

# Ecological Overshoot: “The good news”

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**What is the problem?**

And what is holding us  
back from responding  
meaningfully to the  
problem?

# Correction by design or disaster?

If we burnt all the fossil fuels... >1222 ppm

RCP8.5

<https://pubs.rsc.org/en/content/articlehtml/2024/ea/d3ea00107e>

# Upton Sinclair (~ 1920)

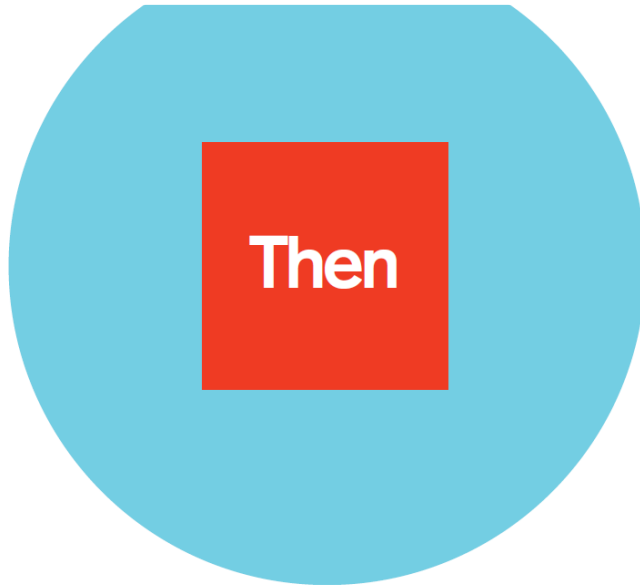
It is very hard to  
understand, if  
your salary depends on  
**not understanding.**

# To be effective information needs to be...

1. **empowering**
2. **factual**
3. **relevant**

# New Context:

This changes the rules of the game



An empty world allows for unlimited production of goods.

■ Economy  
● Biosphere



A full world turns the economy into a global auction.



# Regenerati

presentation by [mathis@wackernagel.info](mailto:mathis@wackernagel.info)

# Conditions



# Outcome

climate  
biodiversity  
nutrients  
land & oceans  
ozone layer  
no pollutants  
water  
no acidification



# Regeneration





# The Essence: Regeneration

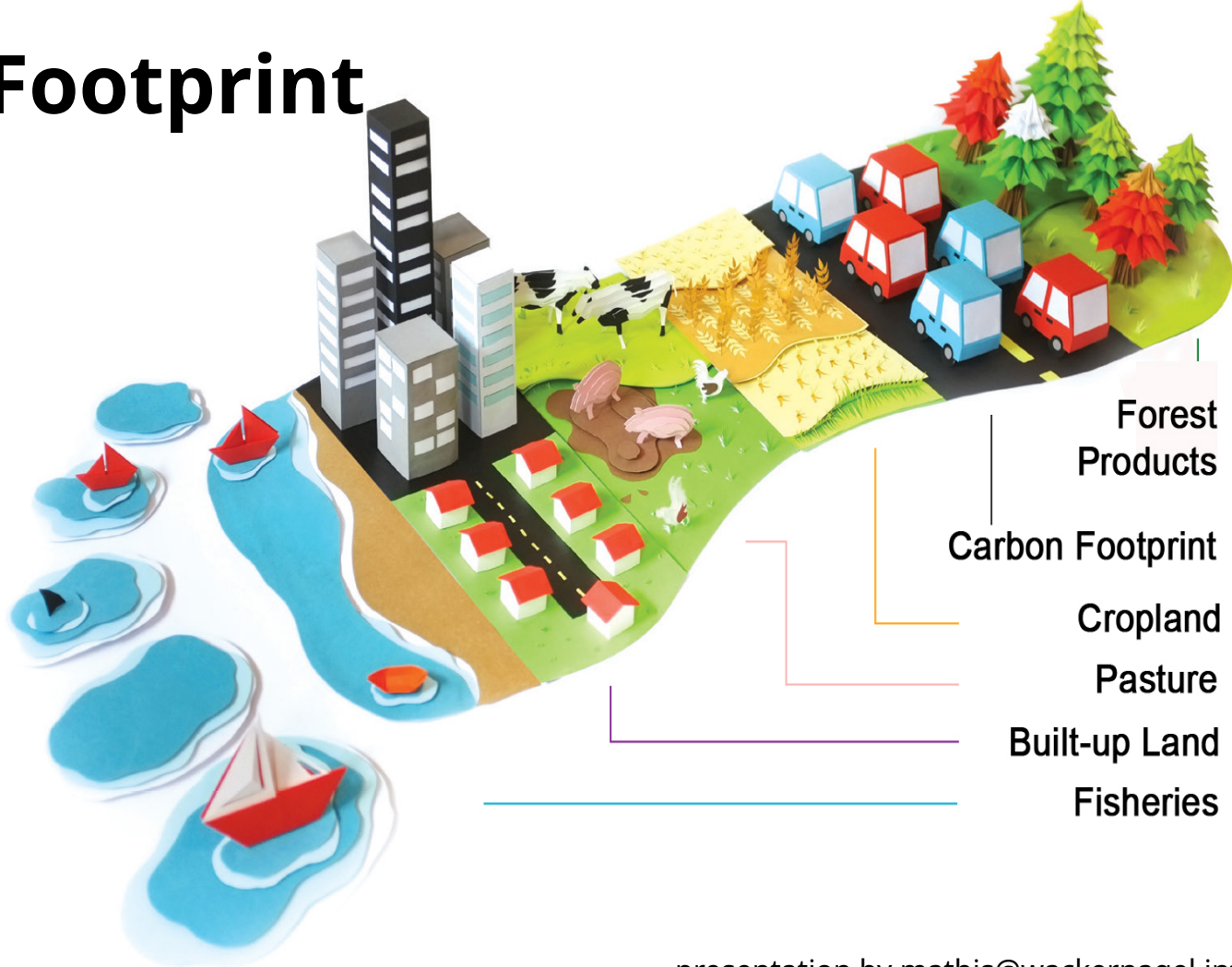
1. Biological resources
2. Fossil fuel use – emissions are limited by regeneration
3. Minerals and ores – extraction and concentration is limited by regeneration (energy & ecosystems depletion)

