

# Spor G

## Governance - Ledelse af ressourcer

## Doughnutøkonomi i praksis

v. **Jacob Rask**, Director, Regenerative Built Environment Network

Facilitator: **Kasper Hillgaard Mühlbach**, Chefkonsulent i Dansk Standard





# Doughnut økonomi

**Jacob Rask**

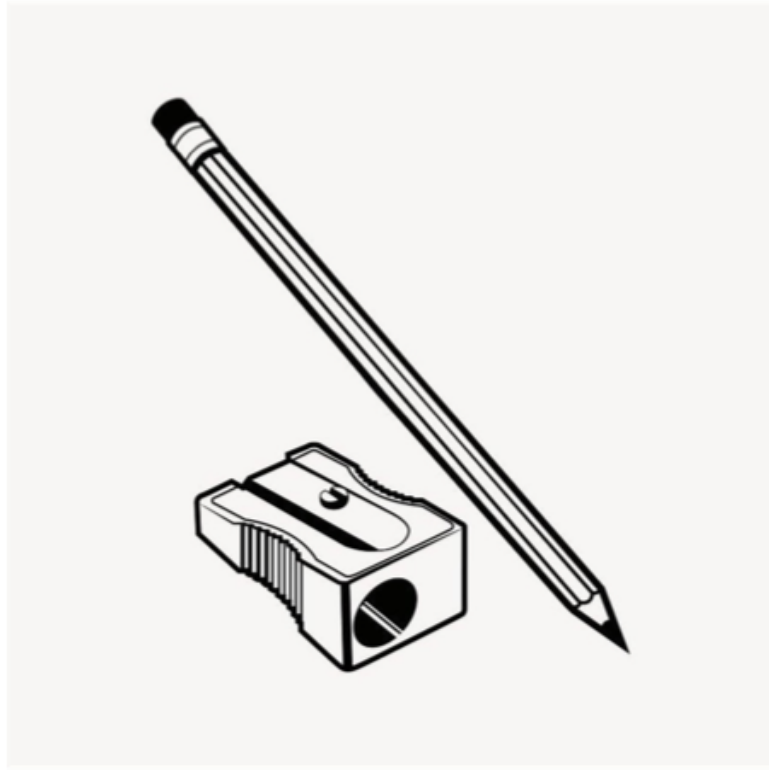
Director, Regenerative Built Environment Network

BLOXHUB - [jra@bloxhub.org](mailto:jra@bloxhub.org)

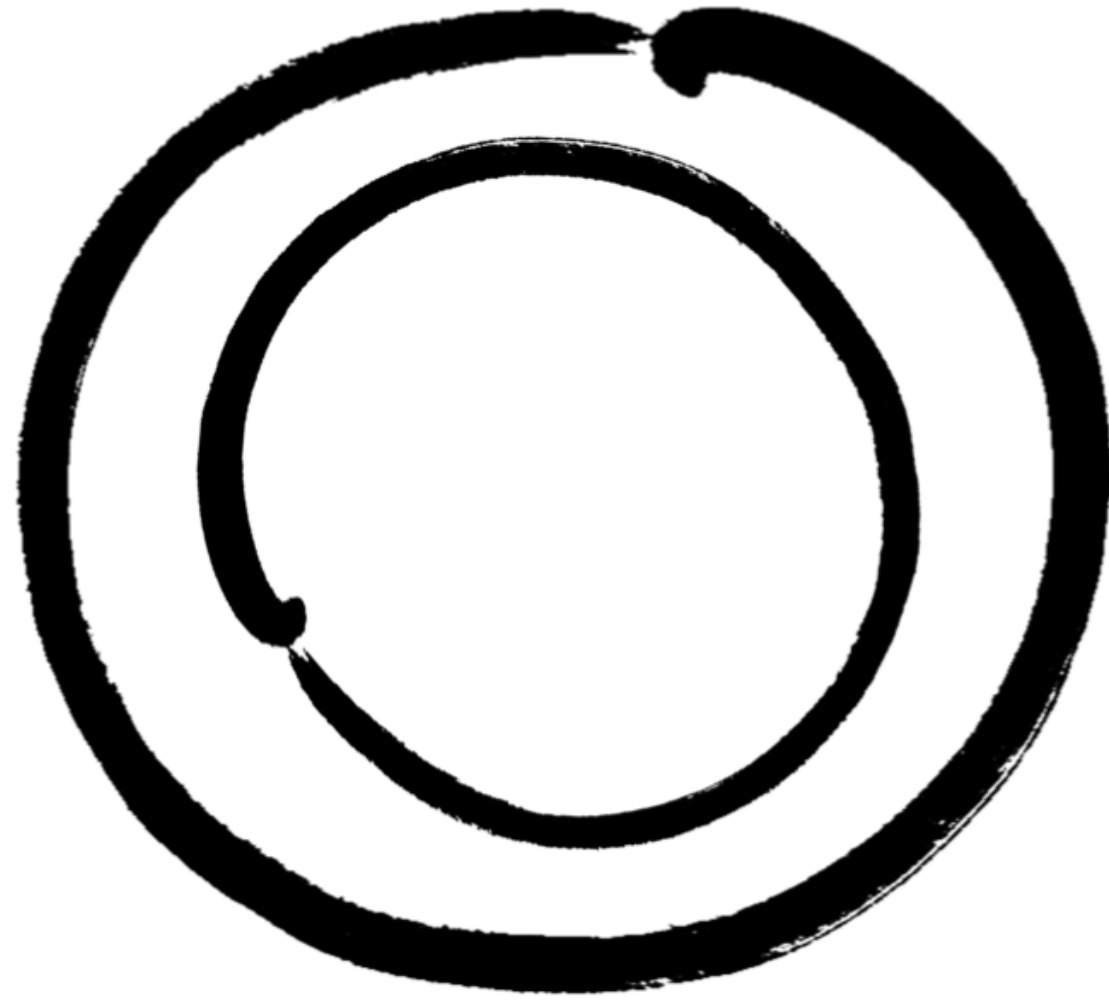
Ekstern lektor i samfundsøkonomi

- Roskilde Universitet

**Nov 2024 - DS**



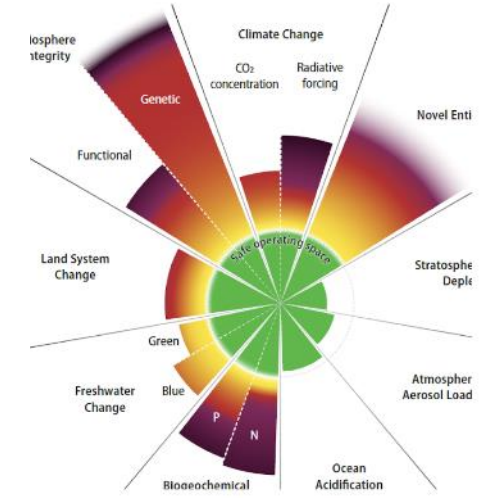
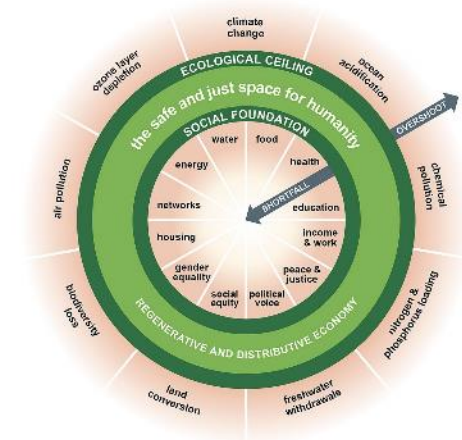
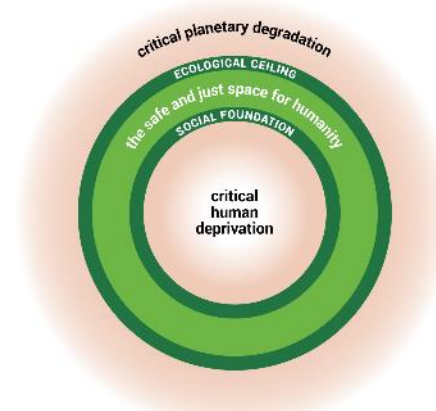
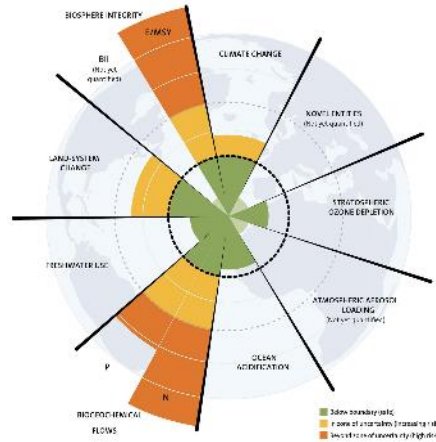
**The most powerful tool in economics is not money, nor even algebra. It is **a pencil**. Because with a pencil you can redraw the world. - Kate Raworth**



