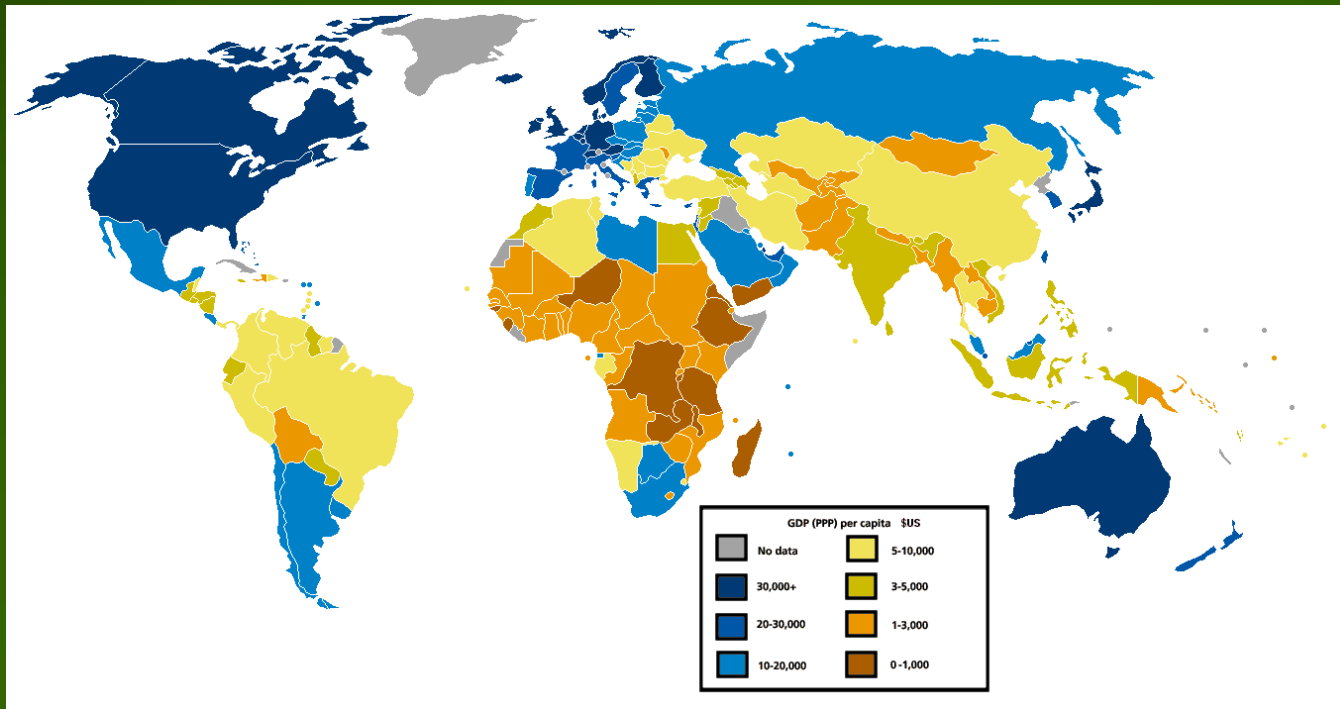


“Backtracking”



Or, with the
trophic theory of money...

GDP/Capita



International Governance

- COPS, Bad → Good
 - Climate COP
 - Biodiversity COP
- UN Sustainable Development Goals
- Espoo Convention
- Convention on Economic Sustainability

Trickle-down Consumption

United States(s)

