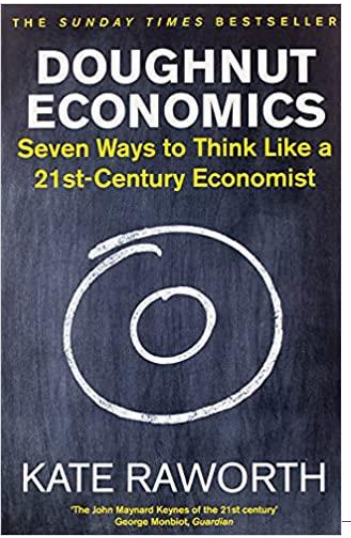
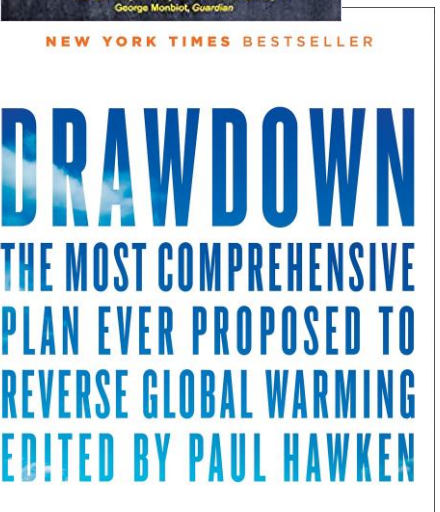
Operationalizing Modern Monetary Theory, Drawdown, The Green New Deal, "Lettuce Wrap" Economics, and The Orange Economy:

An Institutional Approach to Global Climate Change and Other Issues of Ecological Health





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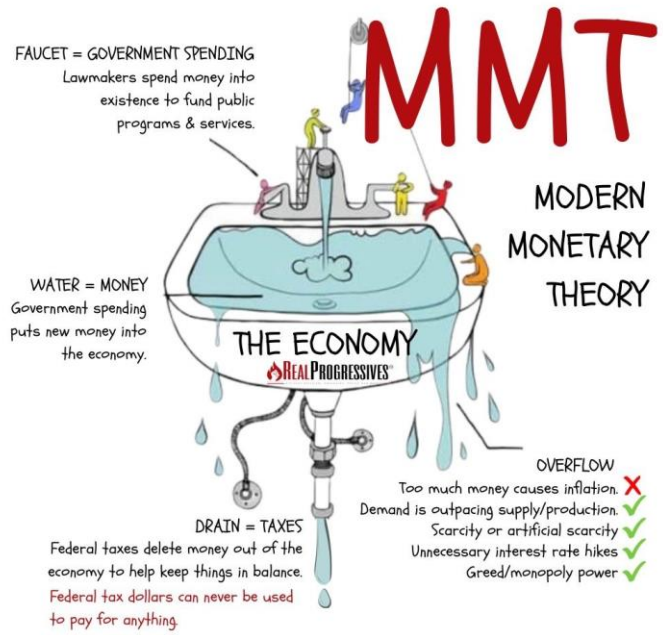
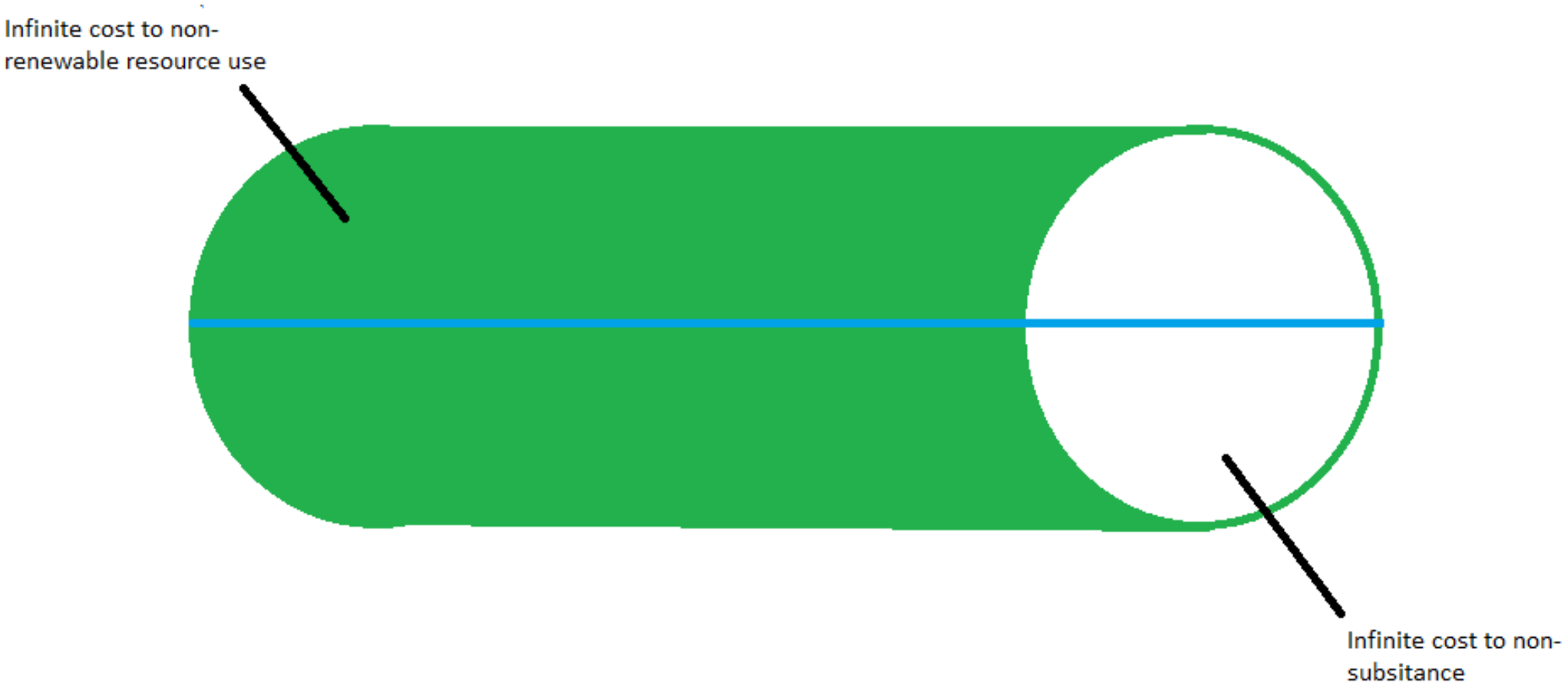