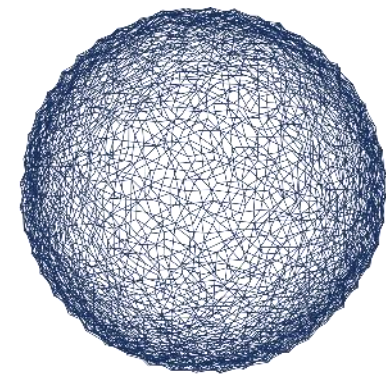




# Fremskridtets form i det 21. århundrede?



Richardson et al. 2023

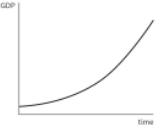





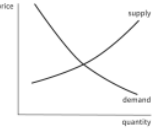
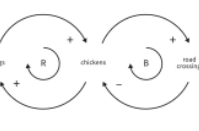

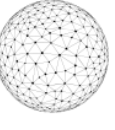


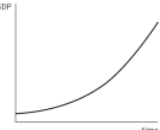
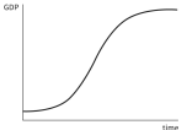


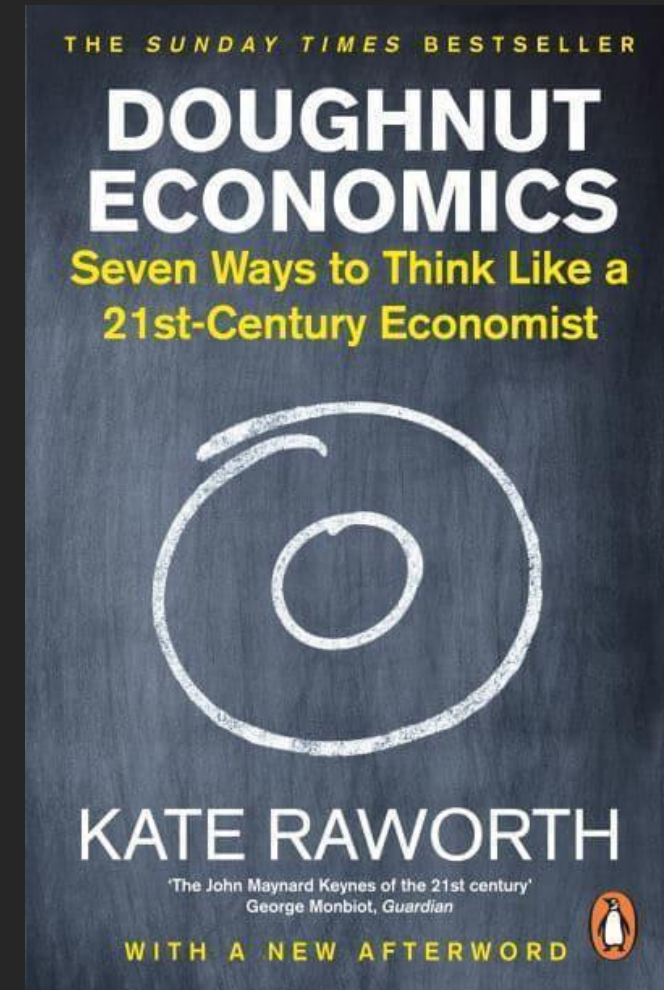
COP15  
COPENHAGEN  
UN CLIMATE CHANGE CONFERENCE 2009





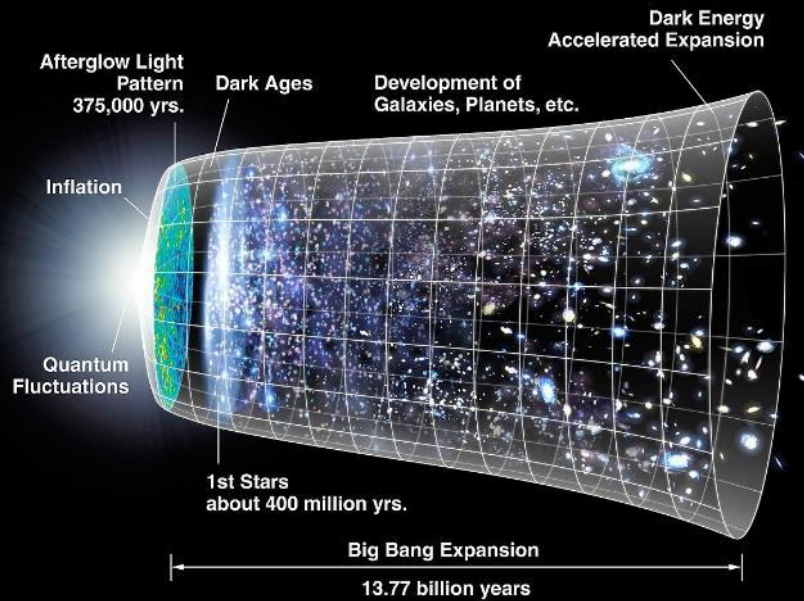
## Seven ways to think like a 21st century economist

Seven Ways to Think:	From 20th-Century Economics	To 21st-Century Economics
1. Change the Goal	 GDP	 the Doughnut
2. See the Big Picture	 self-contained market	 embedded economy
3. Nurture Human Nature	 rational economic man	 social adaptable humans
4. Get Savvy with Systems	 mechanical equilibrium	 dynamic complexity
5. Design to Distribute	 growth will even it up again	 distributive by design
6. Create to Regenerate	 growth will clean it up again	 regenerative by design
7. Be Agnostic about Growth	 growth addicted	 growth agnostic