The lens of analysis:

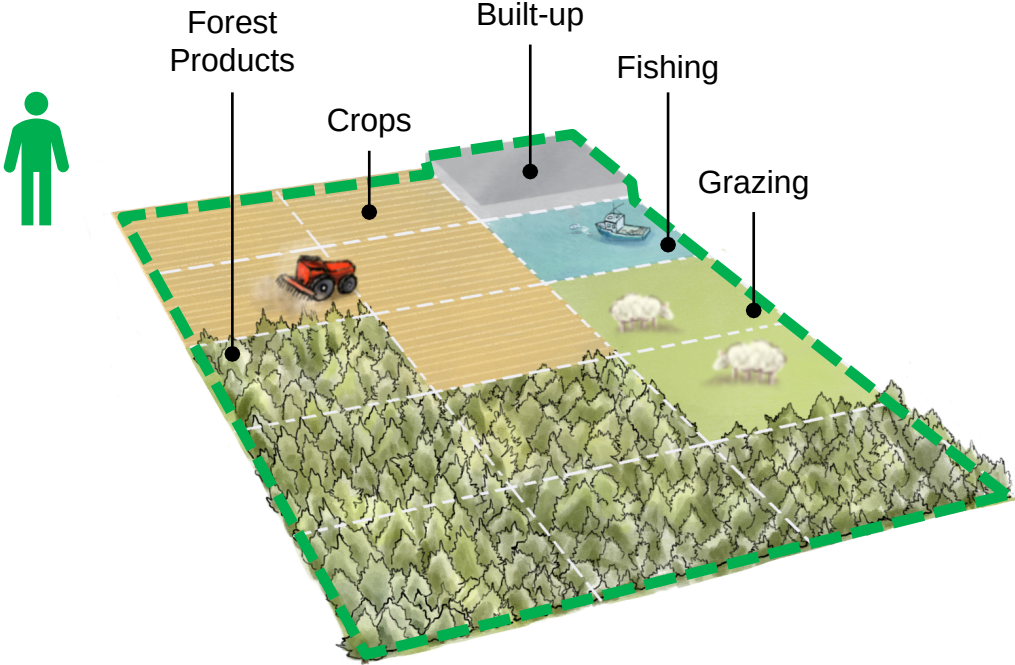
**Competition for  
regeneration**

(or biologically productive

# Ecological Footprint

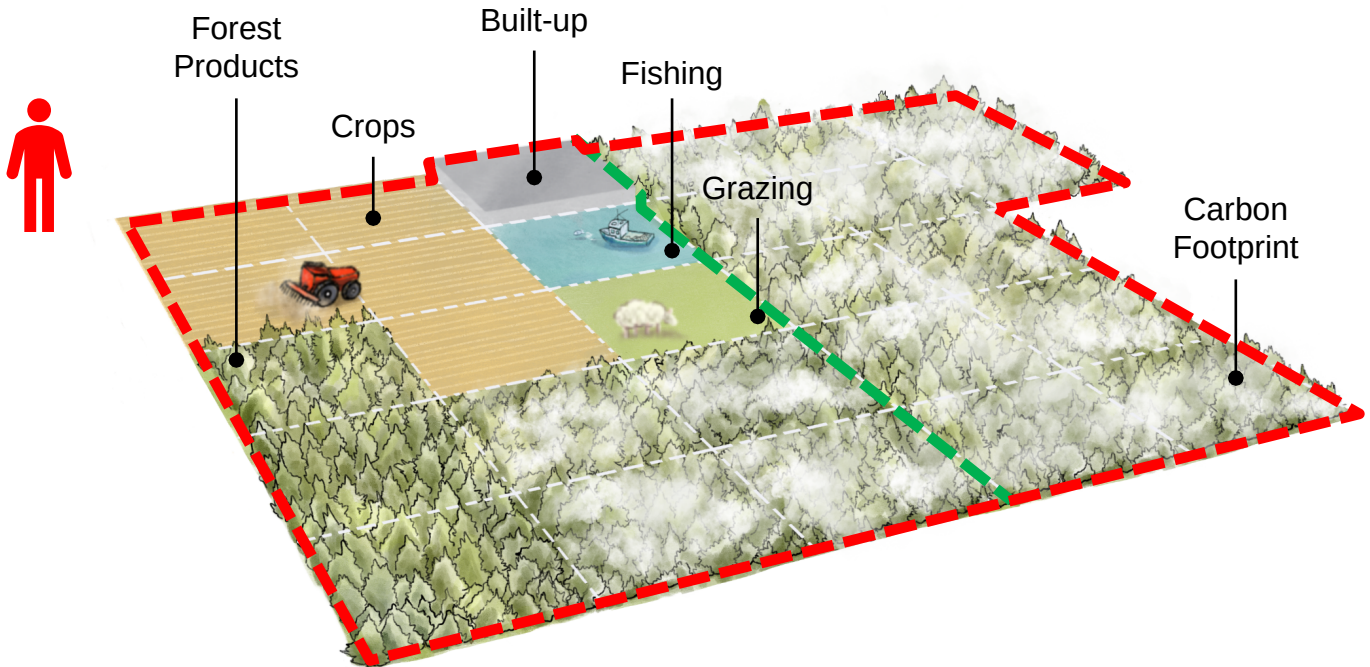


# Our biocapacity per person in the world (2024)



**12.1** (billion ha) **→** **8.1** (billion people) **=** **1.5** (global ha/ person)

# Our global Ecological Footprint per person (2024)



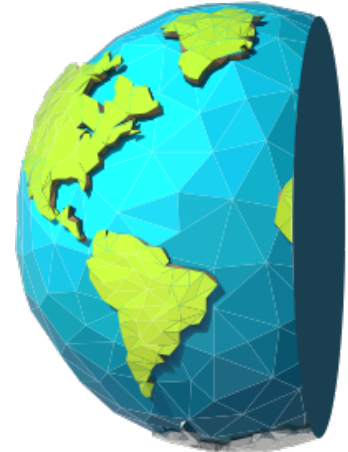
**21.3** (billion global ha) **➔** **8.1** (billion people) **=** **2.6** (global ha/ person)

**In 2024**

$$\frac{\text{demand}}{\text{regeneration}} = 1.7$$

During 2024, humanity is  
using  
**1.7 Earths.**

Therefore in 2024,  
Earth Overshoot Day  
fell on **August 1.**



presentation by [mathis@wackernagel.info](mailto:mathis@wackernagel.info)

To preserve biodiversity,  
ecologists suggest using  
only **0.5 Earths**.

This is three times less  
than our current demand.





