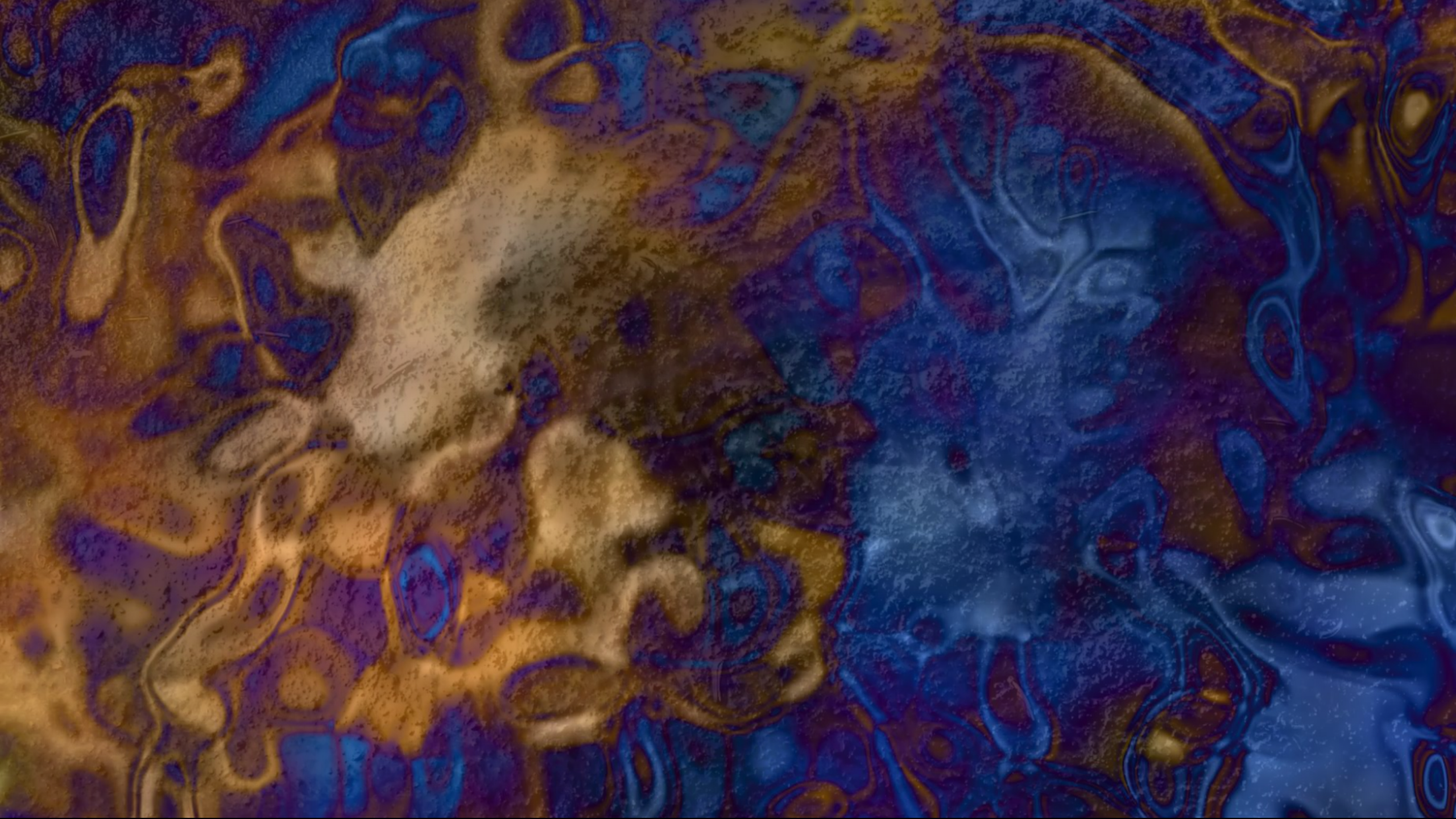




F39 part 1

Jul 25, 2023 2:48 PM



Just Stop Oil !!!??

Part 2 - Oil is the Economy

Frankly 39



F39 part 1

Jul 25, 2023 2:48 PM

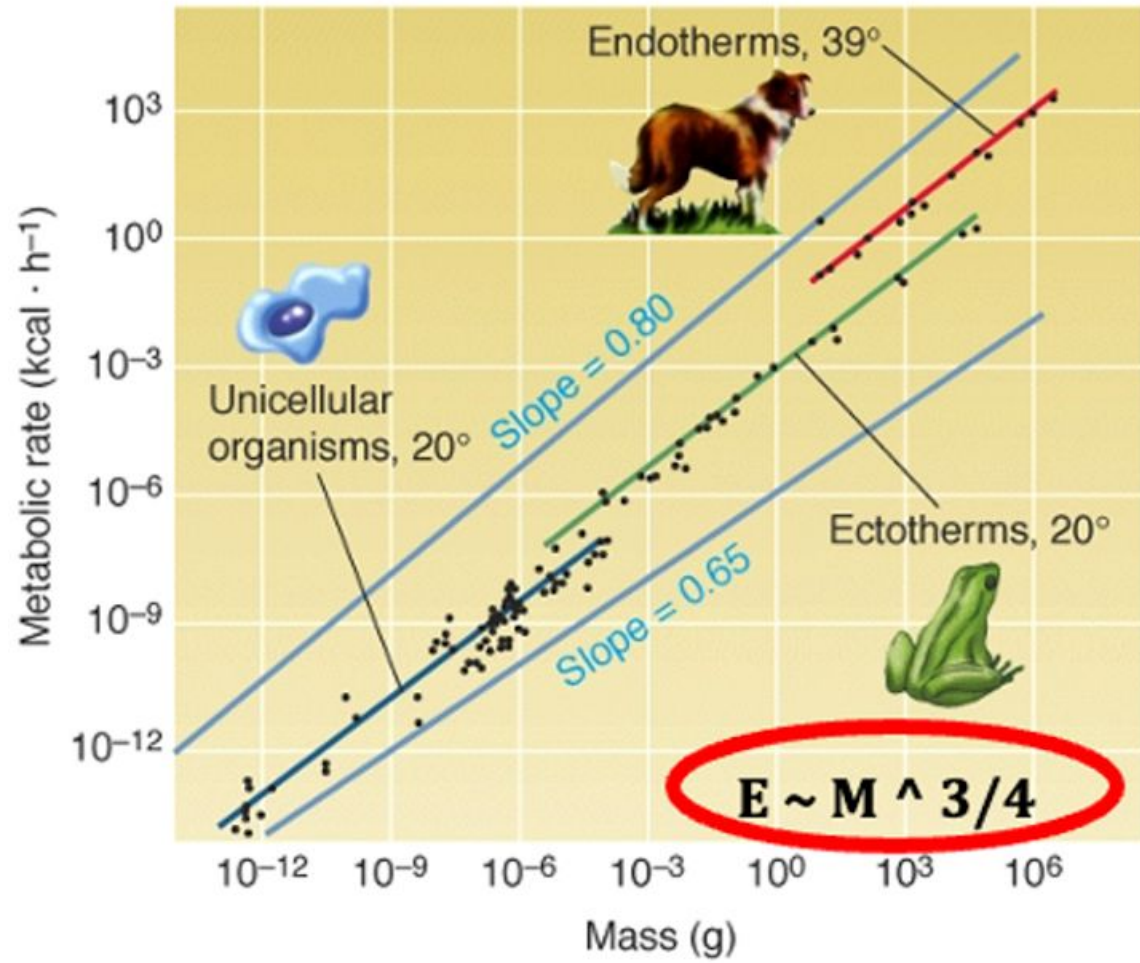
A cheetah and a gazelle are running across a savanna. The cheetah is on the left, and the gazelle is on the right. The background is a blurred landscape of dry grass and trees.

EXPENSE

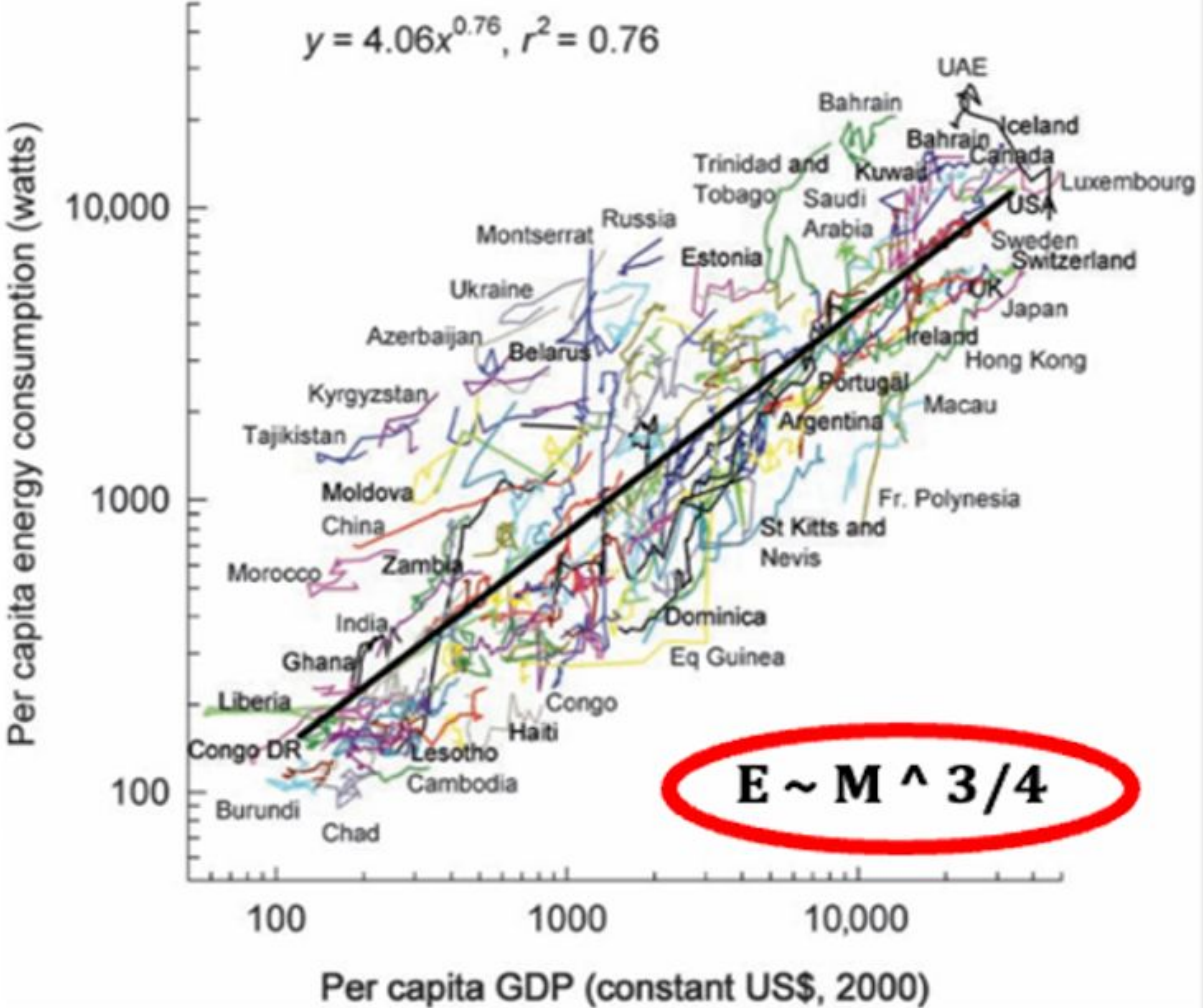
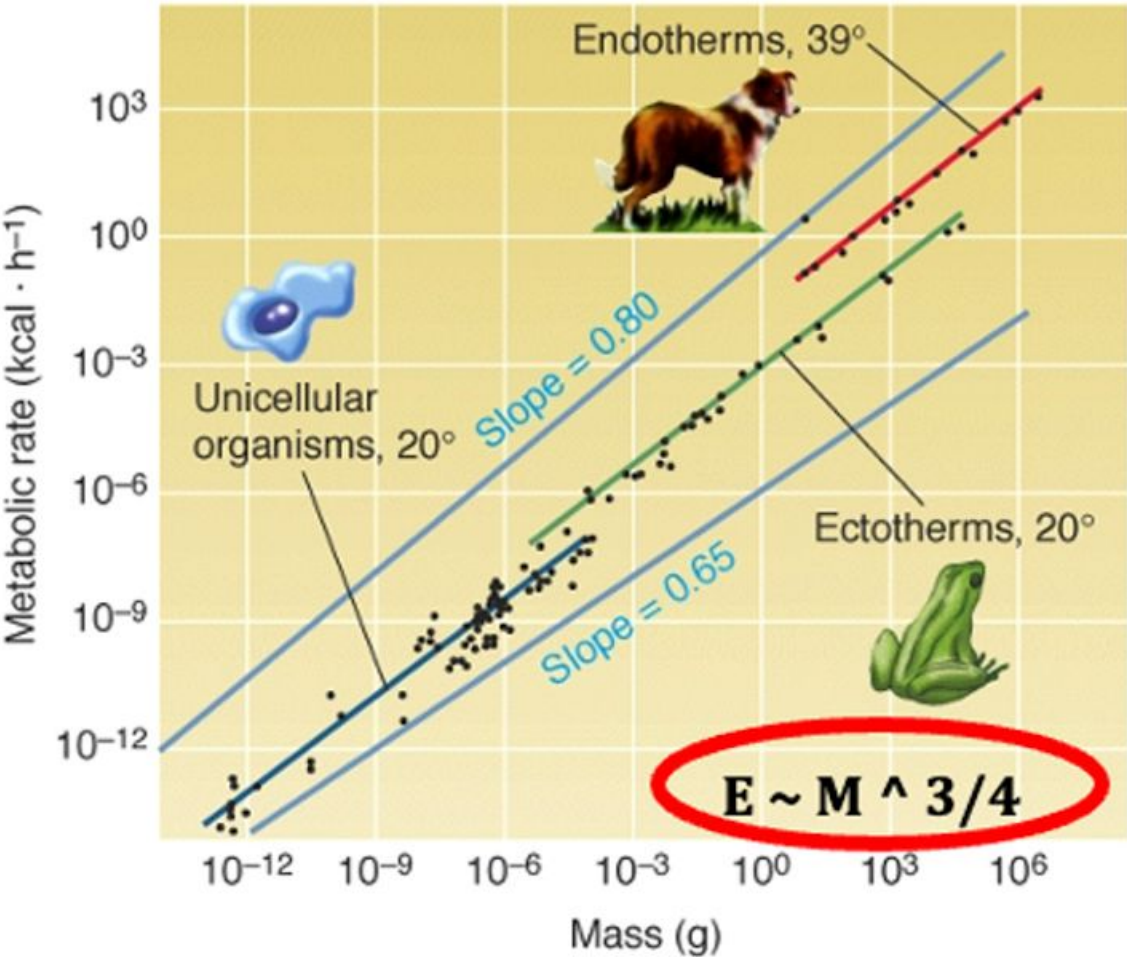
INCOME