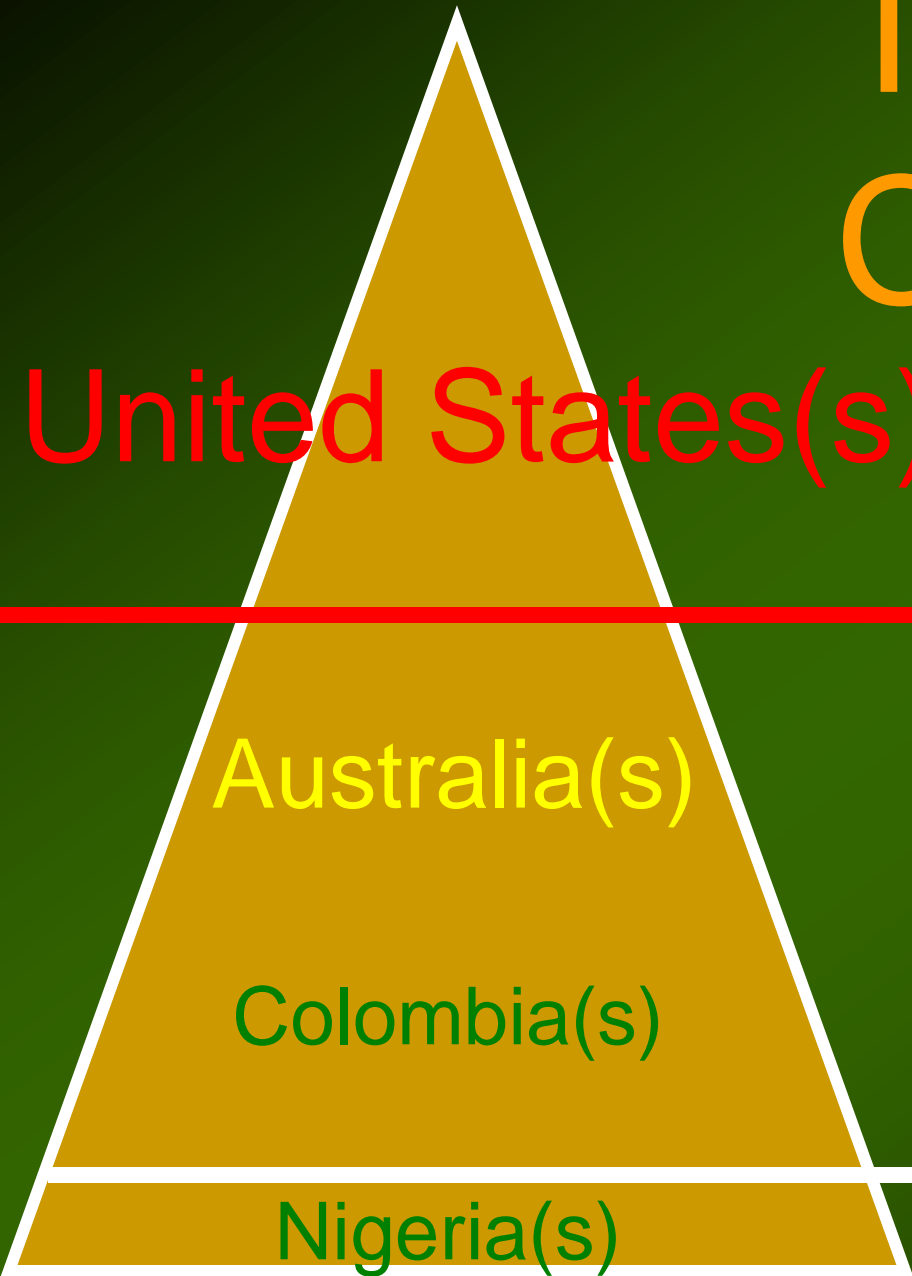
Ecological
Capacity

Australia(s)

Colombia(s)

Poverty
Line

Nigeria(s)



Trickle-down Consumption

United States(s)

Ecological Capacity

Australia(s)