[data.footprintnetwork.org](https://data.footprintnetwork.org)

[www.footprintnetwork.org](https://www.footprintnetwork.org)

[www.overshootday.org](https://www.overshootday.org)

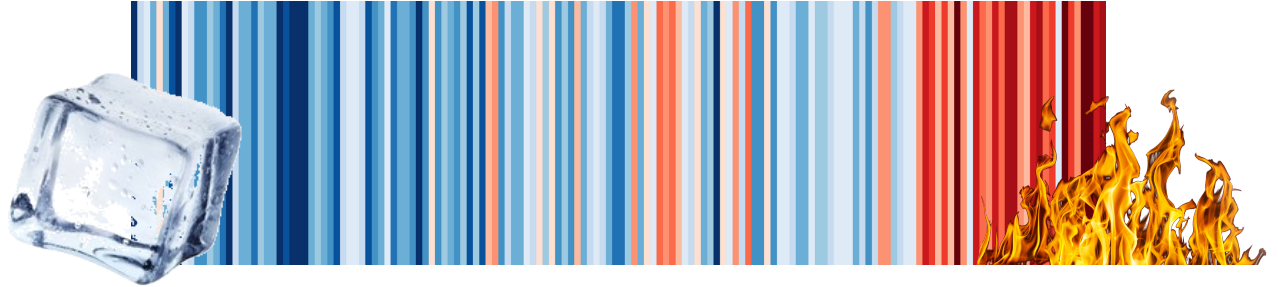
[www.wackernagel.info](https://www.wackernagel.info)

# Reframe

**Which assets will hold value in the predictable future?**

THIS VITAL PART OF THE FUTURE HAS NEVER BEEN  
MORE PREDICTABLE:

IN ANY IMAGINABLE SCENARIO, THERE WILL BE  
MORE CLIMATE CHANGE & RESOURCE  
CONSTRAINTS.



SO, WHICH ASSETS WILL HOLD VALUE?

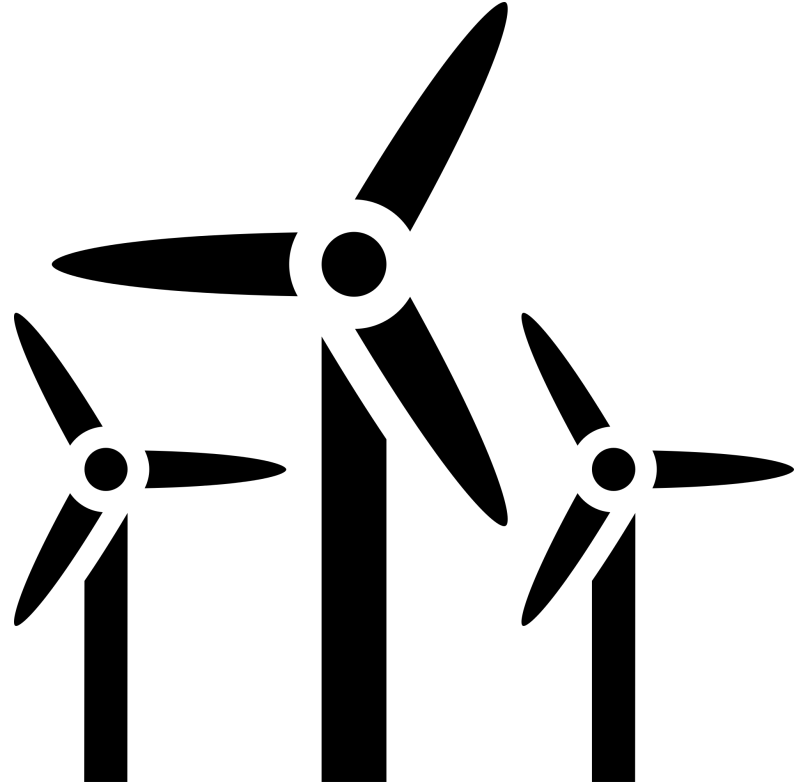
# Assets that drive down overshoot as they expand will gain value