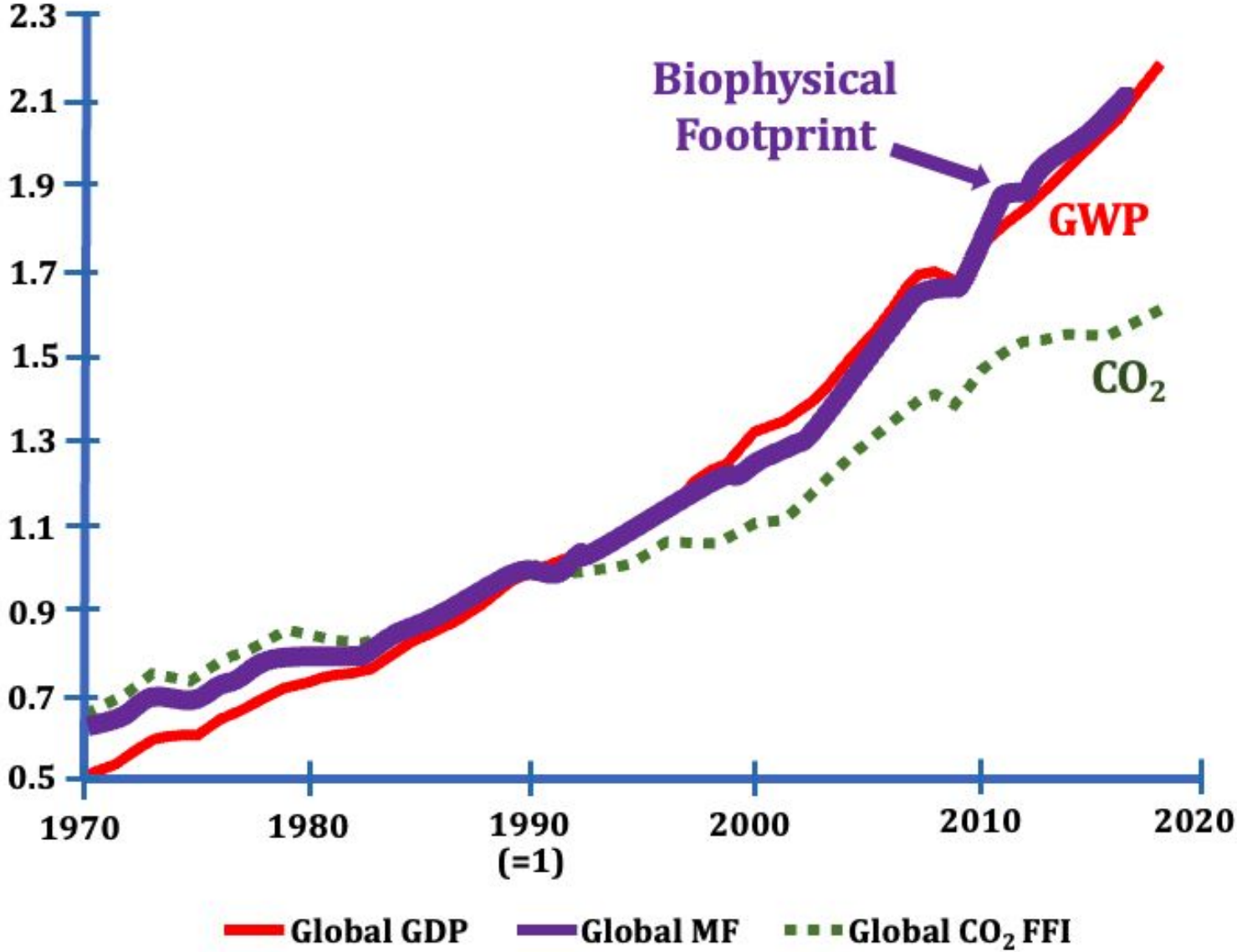
Kleiber's Law



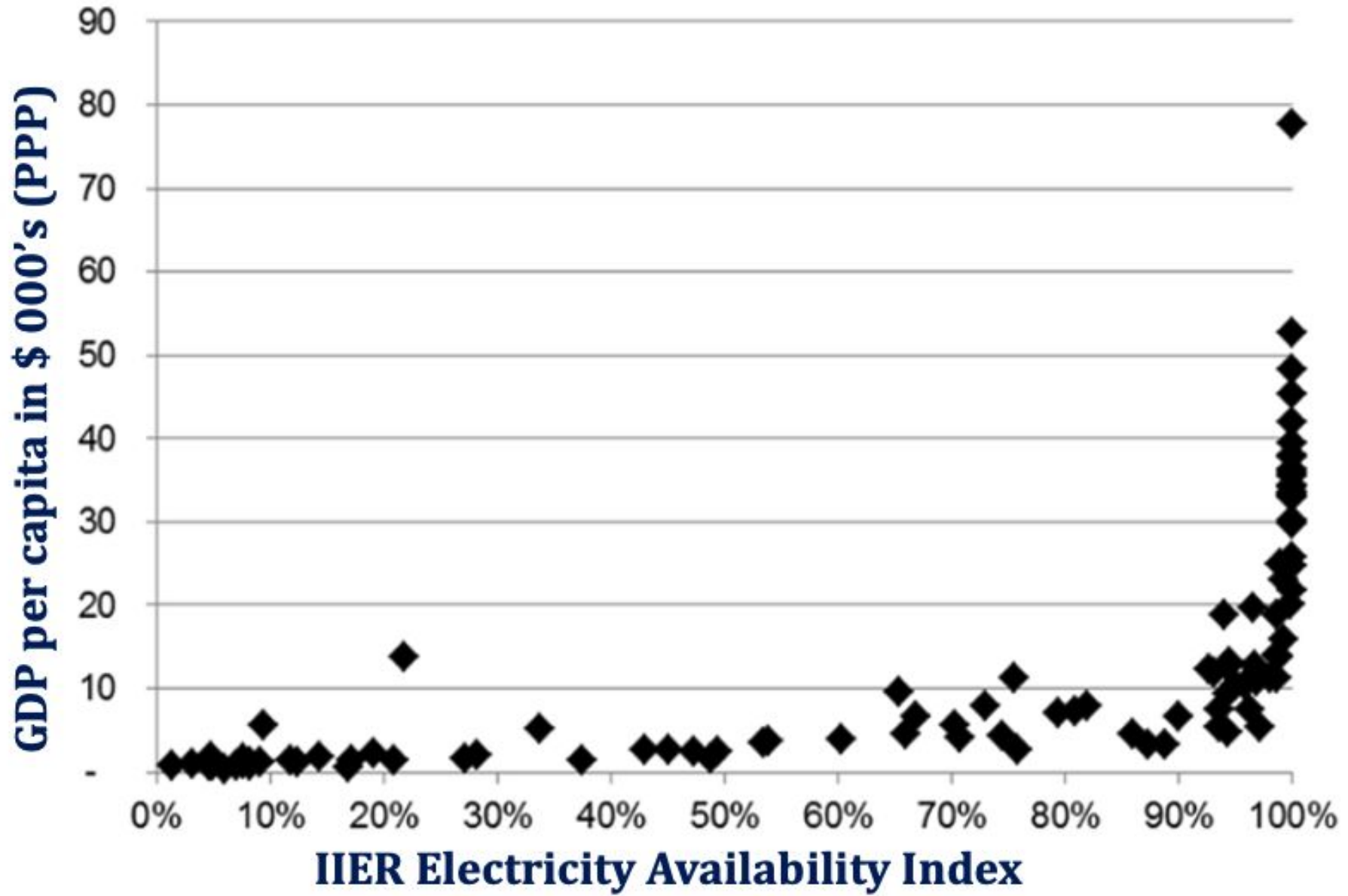
Kleiber's Law



GDP, Energy and Material Footprint Tightly Linked

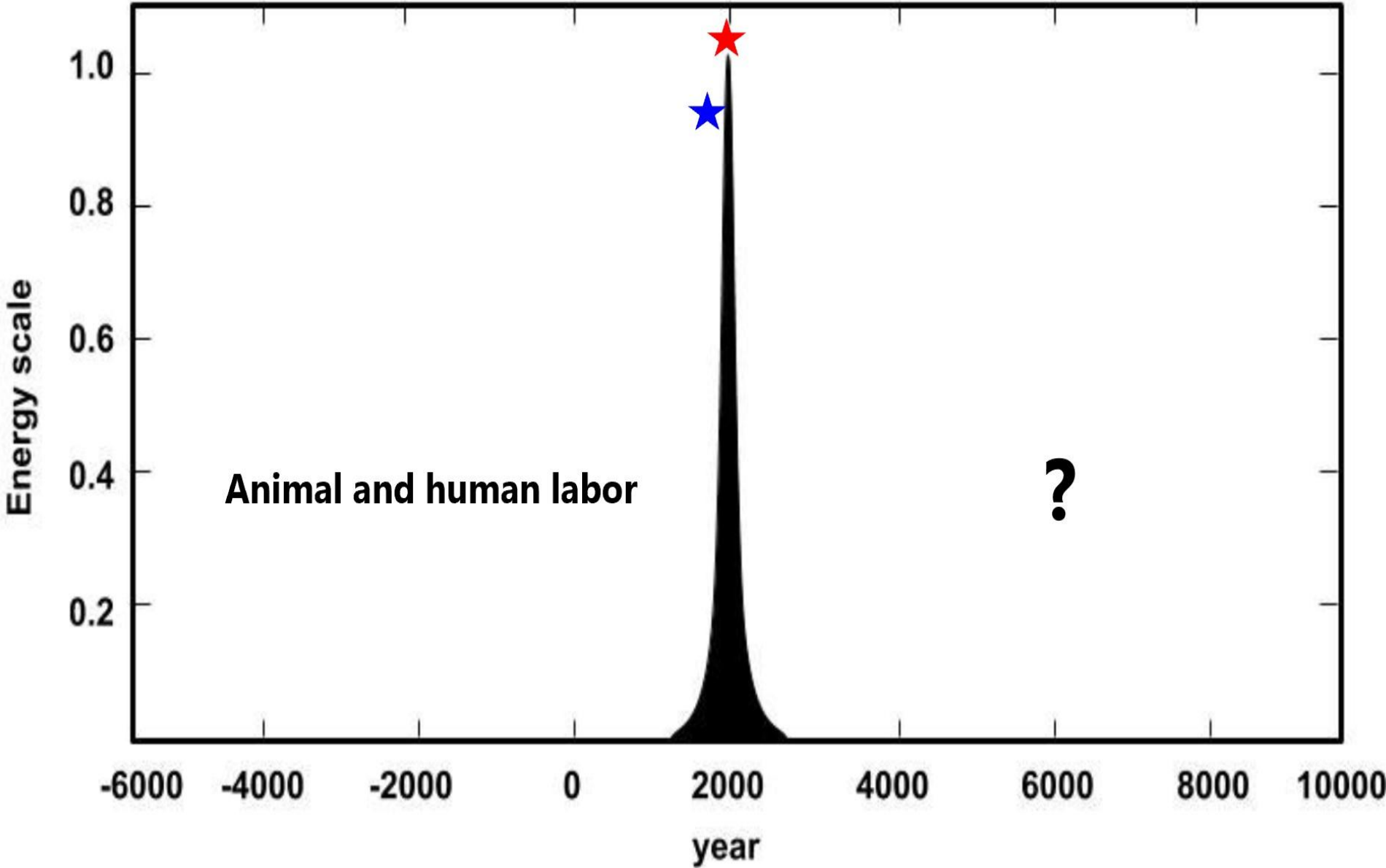


Wiedmann; et al, "Scientists' warning on affluence". *Nature Communications*. 11 (1): 3107.