# Tidsmaskine





Universe begins

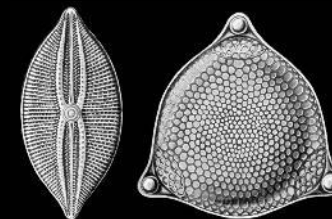
13.8 billion



Earth forms



Life evolves



Eucaryots create ozone layer



Oxygen Levels rise

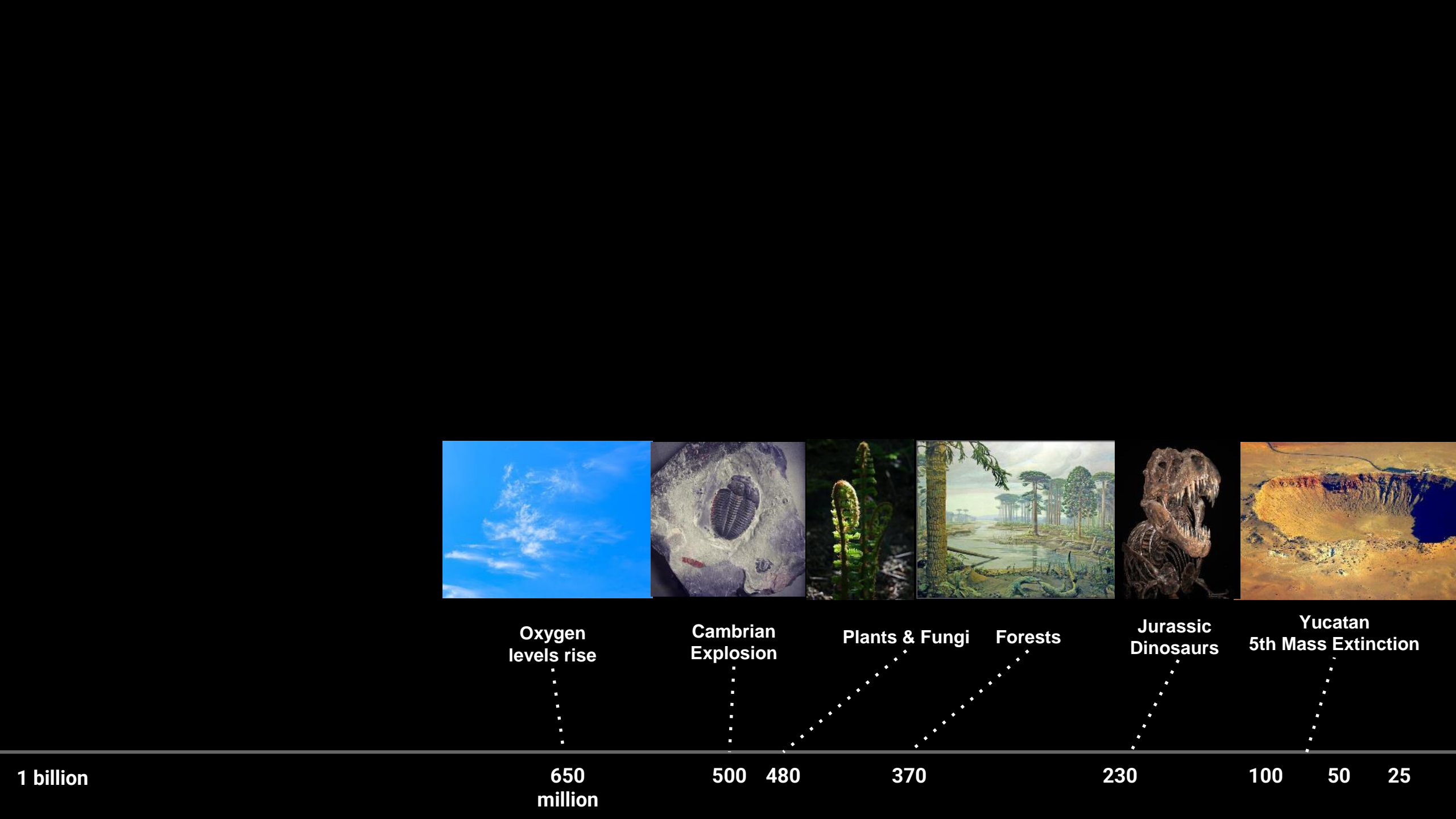
4.5

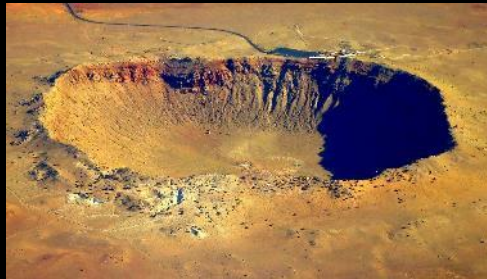
3.8

2.0

0.65







Yucatan  
5th Mass  
Extinction



First  
Primates



First  
Hominids



Homo

100 mio

66 mio

50 mio

25

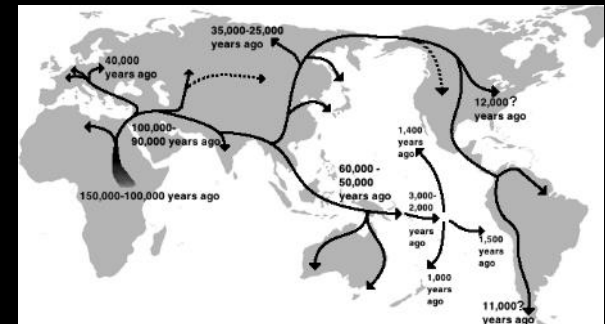
10

6

1



Homo Sapiens  
Emerge



Out of Africa

2  
million

1  