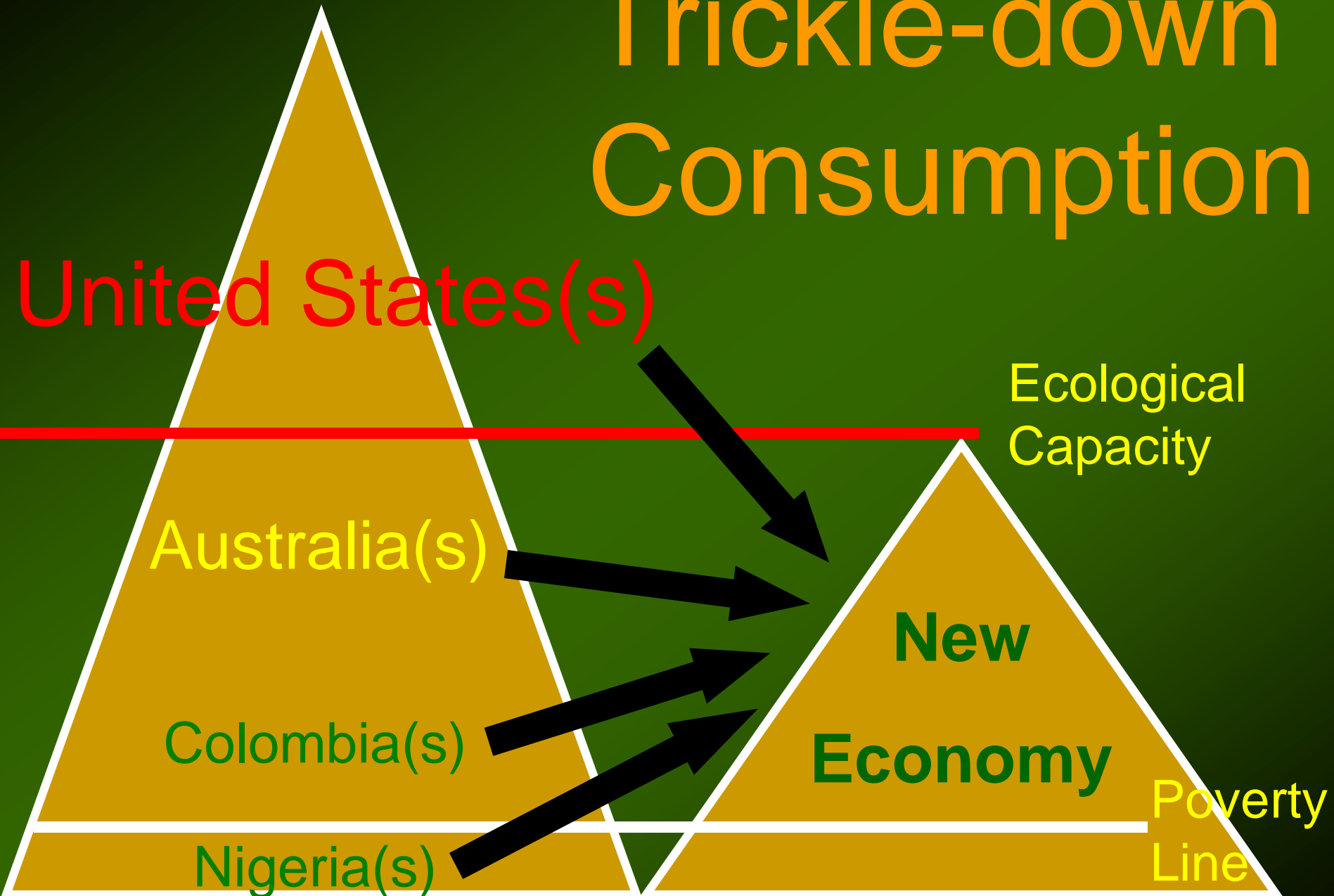
New

Colombia(s)

Economy

Nigeria(s)

Poverty Line



Take Action

- Sign the steady-state position (www.steadystate.org)
- (Organizational endorsements welcome as well.)
- Join CASSE — start a chapter.
- Demand “steady statesmanship” at COP17 and COP29 — make them two GOOD COPs.
- Engage in the many CASSE projects.
- Use your imagination and passion for conservation, peace, and security. Remember...

It's the Steady State Economy, Friends

- Environmental Protection IS...
 - Sustainability IS...
 - Peace IS...
- } A Steady State Economy

Start Now!



Sign the Position!
(www.steadystate.org)