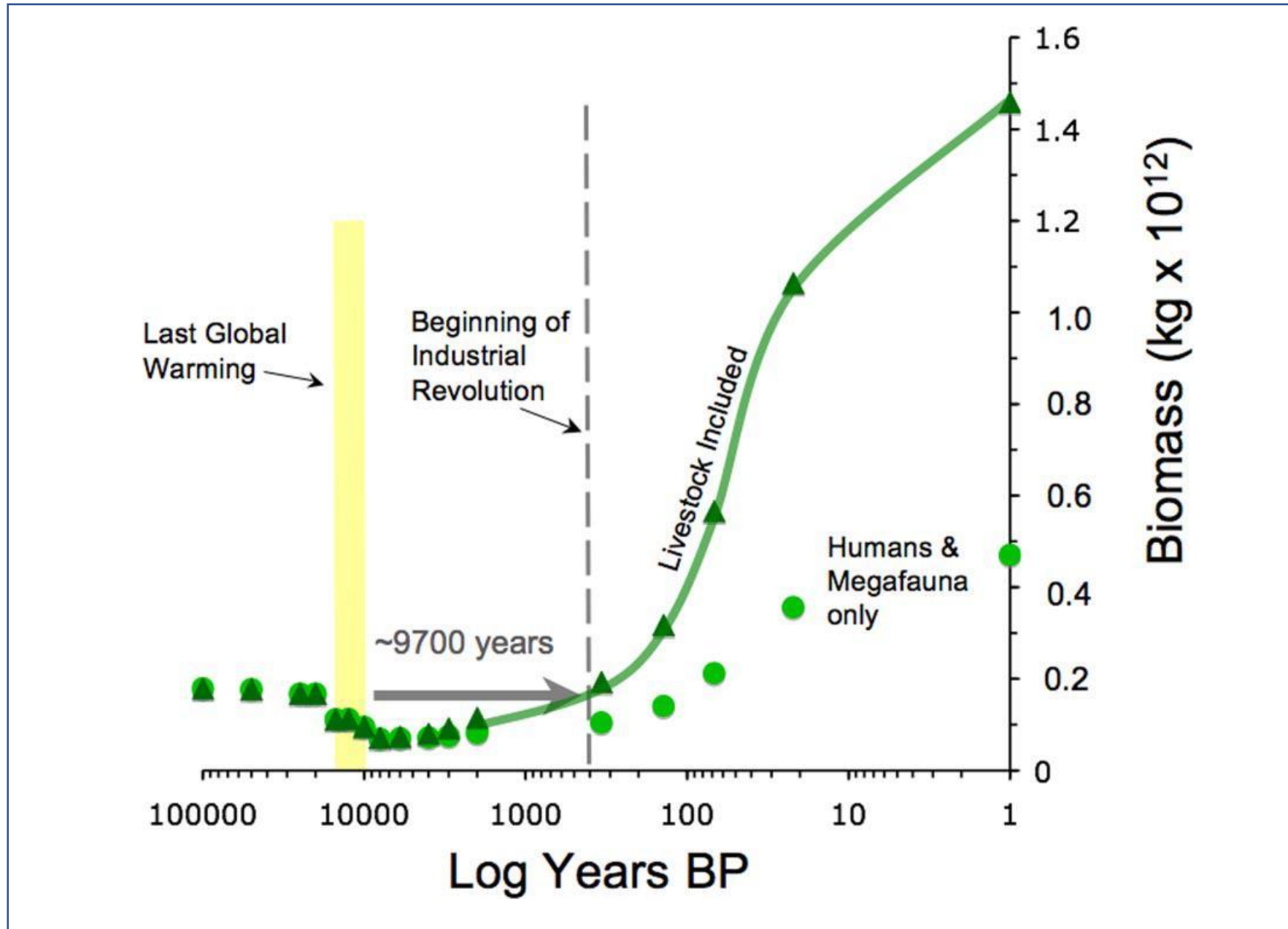


IIER Electricity Availability Index vs. GDP/Capita (PPP) for 99 Countries. Sources: [36-38].

The Carbon Pulse



Total Mammalian Biomass





=



X ~500,000,000,000!

1 barrel of oil = 5.7 million BTU or 1,760 kWh.

1 human does 0.6kWh per workday, x250 days per year.

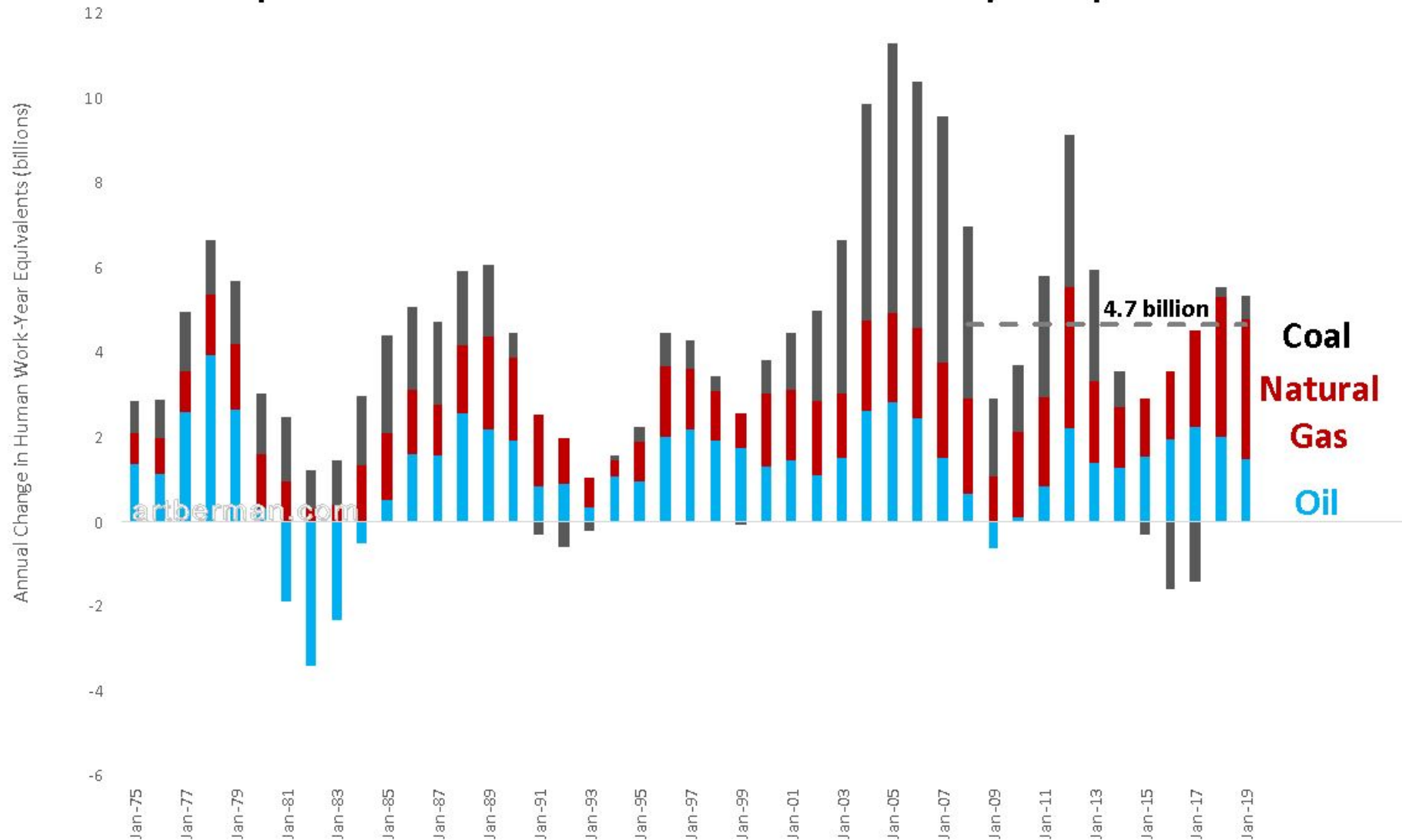
1 barrel = 11 years of work *0.40 efficiency = ~4.5 years.

World uses 100 billion boe per year.

100 billion *4.5 = 450,000,000,000.

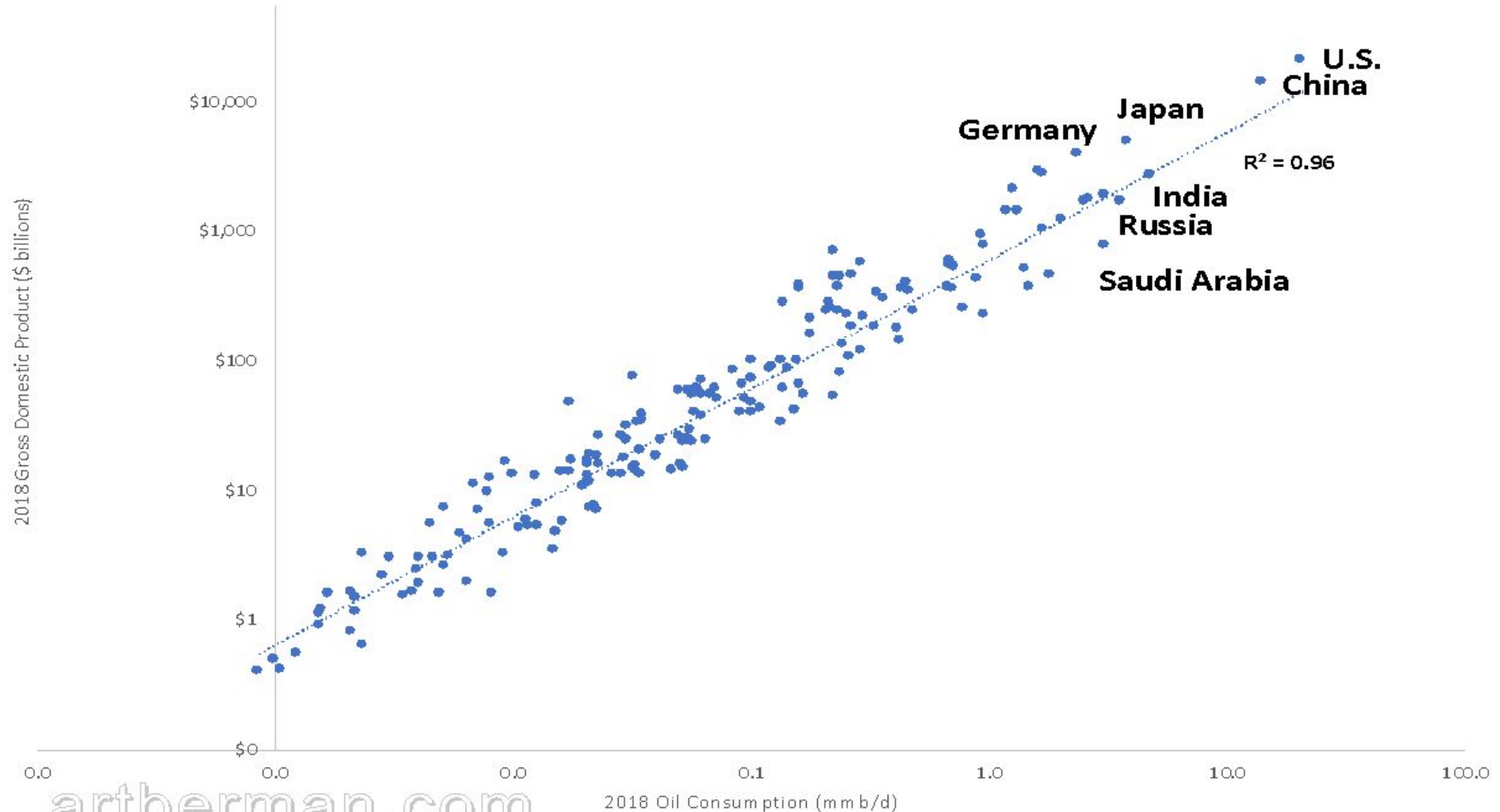


**Average addition of 4.7 billion work-year equivalents
from coal, natural gas and oil consumption over the last decade
on top of the base level of 360 billion human work-year equivalents**