million

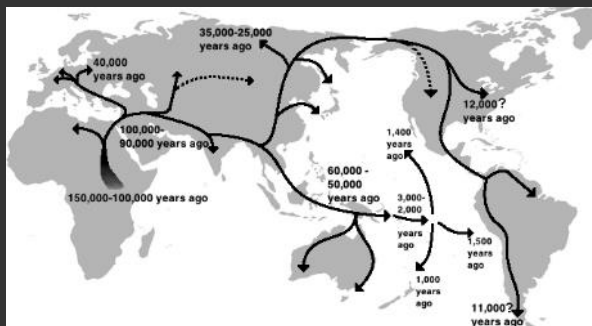
500

200

100

50





## Homo Sapiens Migration out of Africa



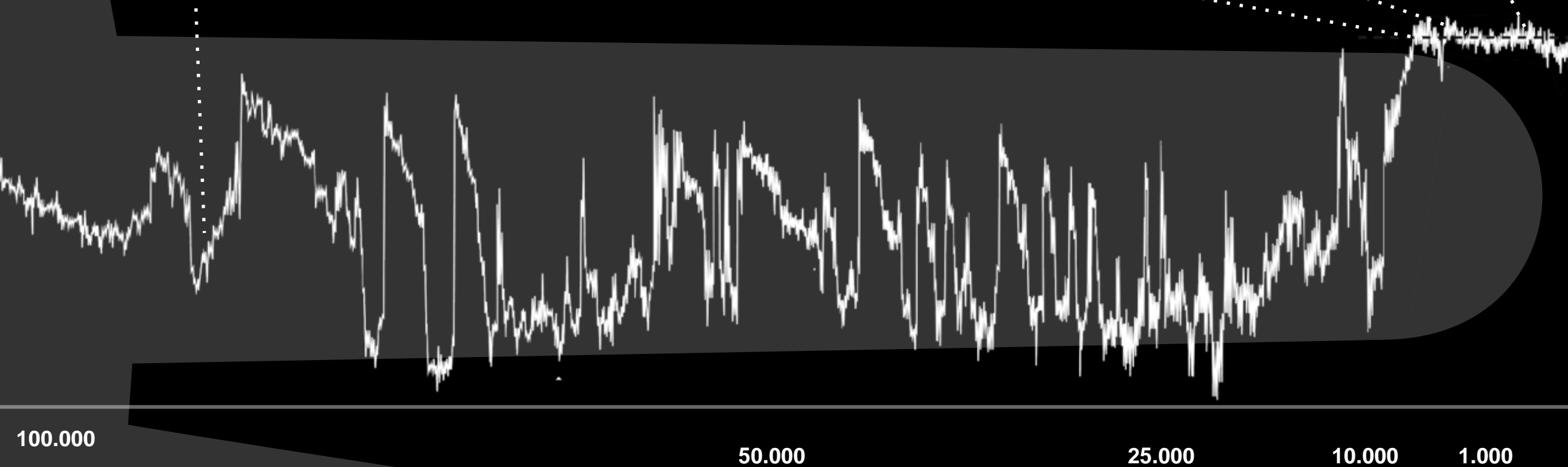
## Farming



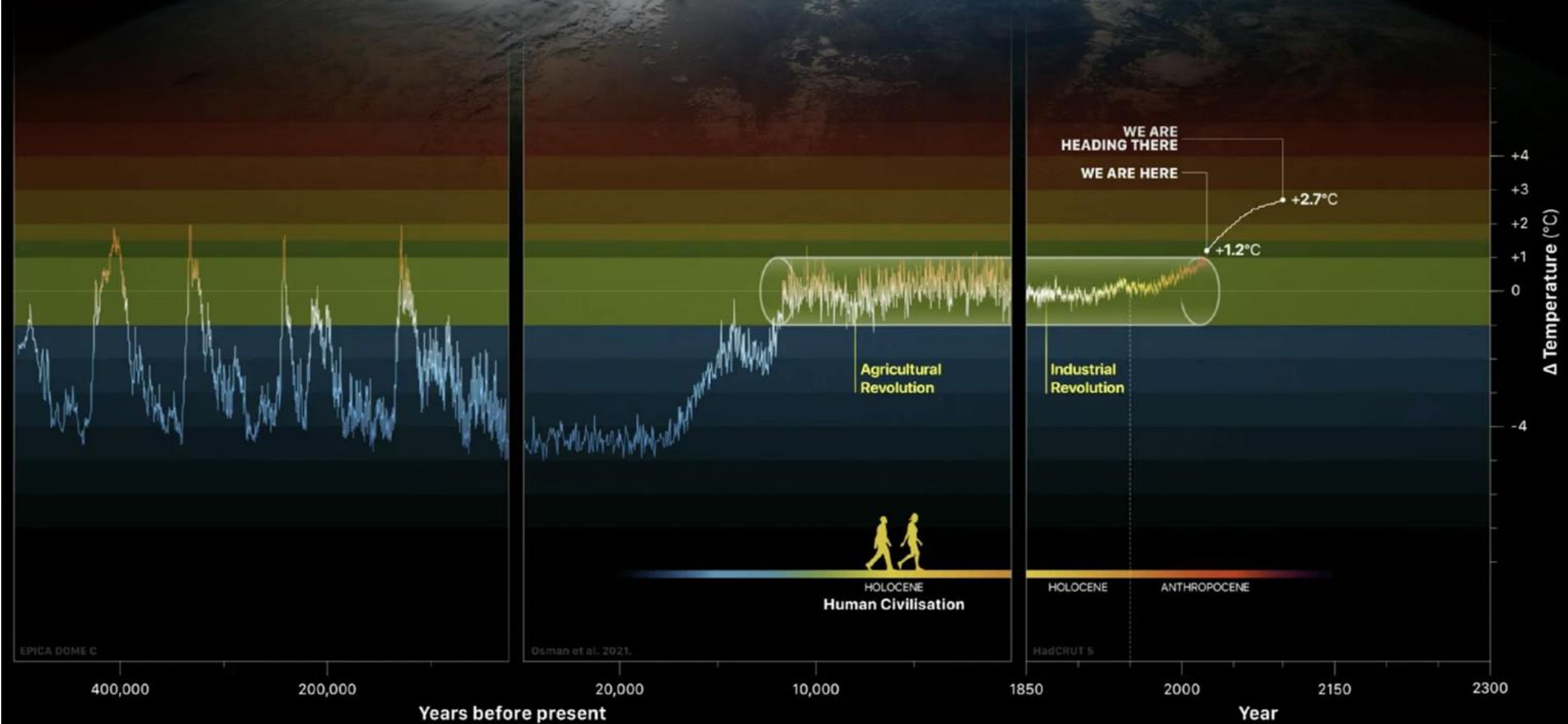
## Cities



## Capitalism



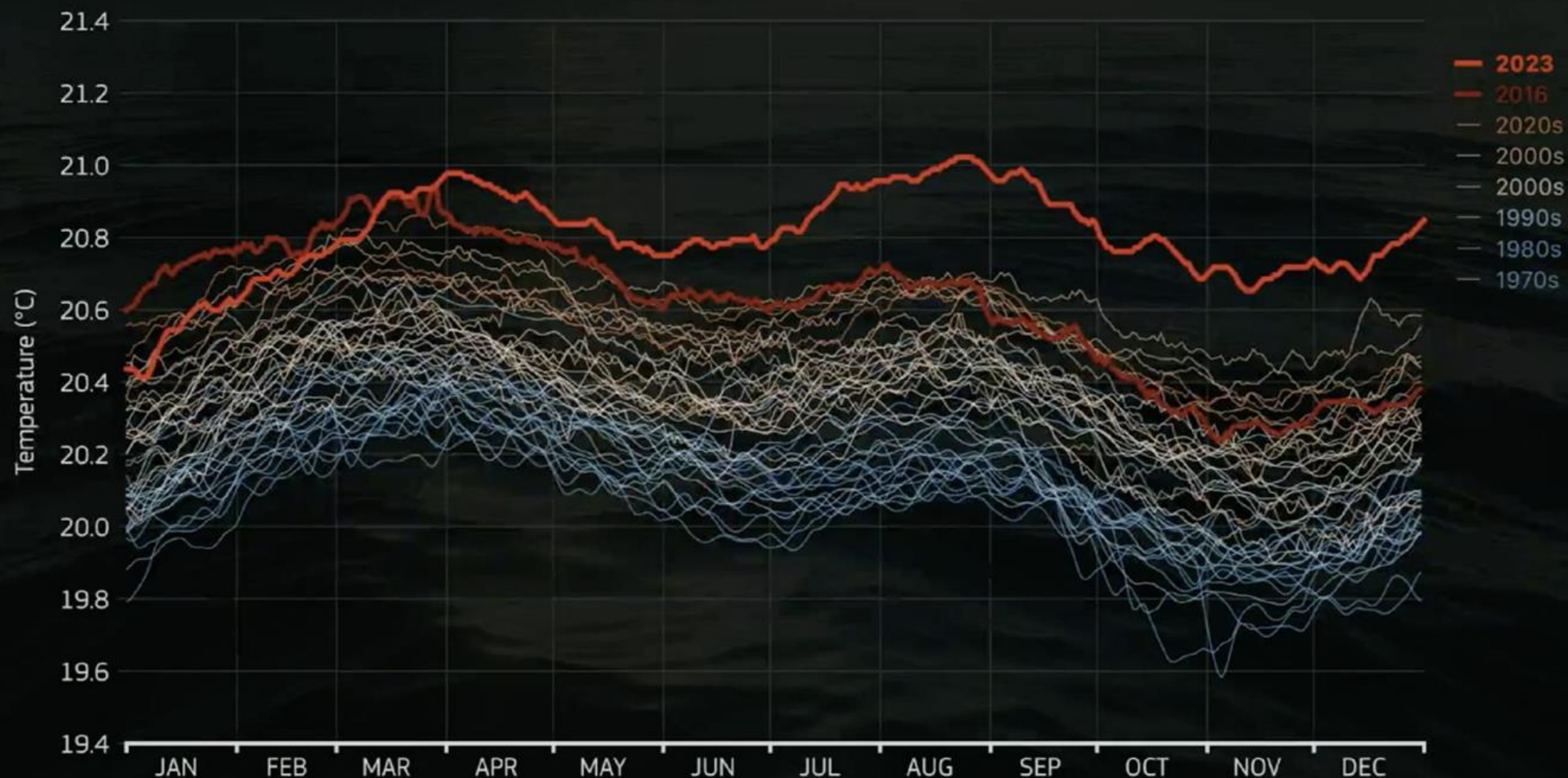
# Humanity's Journey on Earth



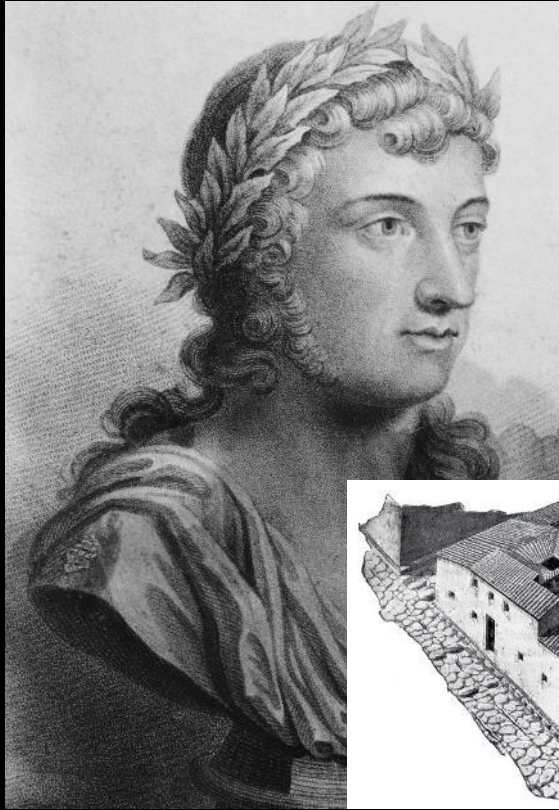


# Daily Sea Surface Temperature · 60°S–60°N

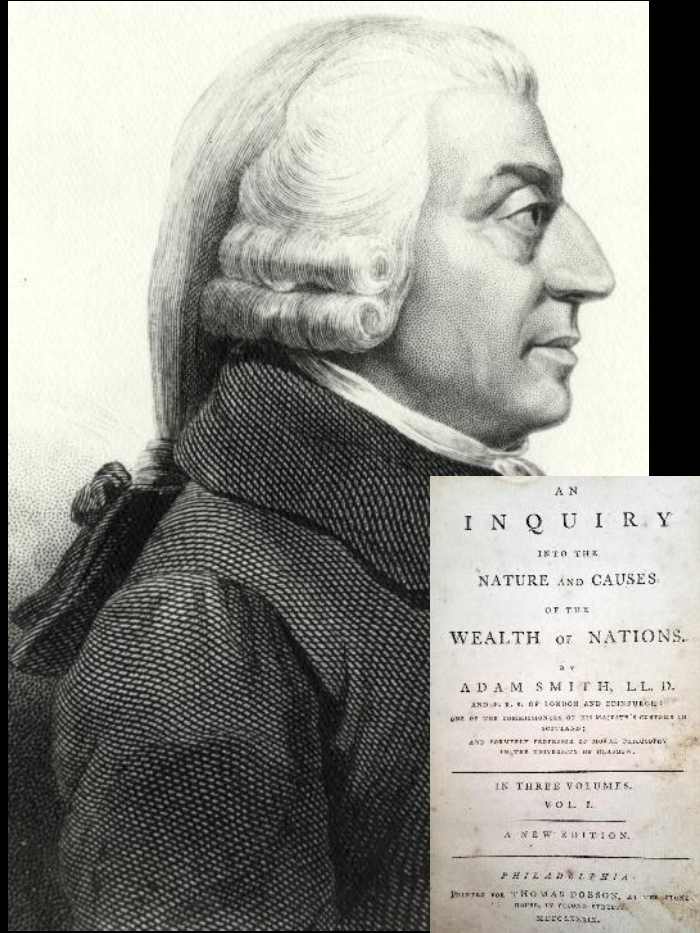
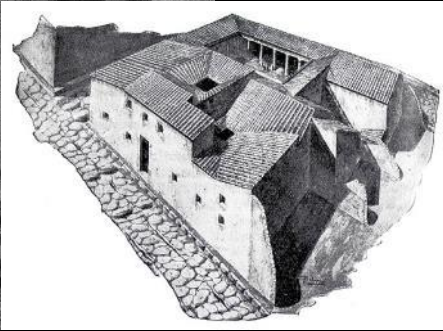
Data: ERA5 1979-2024