Question to be addressed

What are the necessary conditions of social welfare maximization and how do we meet them?

Figure 1

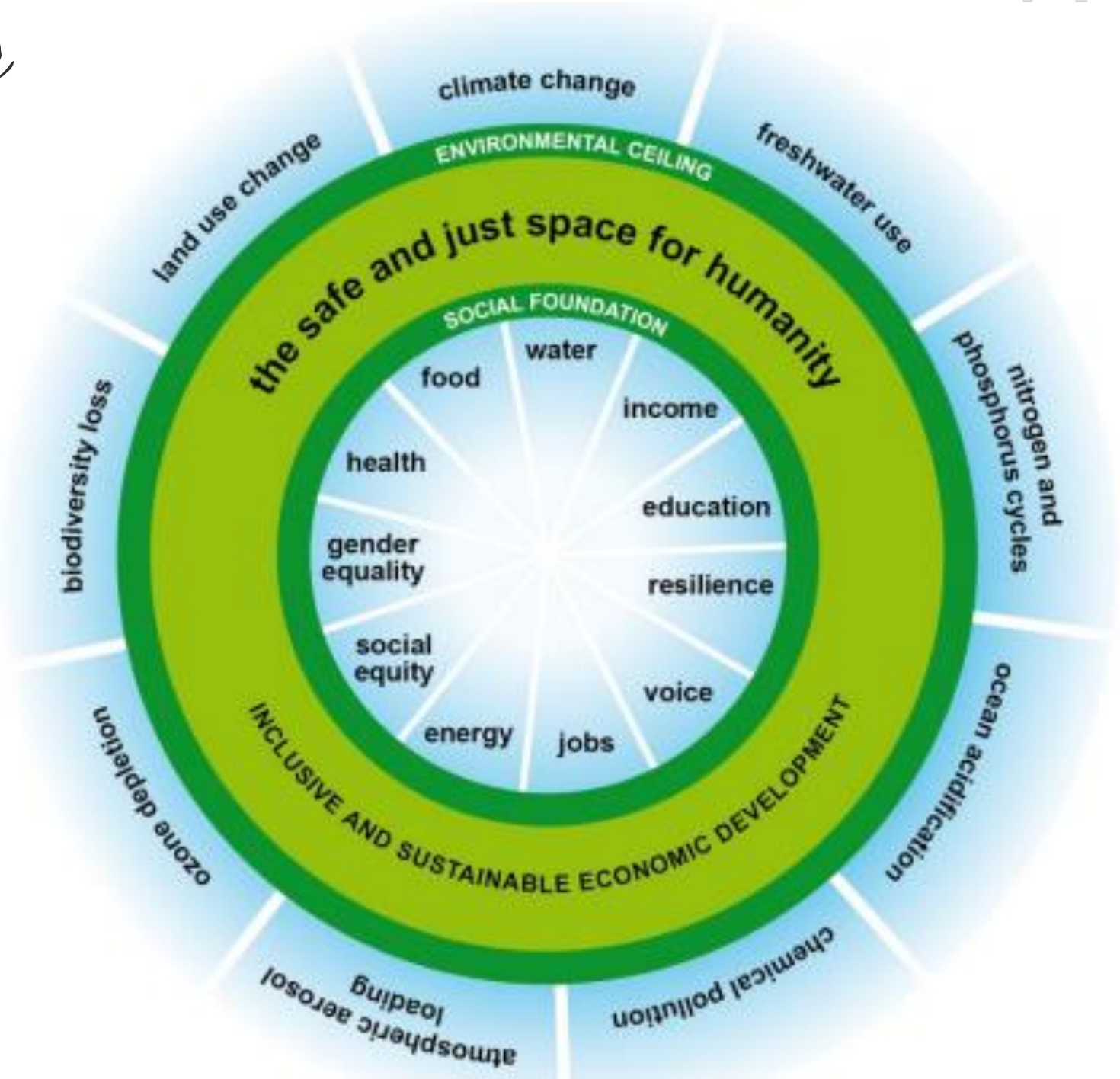
The Lettuce Wrap



This is the Target.

A Safe and Just Place for Humanity (Raworth, 2012)

A.K.A. "Doughnut Economics"