Oil *(for now)* IS the Economy

**Oil consumption vs GDP
(Logarithmic scales)**



artberman.com



Gasoline



Butane



Propane



Diesel



Kerosene



Jet Fuel



Asphalt



Plastic Precursors



Paint



Tires



Medicine

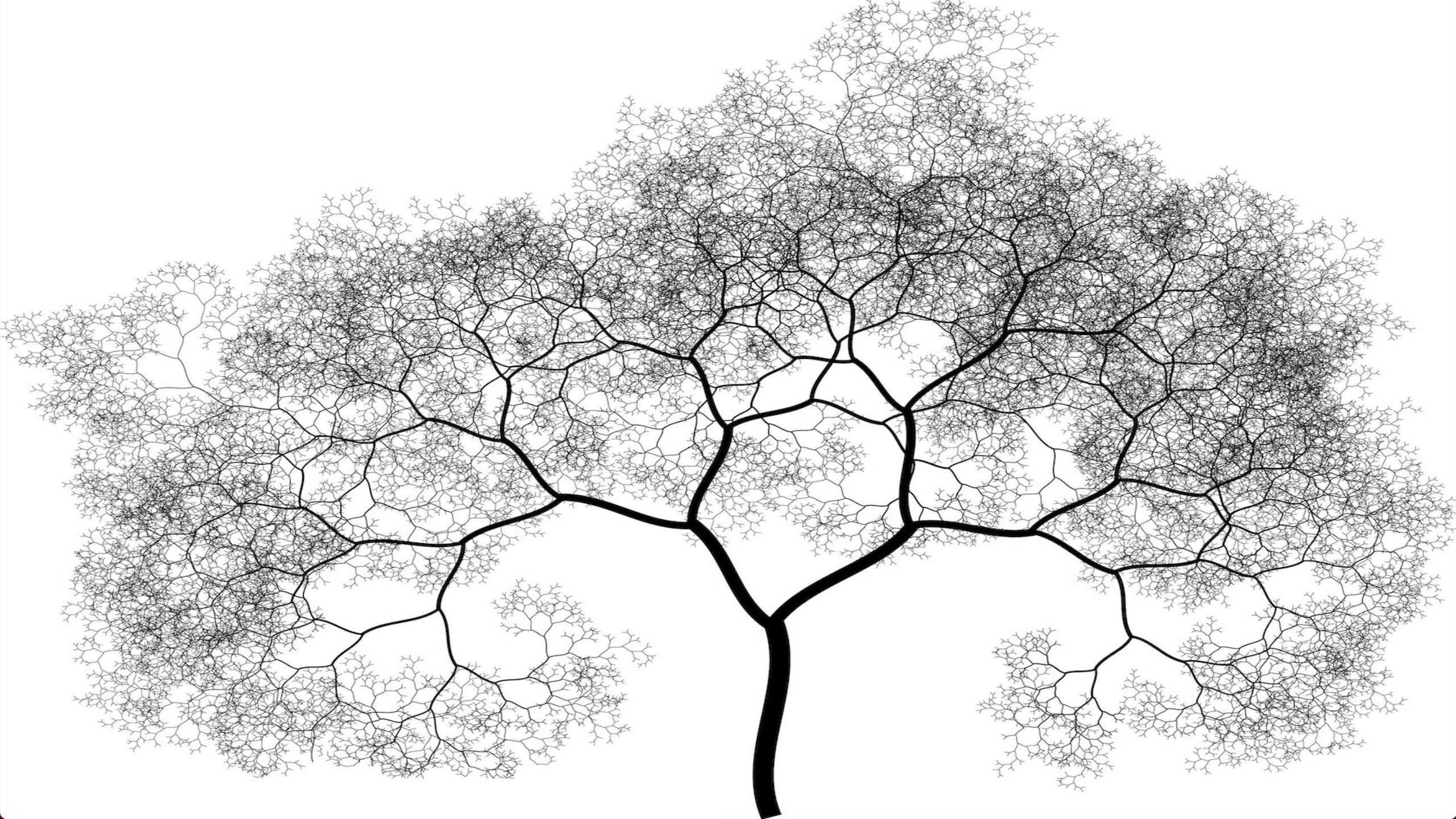


Medical Devices



OIL







Global
human
culture is
functioning as an
energy
dissipating
structure



*A mindless superorganism,
akin to a blind hungry Amoeba*



Medical Center

VARIETY



F39 part 1

Jul 25, 2023 2:48 PM



F39 part 2

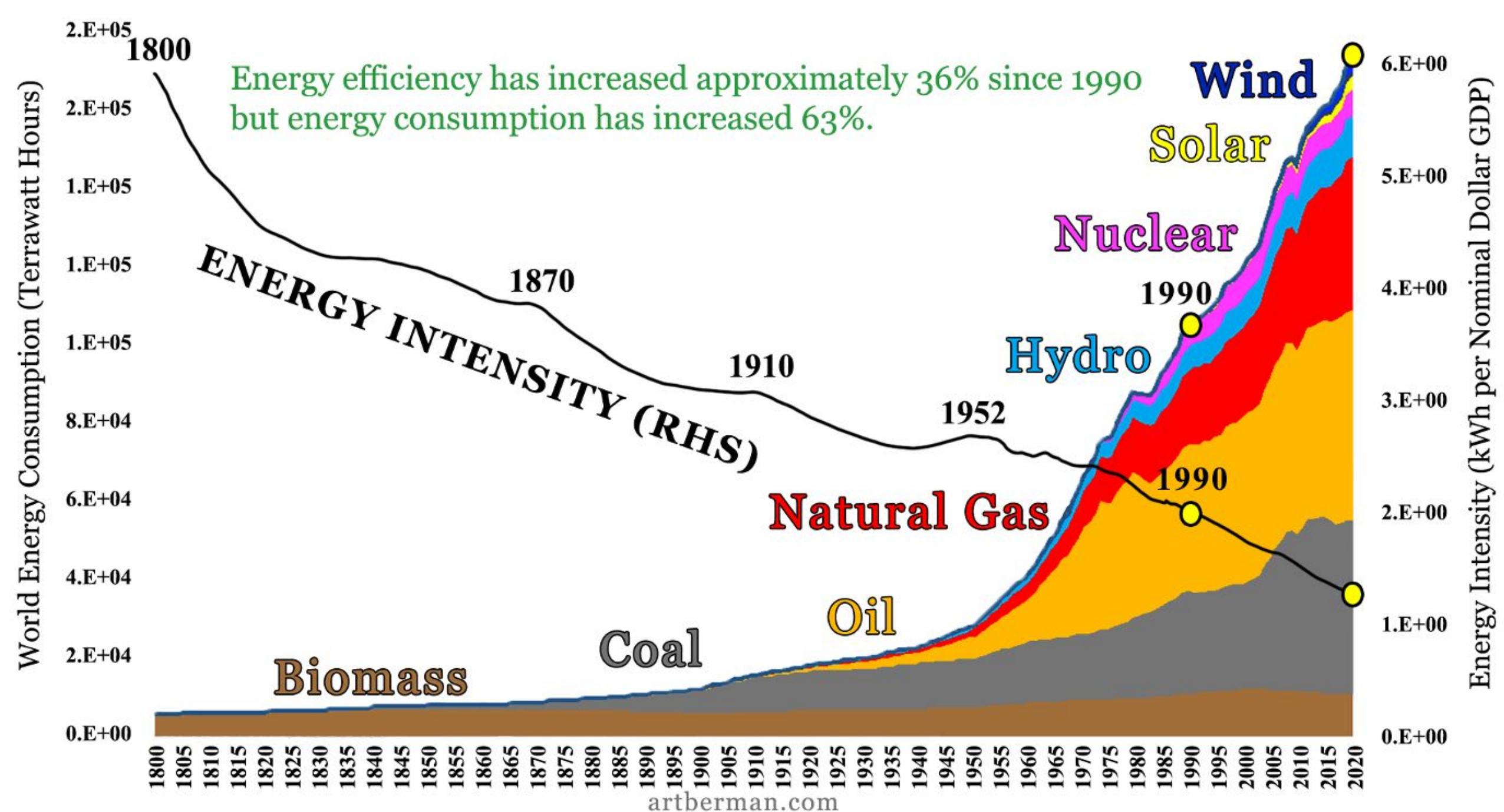
Jul 25, 2023 3:02 PM







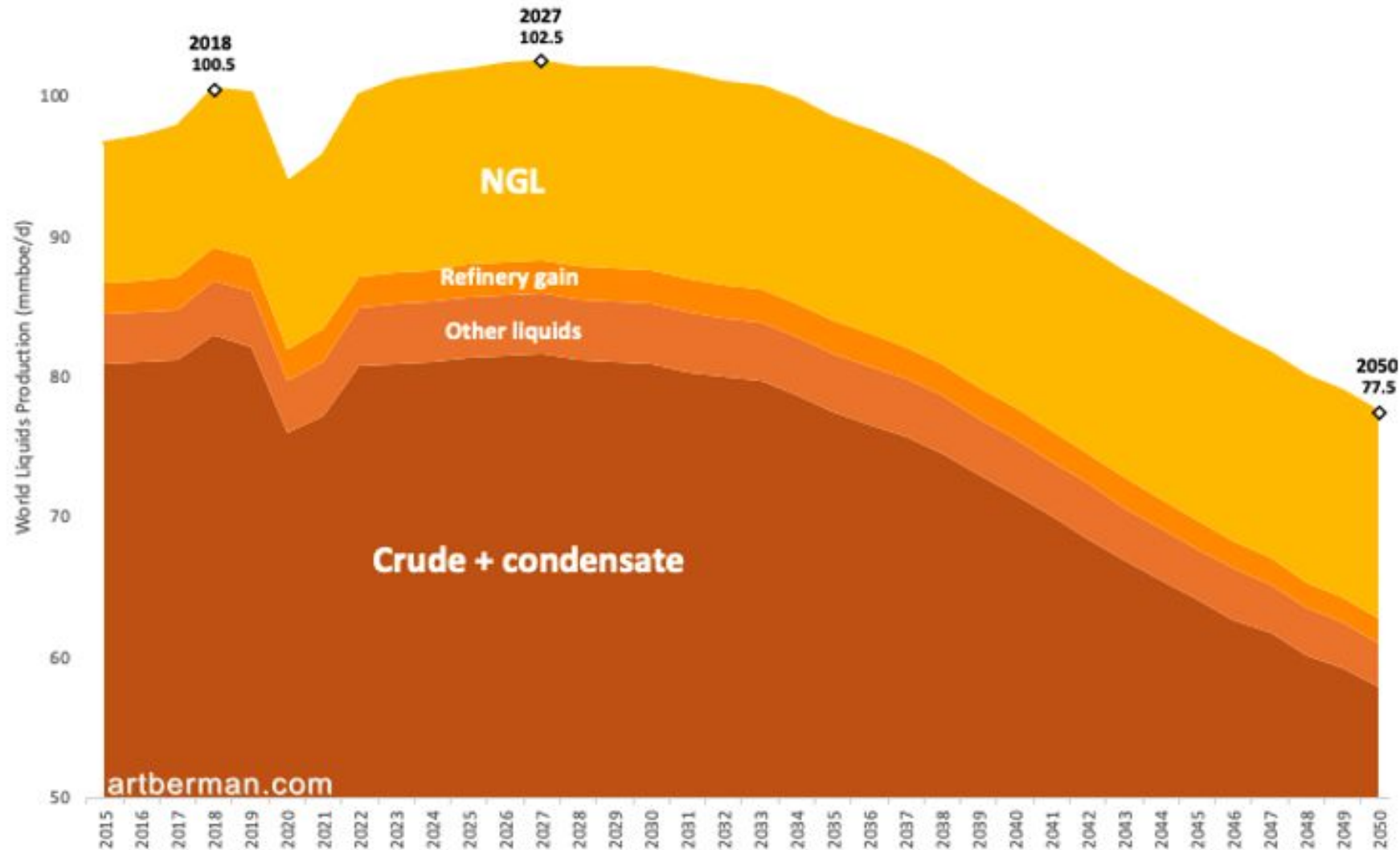






Wile E Coyote and Peak Oil

**Total world liquids production expected to peak around 2027
but crude + condensate never recover to 2018 level**

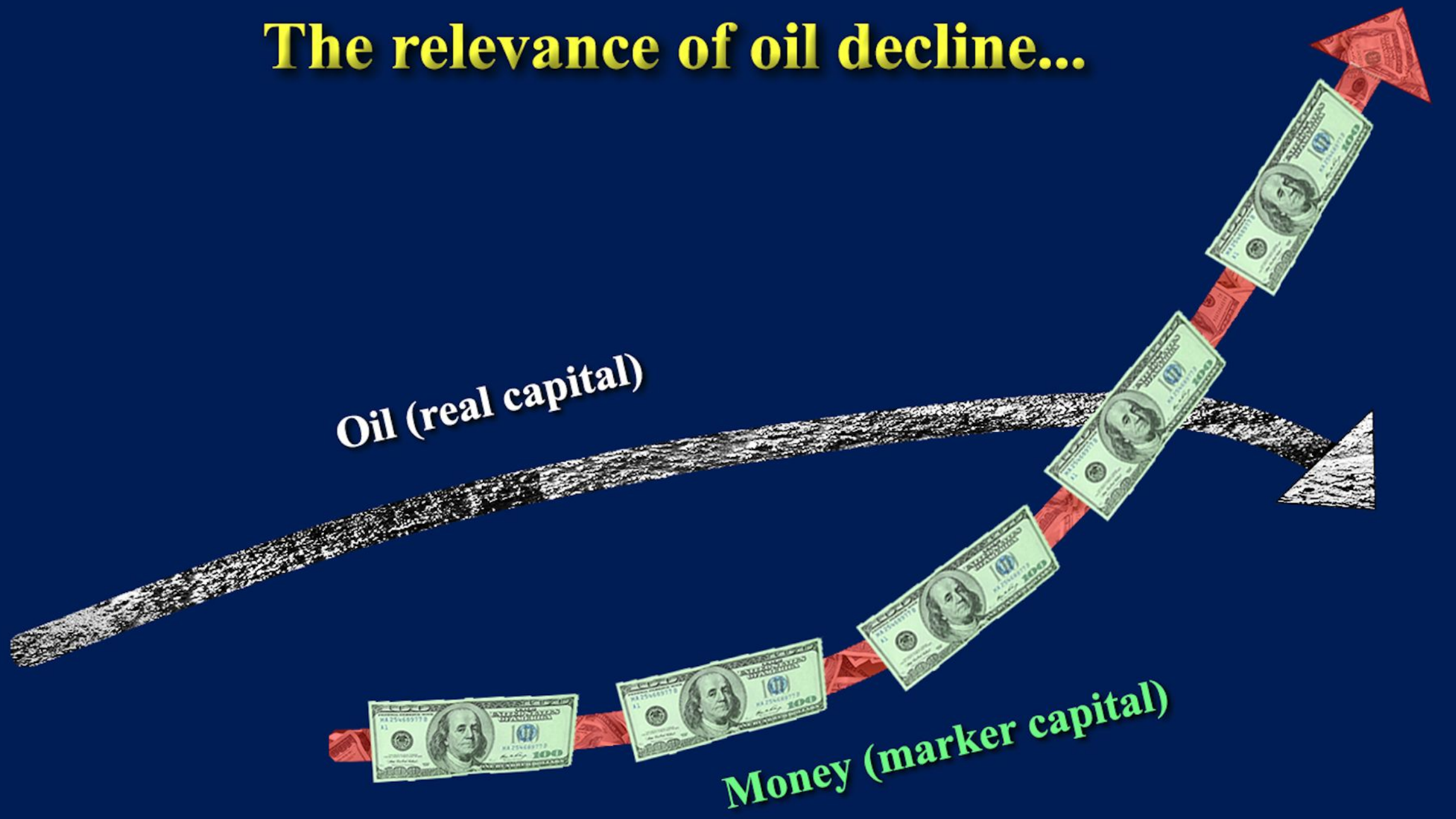


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The relevance of oil decline...