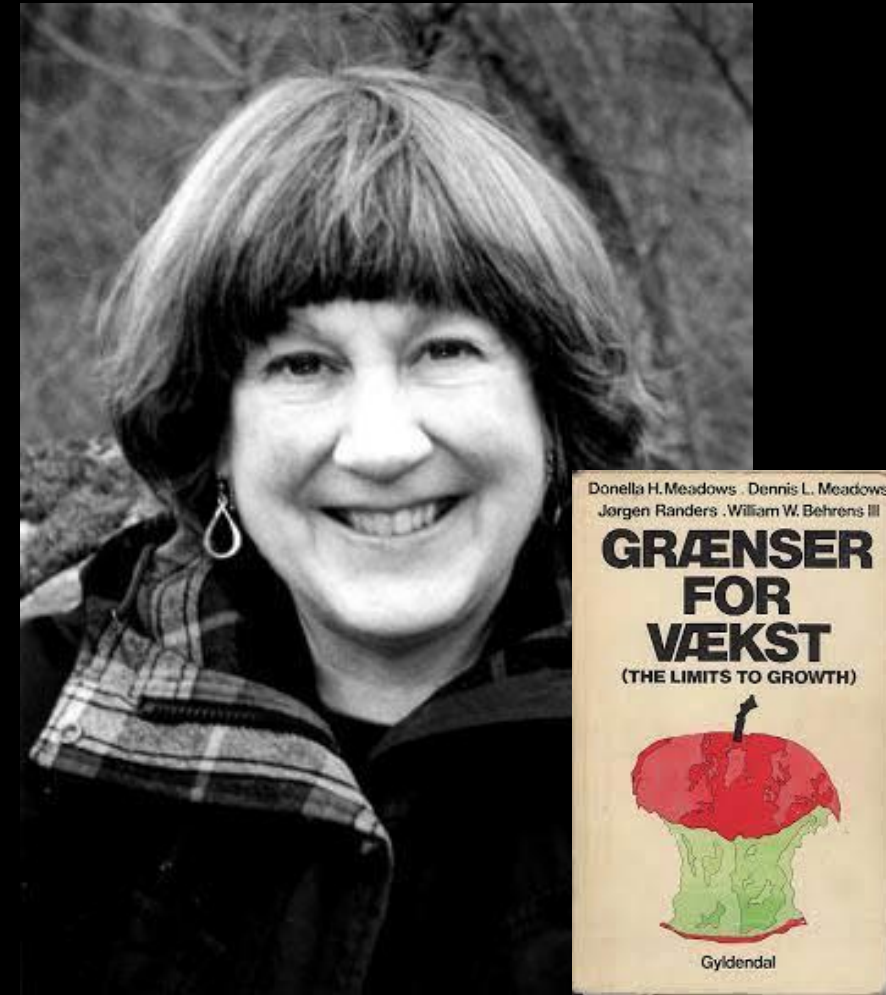




Xenofon - 425 f.Kr.



Adam Smith - 1776



Donella Meadows - 1972

1.000

1500

1750

1900

2000

## Kritik af vækst som mål



**'The welfare of a nation can scarcely be inferred from national income . . . Distinctions must be kept in mind between quantity and quality of growth, between its costs and return, and between the short and the long term....objectives should be explicit: goals for "more growth" should specify of what and for what.'**

– Simon Kuznets, 1962



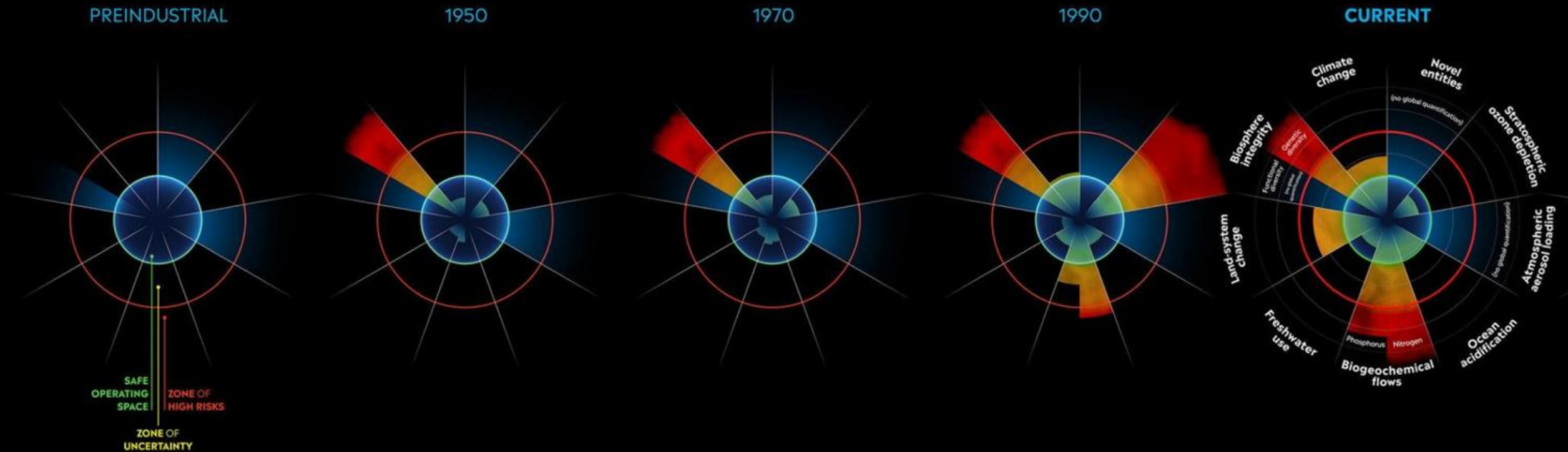
**'Growth is one of the stupidest purposes invented by any culture. We've got to have an enough'**

Always ask: 'Growth of what, and why, and for whom, and who pays the cost, and how long can it last, and what's the cost to the planet, and how much is enough?'