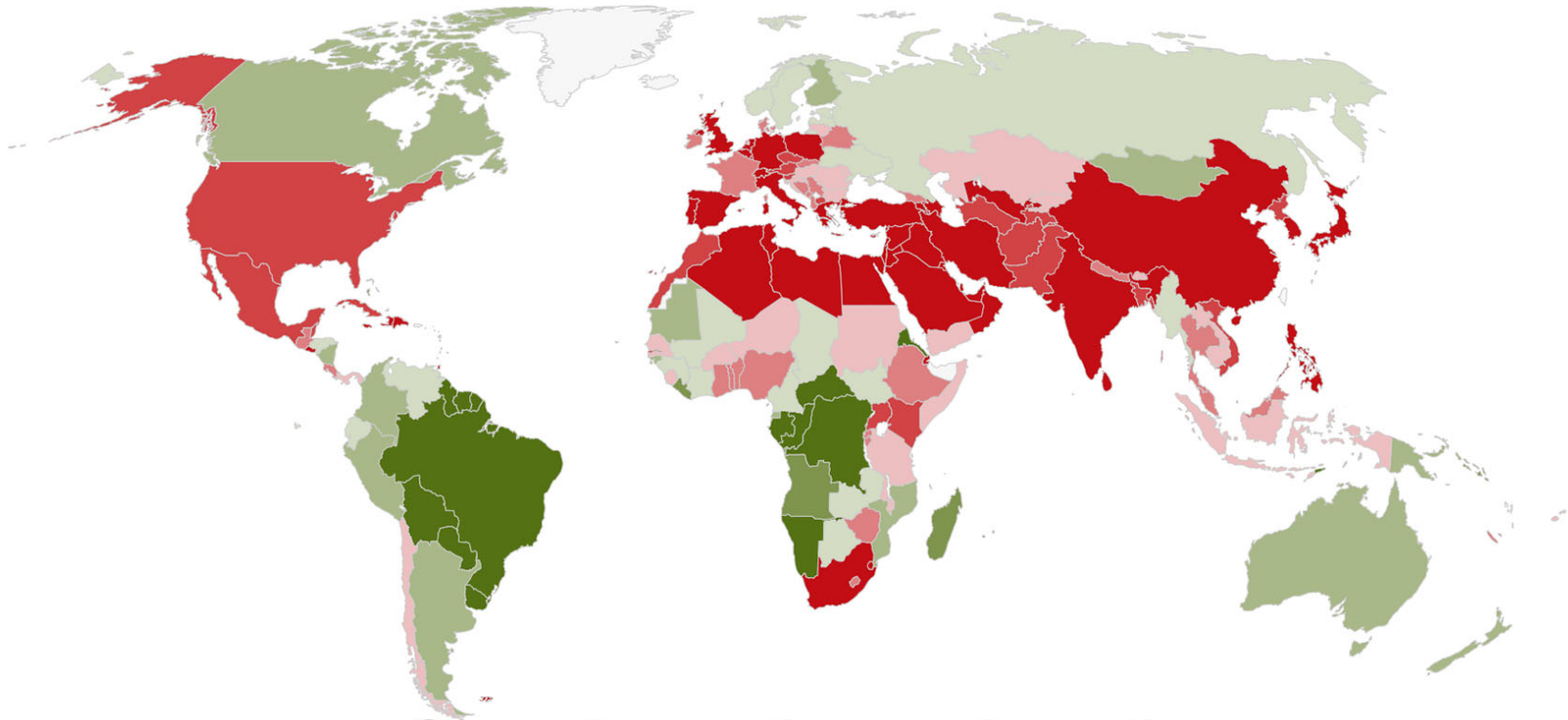
*Because*

- 1. They will not run into resource constraints*
- 2. Their costs will be lower*
- 3. They will be needed more*



Company expands,  
overshoot goes up or down?





[data.footprintnetwork.org](http://data.footprintnetwork.org)



ECOLOGICAL DEFICIT/RESERVE



TOTAL ECOLOGICAL FOOTPRINT



ECOLOGICAL FOOTPRINT PER PERSON



TOTAL BIOCAPACITY



BIOCAPACITY PER PERSON



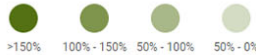
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**ECOLOGICAL DEFICIT/RESERVE**

An ecological deficit occurs when the Ecological Footprint of a population exceeds the biocapacity of the area available to that population. A national ecological deficit means that the nation is importing biocapacity through trade, liquidating national ecological assets or emitting carbon dioxide waste into the atmosphere. An ecological reserve exists when the biocapacity of a region exceeds its population's Ecological Footprint.

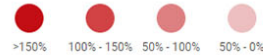
**BIOCAPACITY CREDITORS**

*BIOCAPACITY GREATER THAN FOOTPRINT*



**BIOCAPACITY DEBTORS**

*FOOTPRINT GREATER THAN BIOCAPACITY*



# Essence and next bridge to cross

- **Overshoot is context**
- **NO downside for better understanding future**
- **Barrier:** Help people see their self interest in responding to overshoot.

**For contact and more background:**  
[www.wackernagel.info](http://www.wackernagel.info)