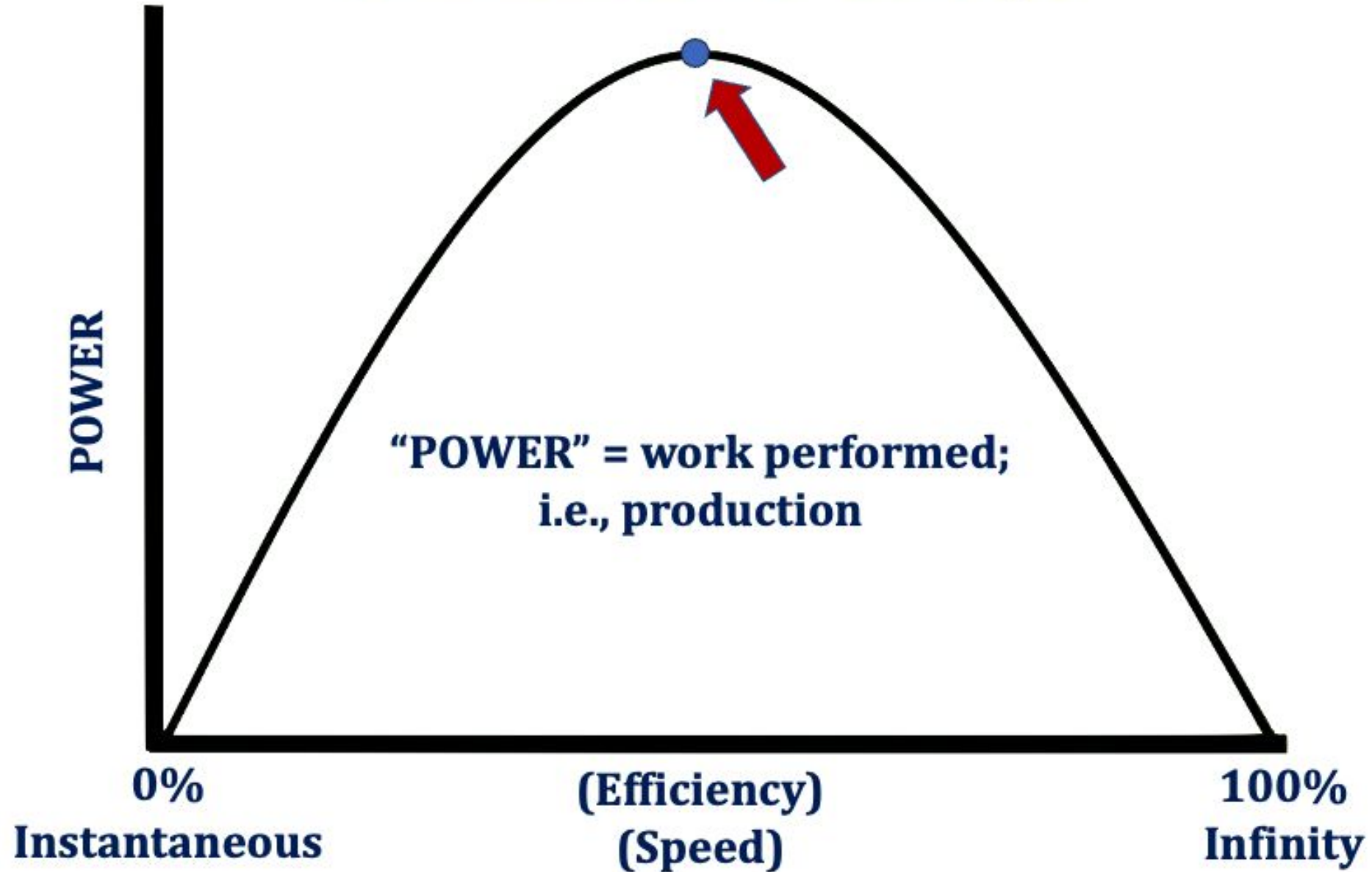
Oil (real capital)

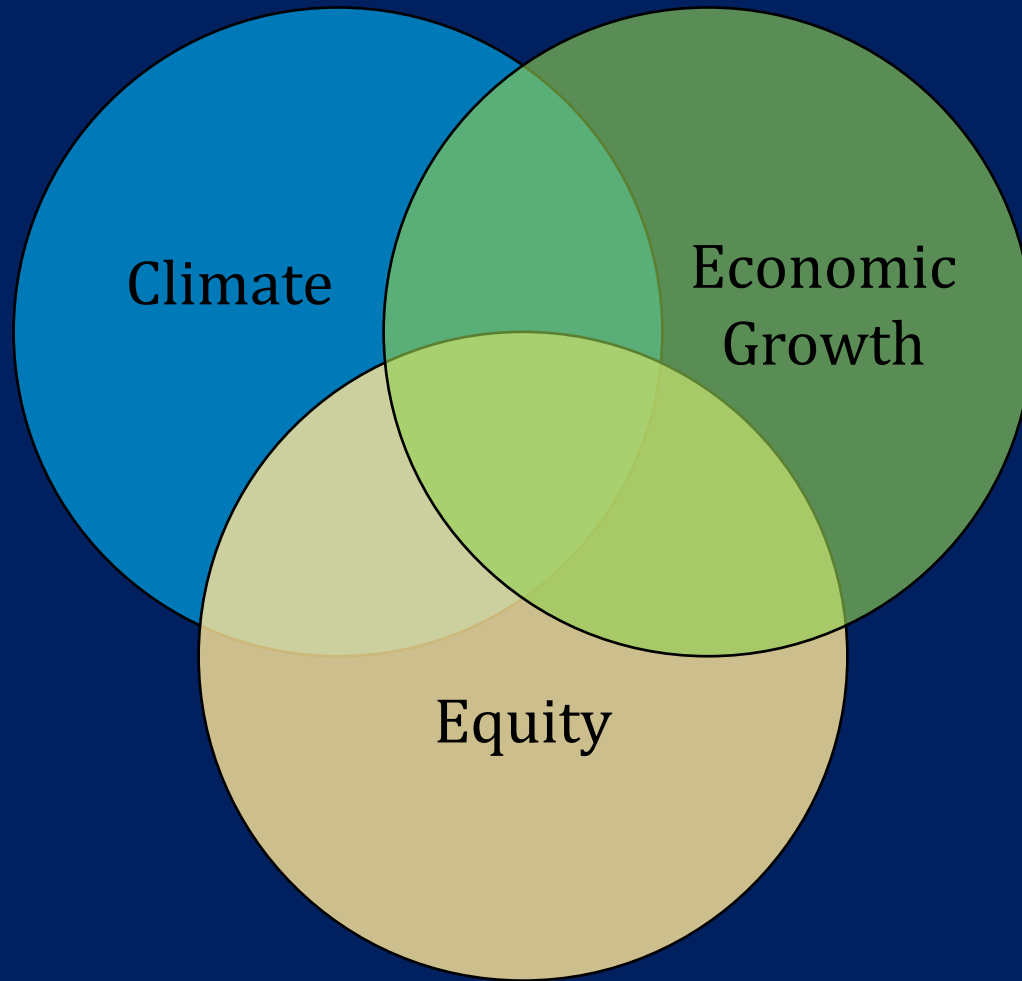
Money (marker capital)