– Donella Meadows, 1999



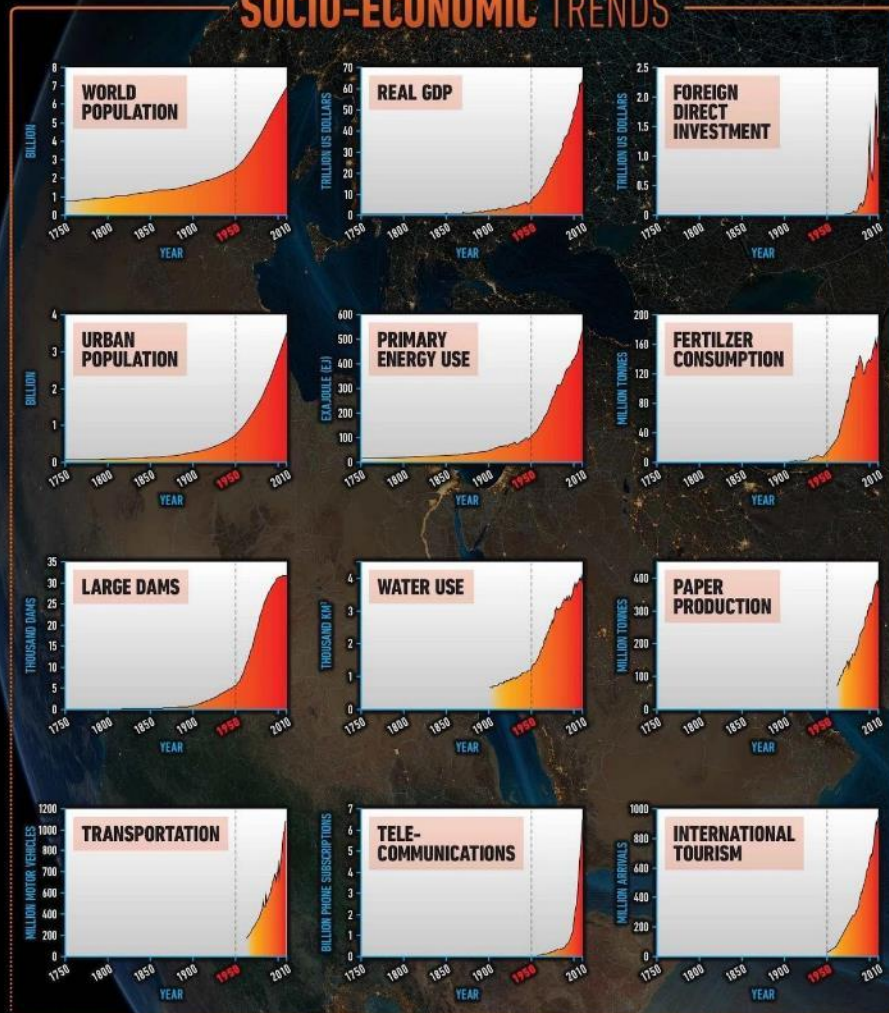
# Sådan gik det 20 århundrede



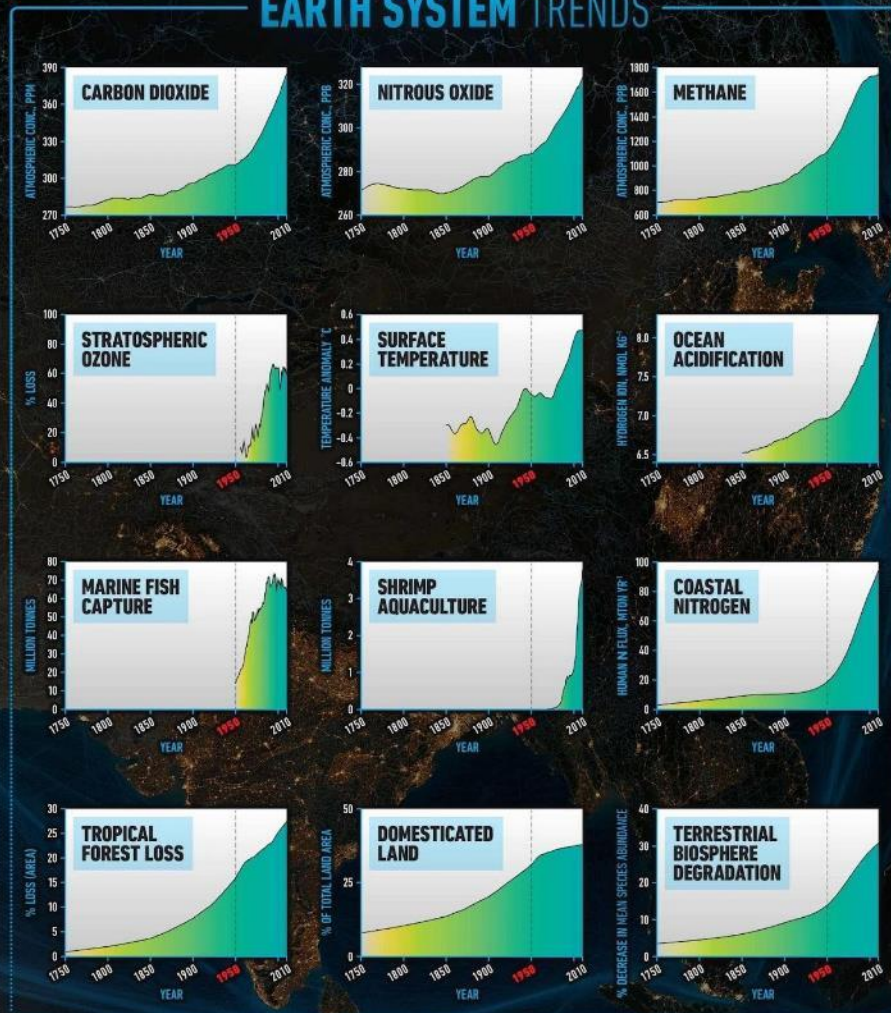


# THE GREAT ACCELERATION

## SOCIO-ECONOMIC TRENDS



## EARTH SYSTEM TRENDS



REFERENCE: Steffen, W., W. Broadgate, L. Deutsch, O. Gaffney and C. Ludwig (2015), The Trajectory of the Anthropocene: the Great Acceleration, Submitted to *The Anthropocene Review*.