A Safe and Just Space for Humanity

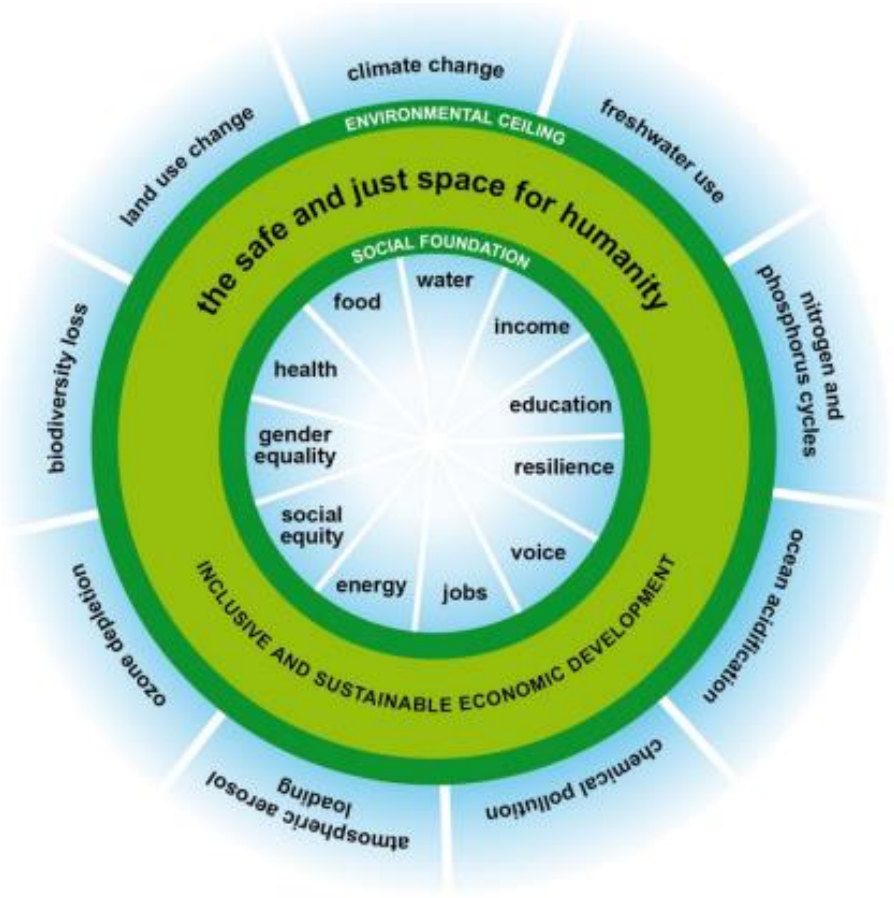


Figure 1

The Lettuce Wrap

A Safe and Happy Place for Humanity and The Earth

"Lettuce wrap" is a 'healthier' alternative with "thinner" requirements.

The First Necessary Condition of Welfare Maximization

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William Stanly Jevons (1835-1882)

"…the total utility of the food we eat consists in maintaining life, and may be considered as infinitely great." (1888, "Law of the Variation of Utility" section, para. 3).

and

"…no inconsiderable part of the values with which we deal in practical economics must be *negative values" (1888, Negative and Zero Value" section, para 1).*

Furthermore, bare-minimum subsistence involves very high disutility

Hunger

Thirst

Homelessness

Subsistence below a Safe, Secure Healthy, and Clean (SSHC) level is assumed to be intercomparable between agents and ordinally, infinitely negative.

Consequently, societal welfare can never be maximized if even one agent is not subsisting at a SSHC level while others are consuming above it.

The Second Necessary Condition of Welfare Maximization

Zero non-renewable resource use

Kip Viscusi writes: “Suppose that a development policy will lead to the permanent loss of some very inconsequential environmental amenity that has a value of $1 [a proxy for utility] in each period. With that loss extended for an infinite time horizon, the present value of the environmental harm is infinite” (2007, p.216).

$$\therefore$$

$$\sum_{t=0}^{\infty}[U(ED_t)]=-\infty$$

ED=Permanent Environmental Damage
T-time
U(·)=utility of

The Sufficient Condition of Welfare Maximization

While it is suggested that more research is necessary to determine this condition, happiness research,
That generally suggests that social connections, being in nature, and the positive utility of being in the "flow" of work render happiness, once a SSHC level of subsistence is reached, may point us in the right direction. (Belic, 2011; Conkle, 2008)

Fitting into the "Lettuce Wrap": Hitting the maximally efficient target

Figure 1

The Lettuce Wrap

”We need goals that we don't know how to reach. When we don't know, that is when imagination, creativity, innovation, and breakthroughs happen.” –Paul Hawken (2021)

Developments towards accurately evaluating capacity and making it work to meet human needs, across time and that of the Earth .

- ✓ MMT: It's about capacity
- ✓ Nersisyan and Wray, 2019: a more complex analysis of homogenous capacity
- ✓ Product Space: A complex, heterogenous measure of capacity
- ✓ Drawdown: a technical improvement of the GND
- ✓ The Orange Economy: Low impact consumption.

A closer look at Drawdown: Improving the technical efficiency of the GND

Category	54 solutions of Drawdown with all costs and benefits calculated	The Congressionally resolved GND – Adaptation and funding suggestions by Nersisyan et al. (2019)
Scope	World / Carbon equivalent (CO2e)=greenhouse gases in general	United States / Carbon gas (only)
Greenhouse Gas Drawdown (30 years)	630 gigatons	172 gigatons (Nersisyan, et al)* *Overestimates: counts CO2e
Net Cost over 30 years	0	7.6 Trillion dollars

GND calculations from Center for Climate and Energy Solutions (2019); Countryeconomy.com (2018); and Nersisyan and Wray (2019).

Conclusion: A meta-suggestion:

To Return to Paul Hawken’s (2021) quote, “We need goals that we don't know how to reach. When we don't know, that is when imagination, creativity, innovation, and breakthroughs happen.”

Given Big Data gathering technology, neuro-networks, machine learning, and econometric technology, it is likely that the real capacity of the global economy can be well understood.

From this vantage point, creativity, ingenuity, knowledge, and skills can be used to develop capacity such that the world can reasonably subsist and do so without further destroying it, and instead begin the process of healing, the Earth.

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