Maximum Power Principle



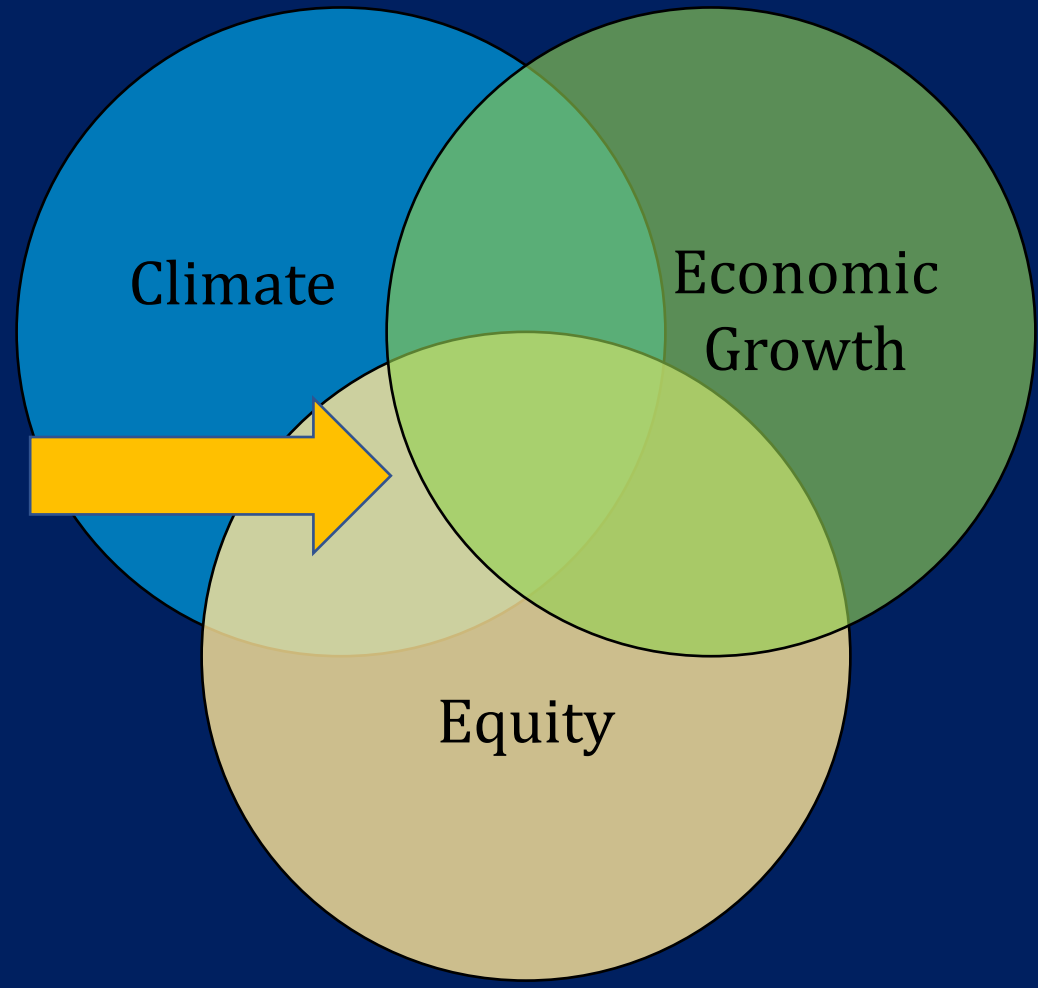


Climate

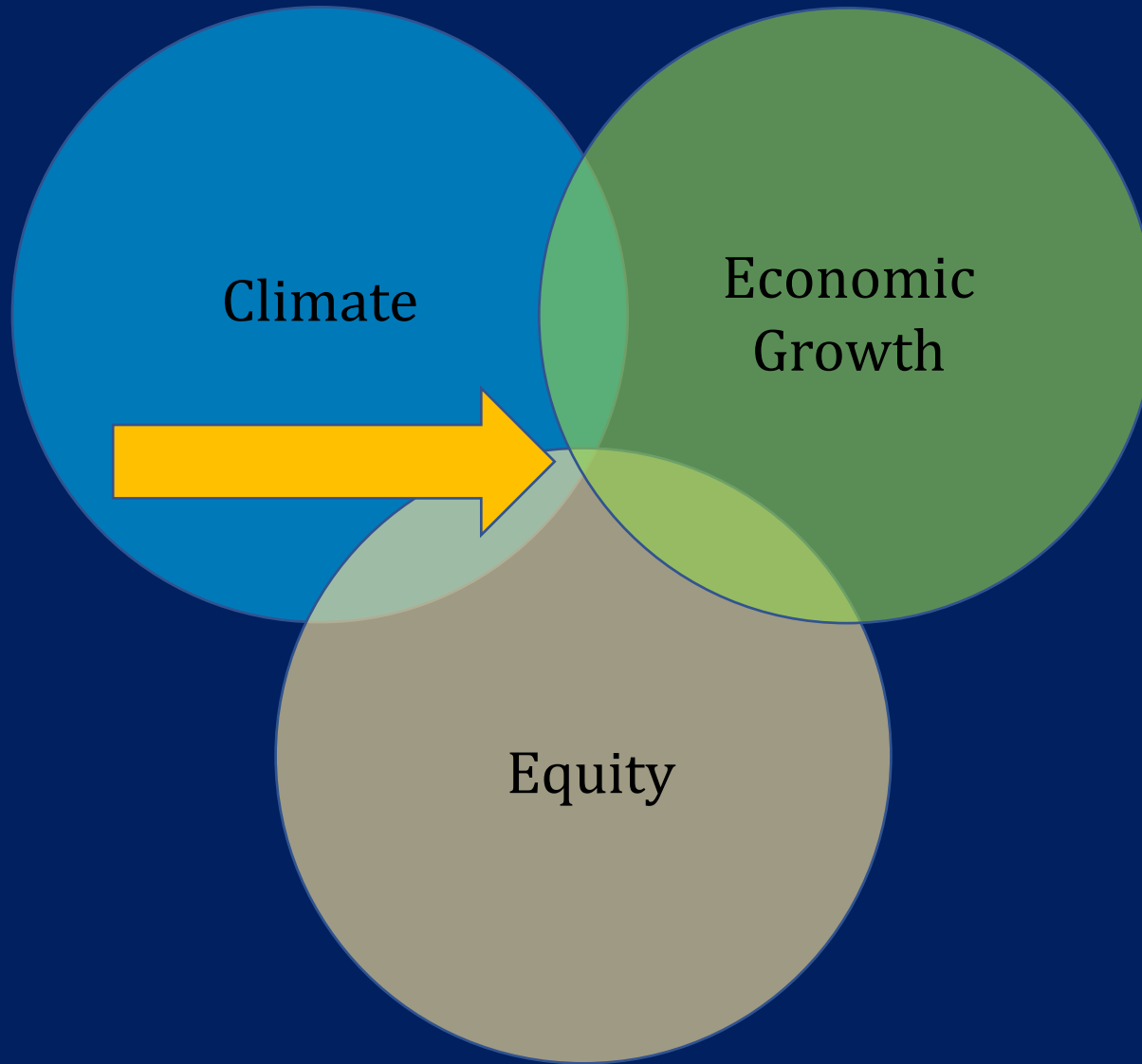
Economic
Growth

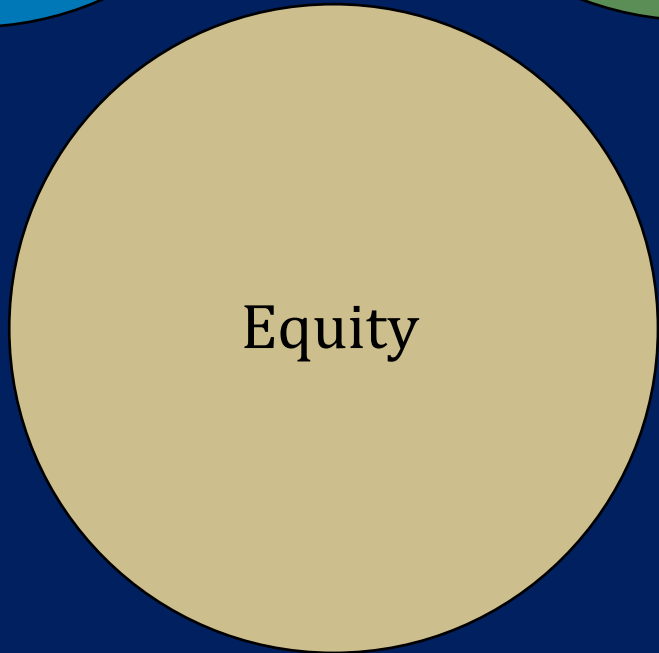
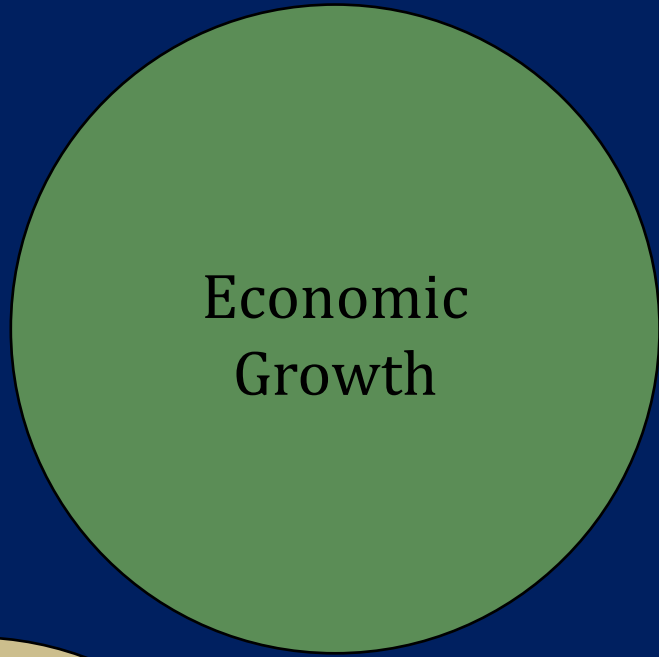
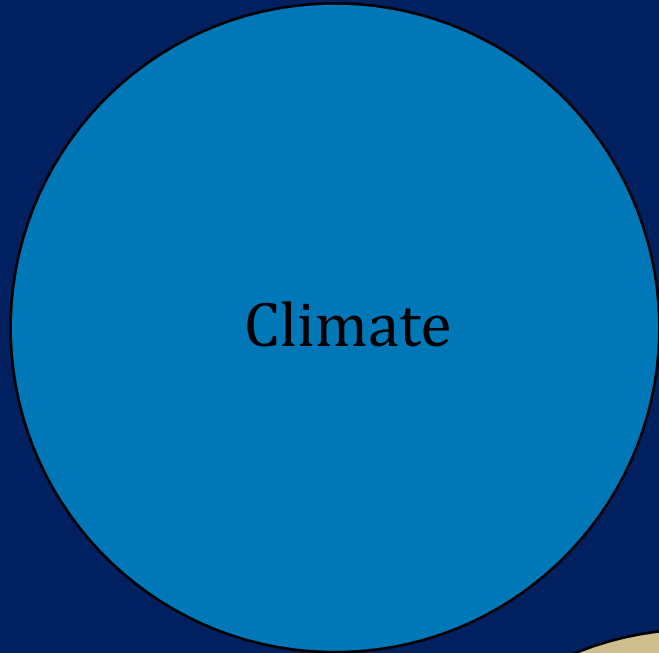
Equity

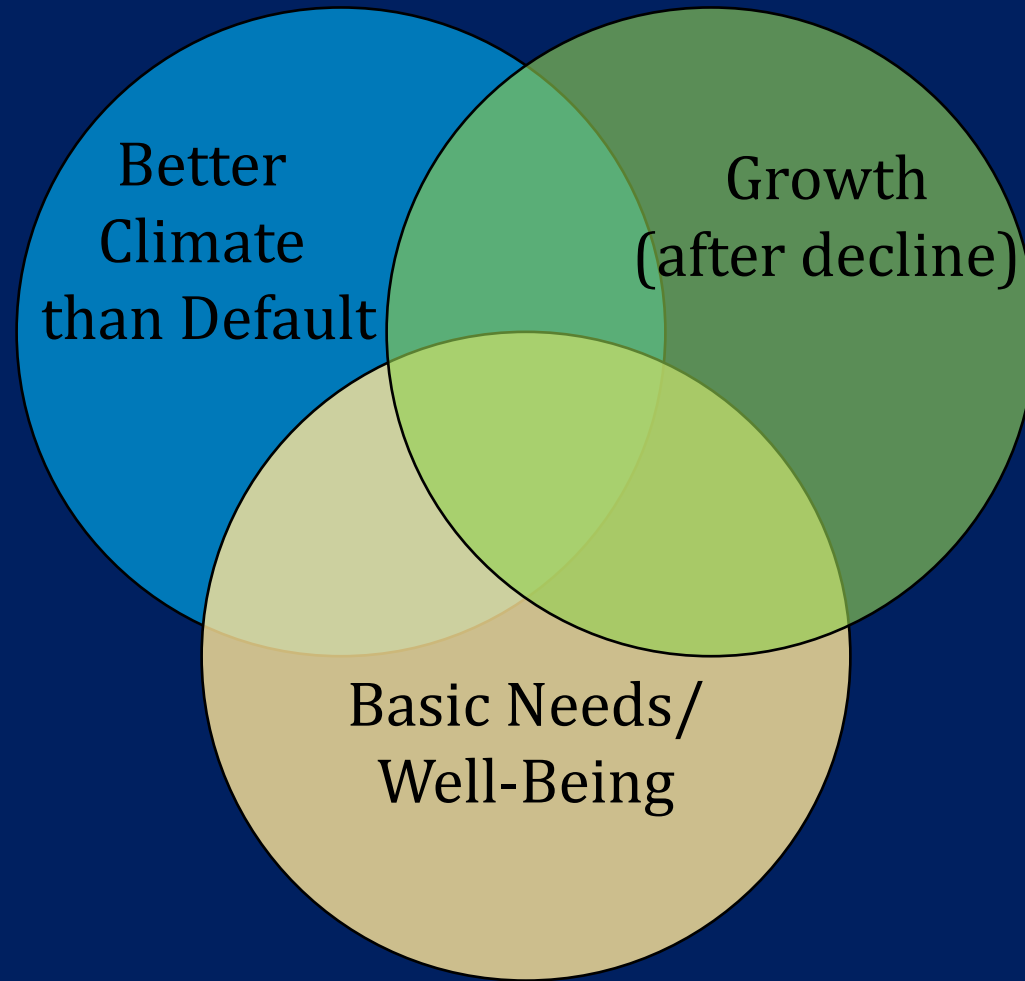
Conceptually
How Overlap



Net Zero







Better
Climate
than Default

Growth
(after decline)