MAP & DESIGN: Félix Pharand-Deschênes / Globaia



# Sådan begyndte det 21. århundrede

## Økonomisk



Occupy Wall Street, New York 2008

## Økologisk



Skybrud, København 2011

## Socialt



Covid lockdown, Beijing 2020

## Politisk



Syriske flygtninge - Danmark 2016



Arab Spring, Egypt 2011



Skovbrand, Sverige 2018

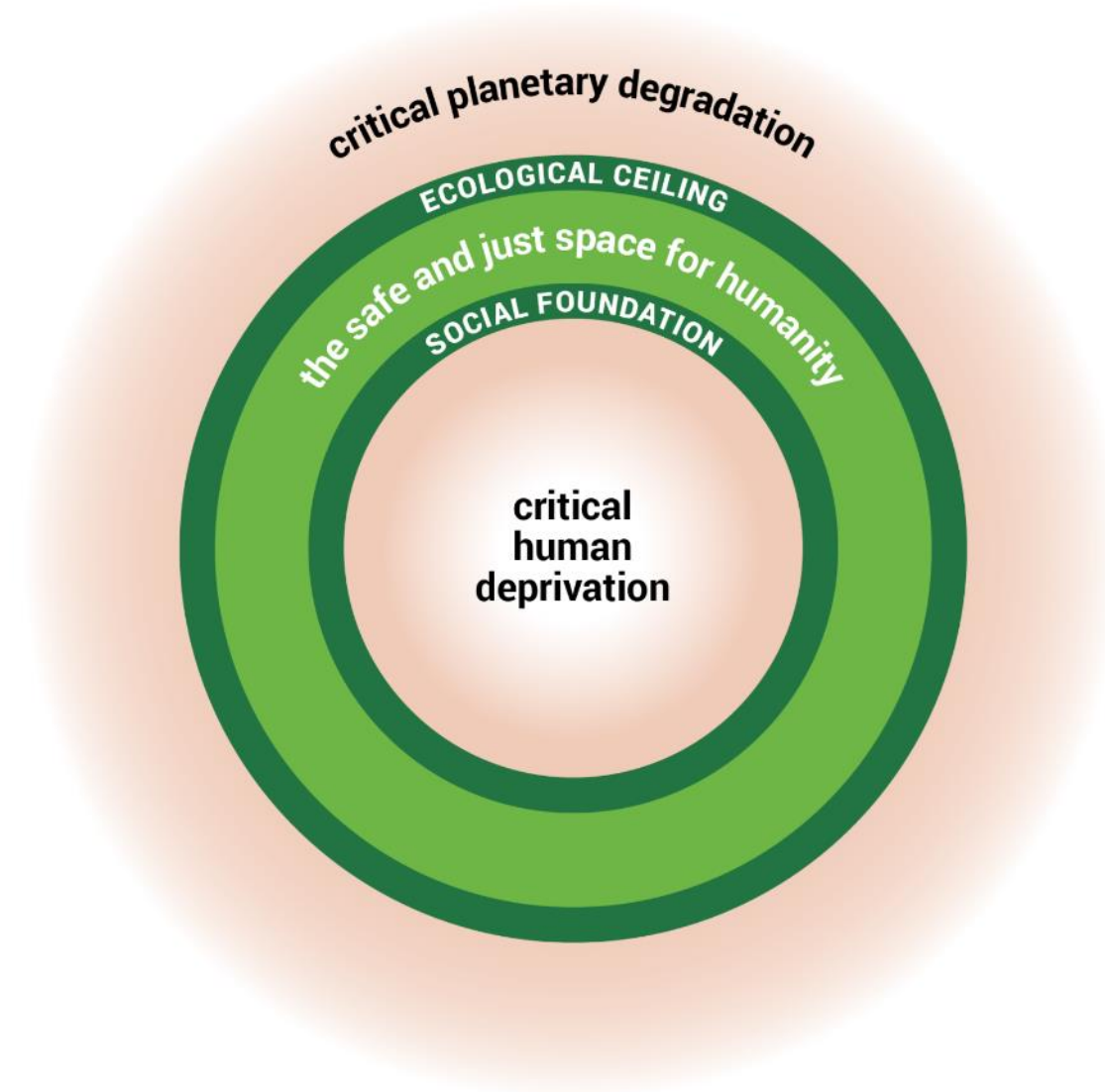


Covid lockdown, Italy 2020



Ukraine 2022

# Et kompas for velfærd

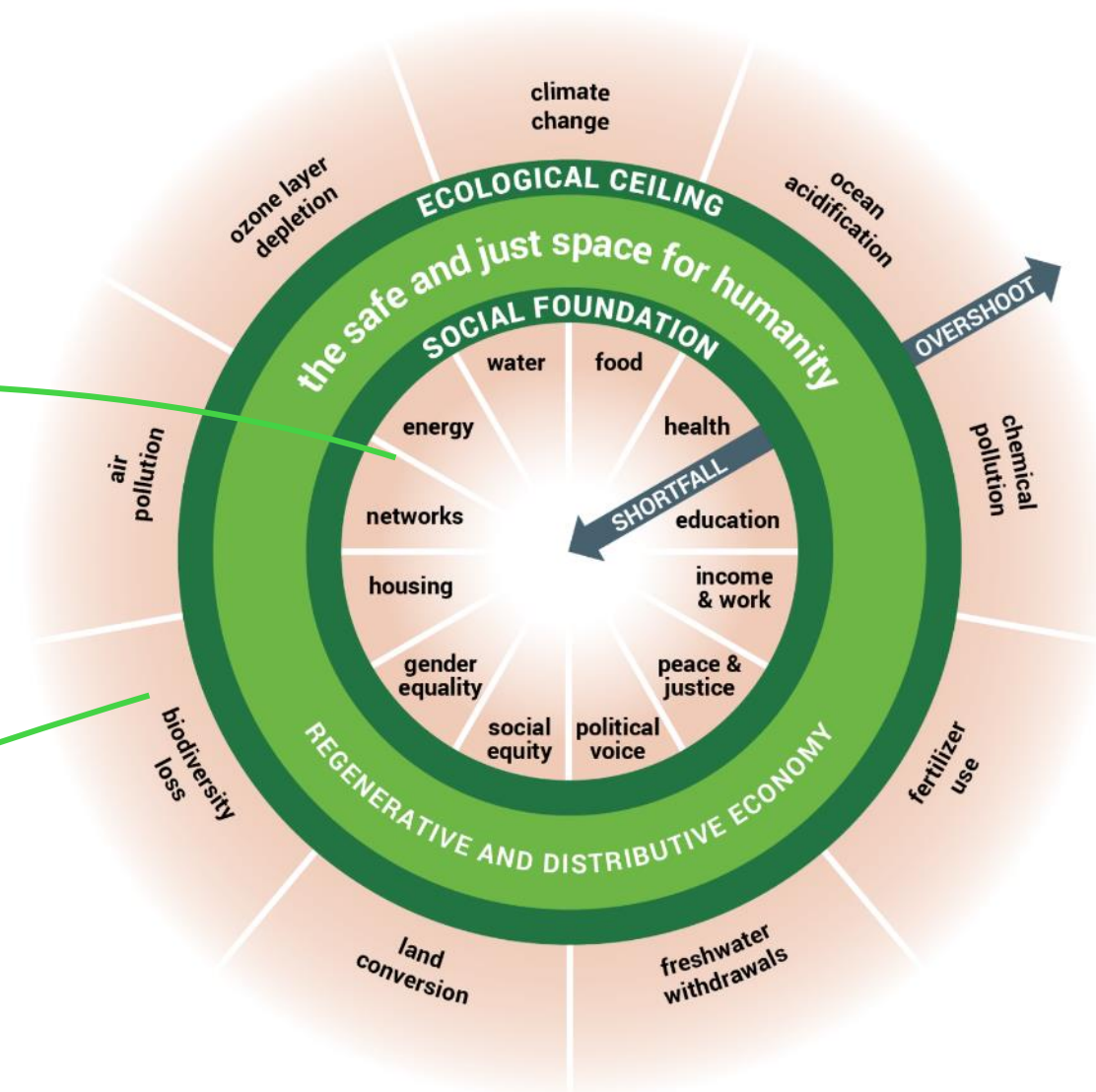




# Et kompas for velfærd

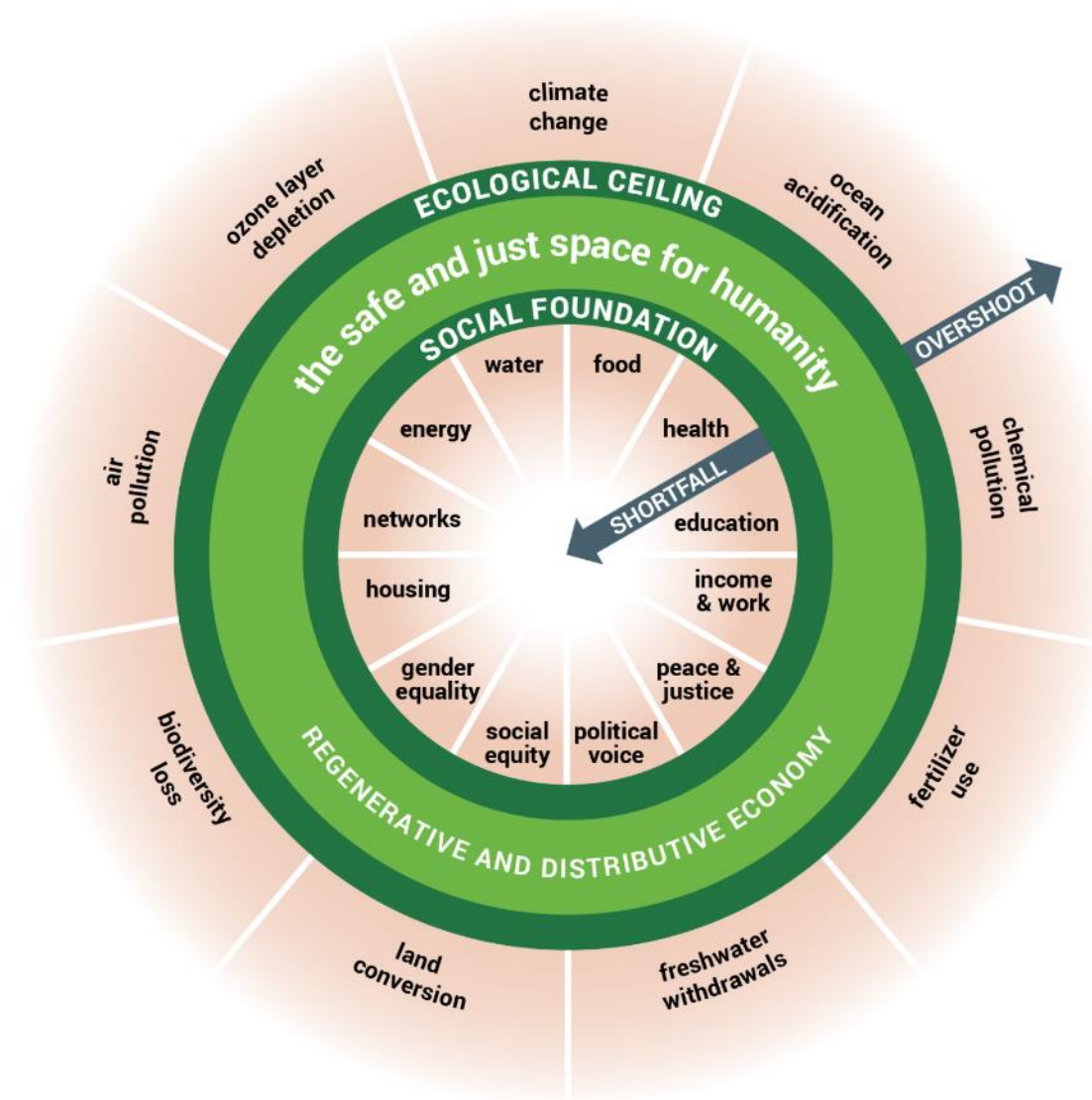
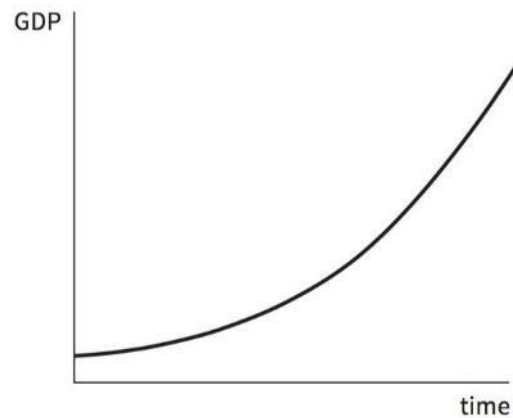