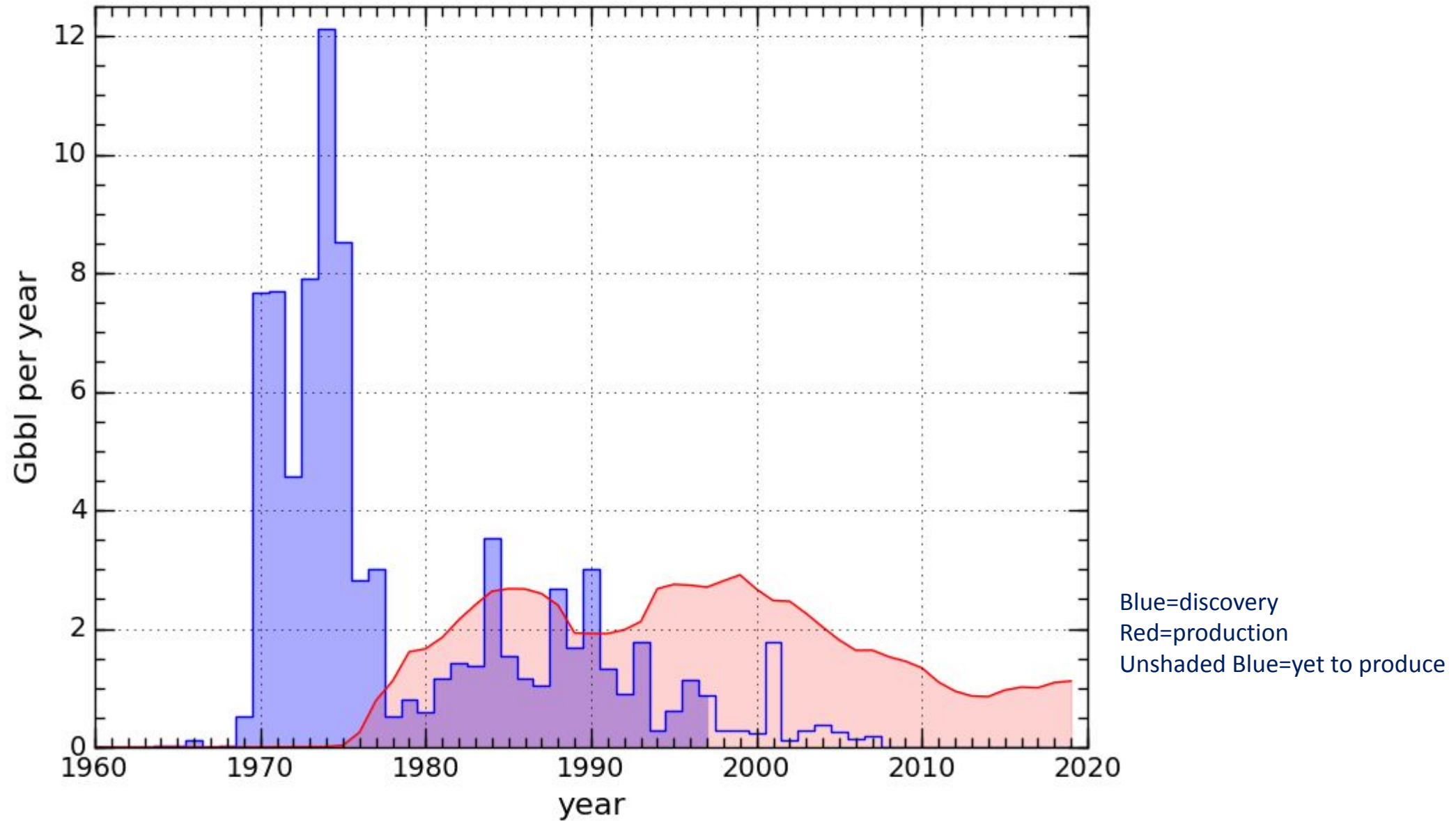
Basic Needs/
Well-Being

Fossil Fuel Companies (and Subsidiaries) are to Blame

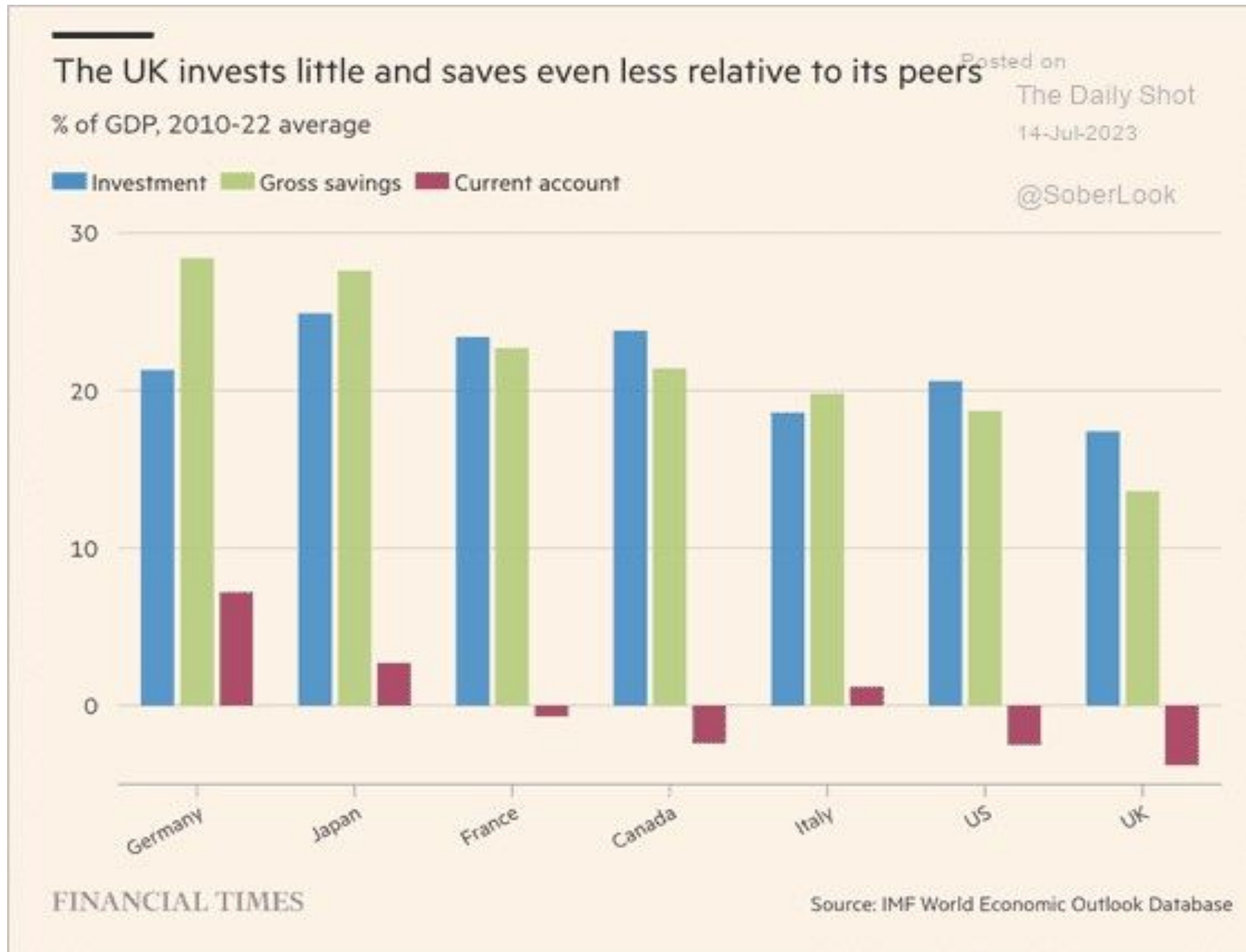


Fossil carbon is the food supply. Exxon and Shell are the distributors. Humans are the consumers.

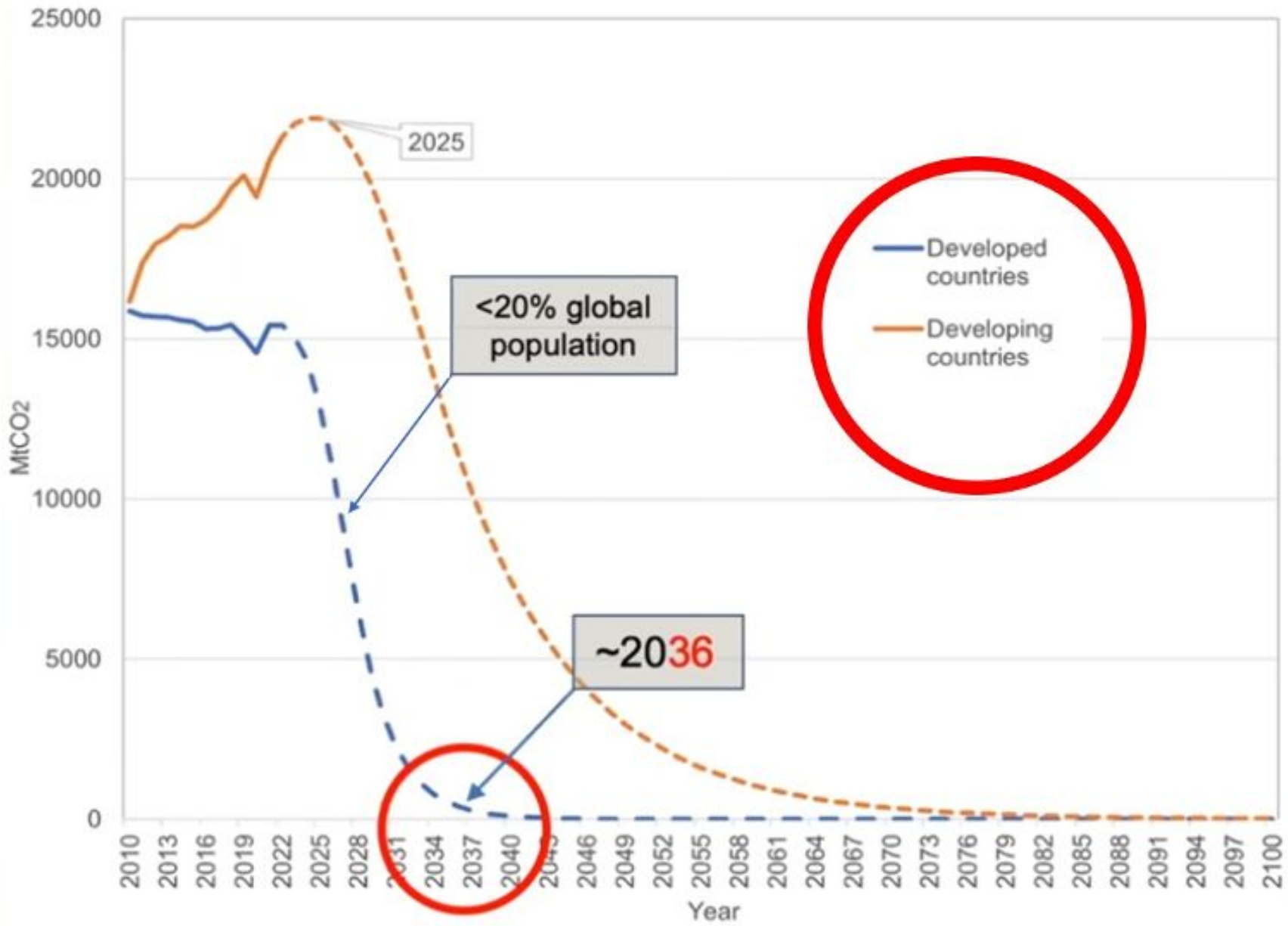
United Kingdom Oil Production



Optionality with Energy (UK investments)



For a Good Chance of $\leq 2\%$



Anderson, K. (2023, April 13). *A Velvet or Violent Climate Revolution: Which will we choose?* Scientist Rebellion. University of Manchester. <https://www.youtube.com/watch?v=VpSWwTjYSj8>

WE ARE ALL
IN THIS TOGETHER.

As a way to show
KINDNESS & CARE
for our neighbors
PLEASE LIMIT
purchases to TWO
of any item, and ONE
full cart of groceries.

YOUR UNDERSTANDING
and THOUGHTFULNESS
is appreciated.

- TRADER JOE'S -

\$ 1.69
EACH

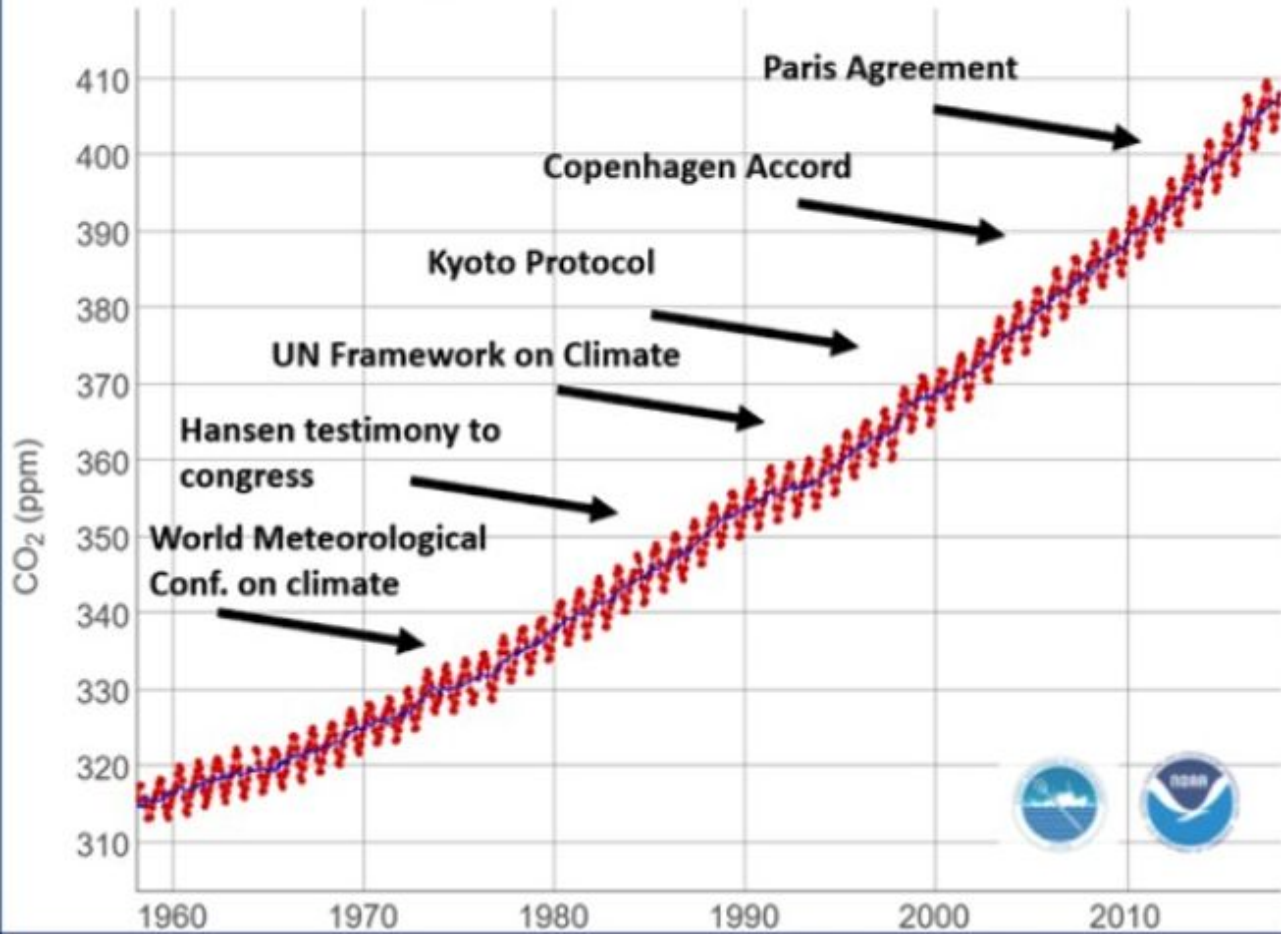
JOE'S



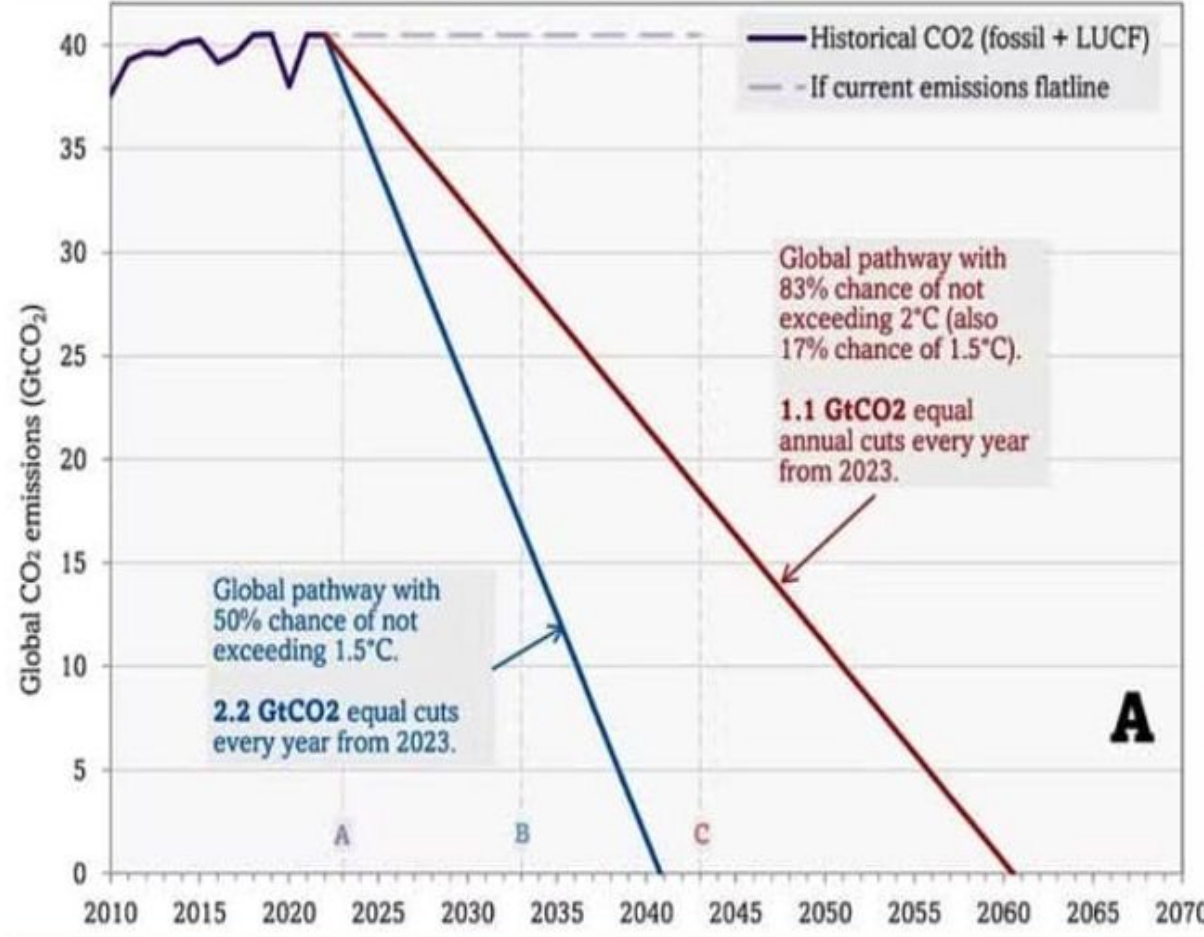




Mauna Loa Monthly Averages



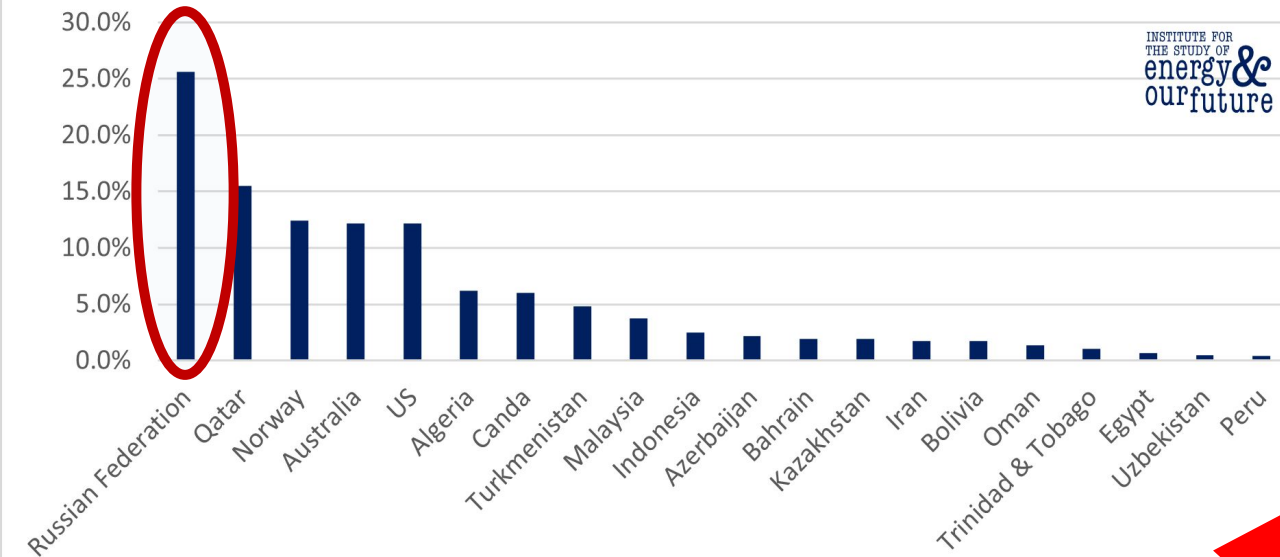
Source: Hagens, N. Future of Economics-Beyond the Superorganism, 2020



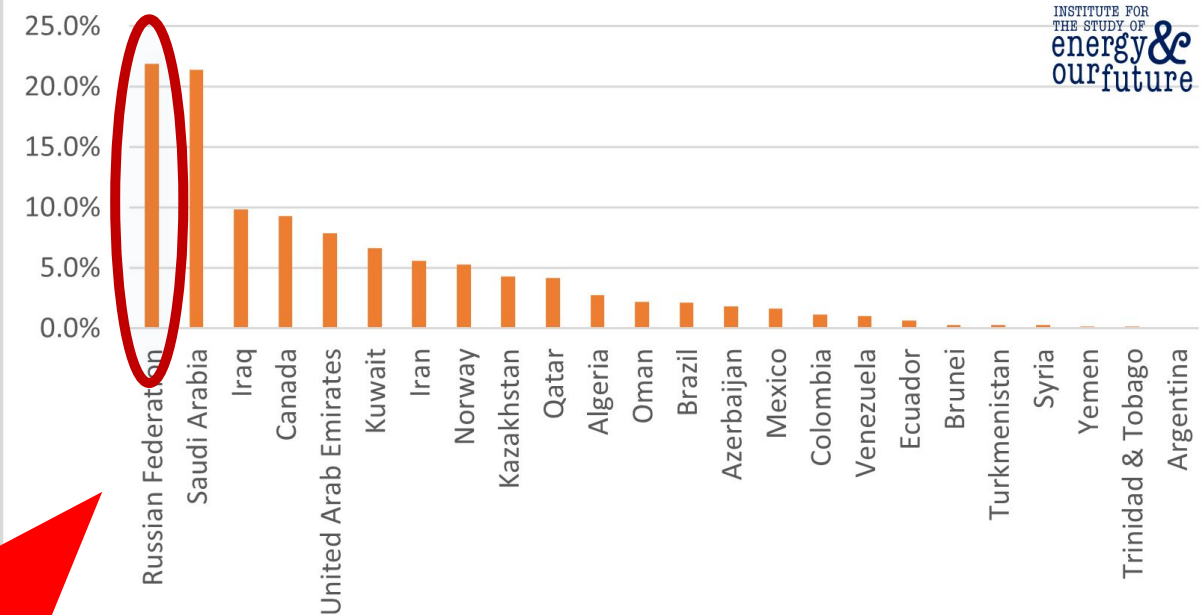
Graph: Kevin Anderson / Climate Uncensored

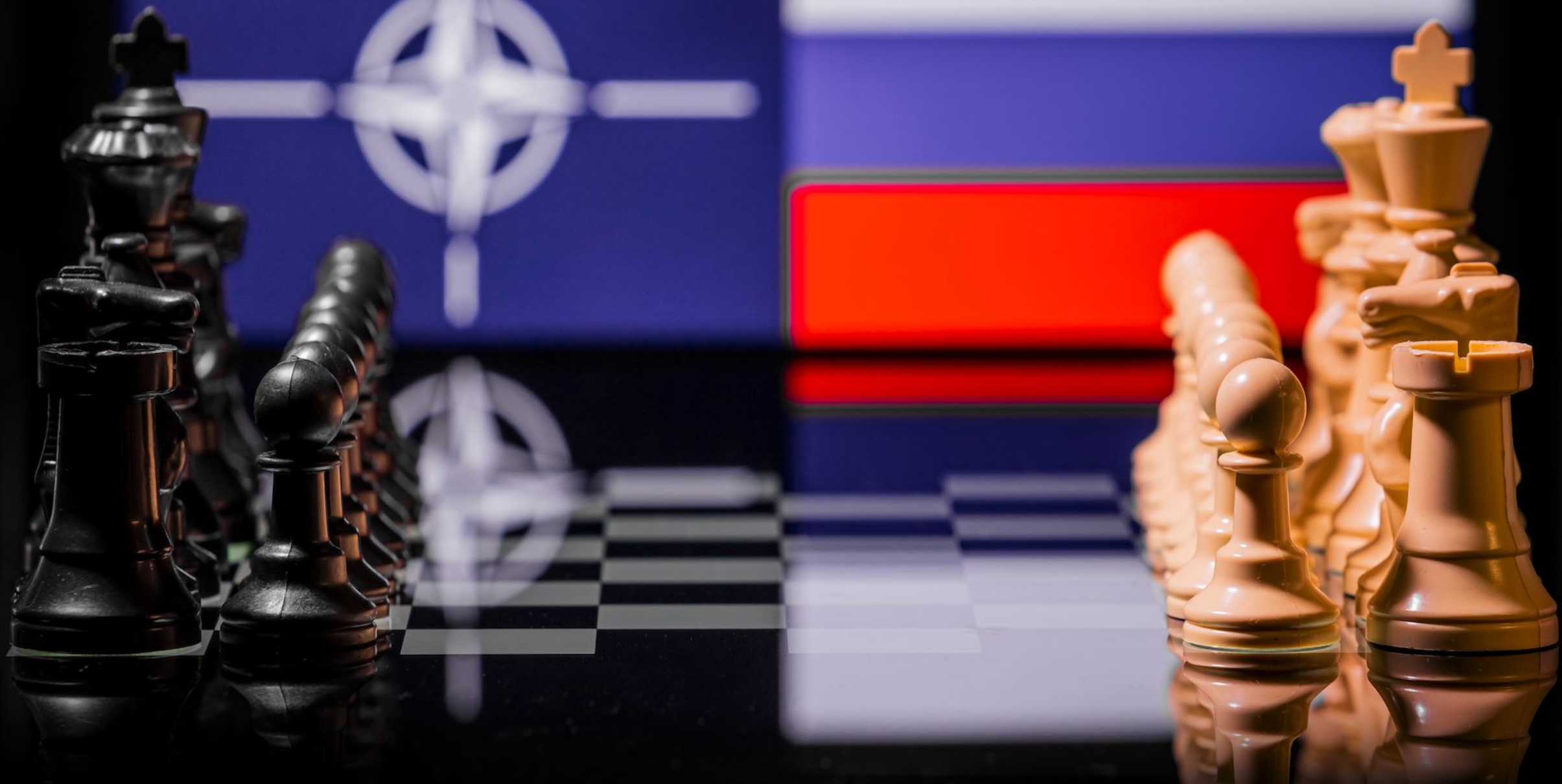
Oil and Gas EXPORTERS are different countries than PRODUCERS

Nat Gas Exporting Countries as % of Global NG Exports
2021



Countries as % of World Oil Exports 2021







F39 part 2

Jul 25, 2023 3:02 PM



F39 part 3

Jul 26, 2023 4:22 PM

10 Systemic Inferences

10. Oil is not the problem - the exponential monetary system is
9. We need SYSTEMIC, not piecemeal, solutions to climate (eg EVs)
8. Reduced oil availability will cause a financial/economic cascade
7. The Maximum Power Principle applies to our energy behavior/choices
6. Solving for: a) climate, b) equity and c) growth have different solutions
5. Climate change is an emergent cultural phenomenon - not the fault of fossil fuel companies
4. Oil is the master resource and will leave us before we leave it. The UK is unlikely to 'stop oil'
3. Democracies will never vote for austerity
2. We are in a new 'biophysical world'. Old rules and expectations no longer apply
1. **Currently there is no "choice" to slow our metabolism. (But there are other choices)**