## PLANETARY BOUNDARIES

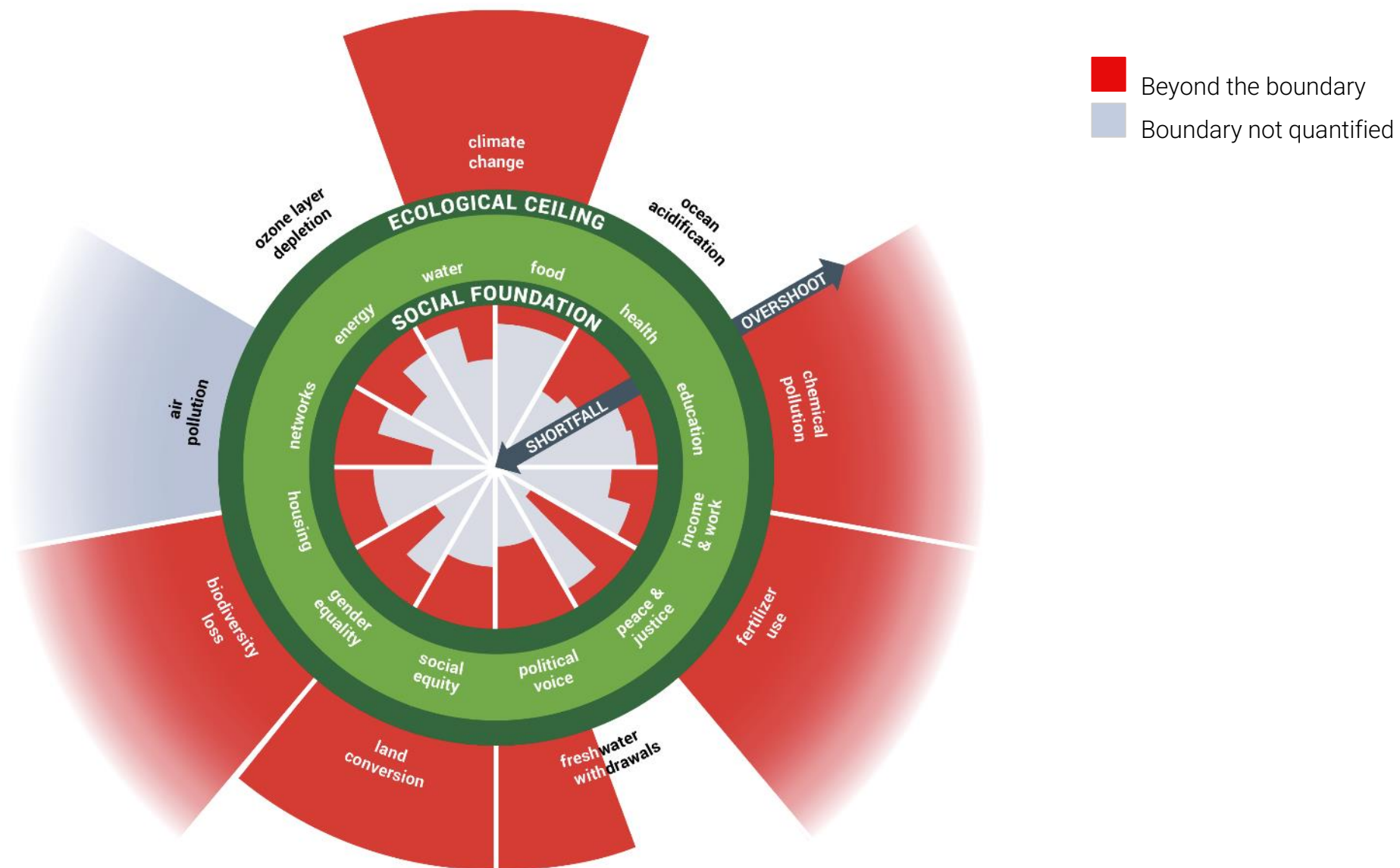




# Et kompas for velfærd



# En verden helt ude af balance



# En verden helt ude af balance

**Forskere advarer: Seks ud af ni planetære grænser er nu overskredet**

**Opvarmingen passerer 1,5 grader, havisens afsmeltning slår rekord, og verdens klimaforhandlere står stille**

**CO2 giver surt vand:**  
Truer med at ødelægge skrøbeligt økosystem i Arktis

**NASA: HOLE IN EARTH'S OZONE LAYER FINALLY CLOSING UP BECAUSE HUMANS DID SOMETHING ABOUT IT**

**90% of world's children are breathing toxic air, WHO study finds**

**EU's klimachef efter dyster rapport: 'Vores børn og børnebørn vil udkæmpe krige om vand og mad'**

**Research finds humans across the globe have microplastics in their stool**

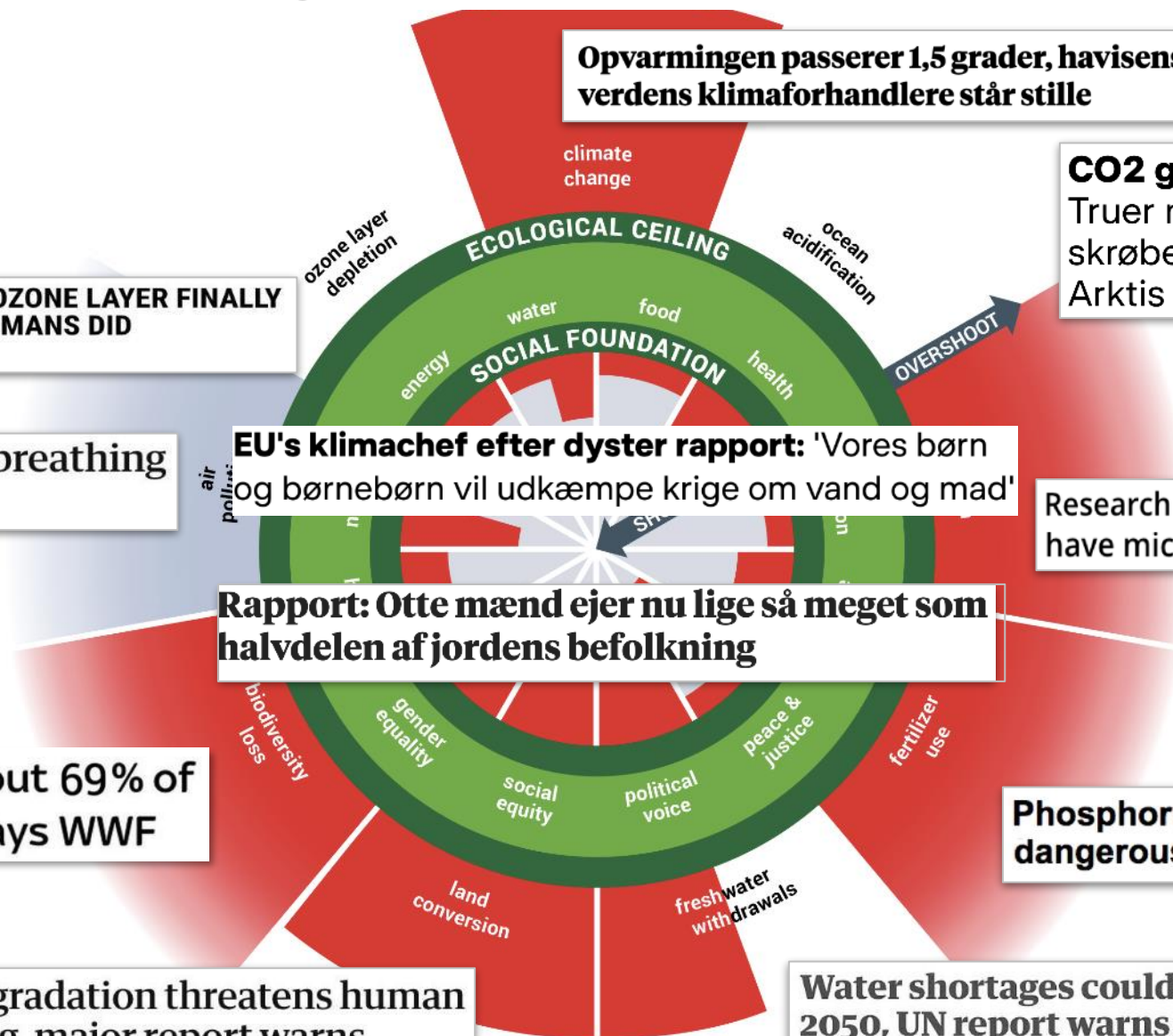
**Rapport: Otte mænd ejer nu lige så meget som halvdelen af jordens befolkning**

**Humans have wiped out 69% of animals since 1970, says WWF**

**Phosphorus pollution reaching dangerous levels worldwide**

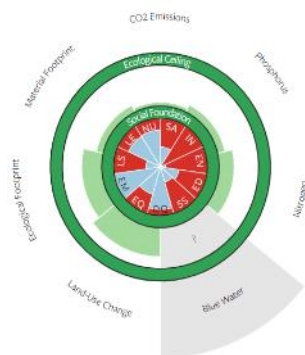
**Land degradation threatens human wellbeing, major report warns**

**Water shortages could affect 5bn people by 2050, UN report warns**



# Nationale doughnuts

Find your country:  
goodlife.leeds.ac.uk

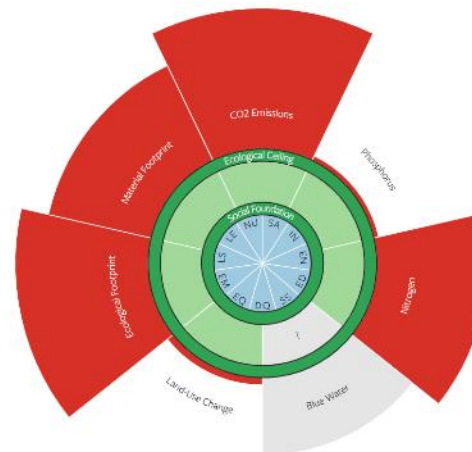


GNI pc  
PPP\$  
2022

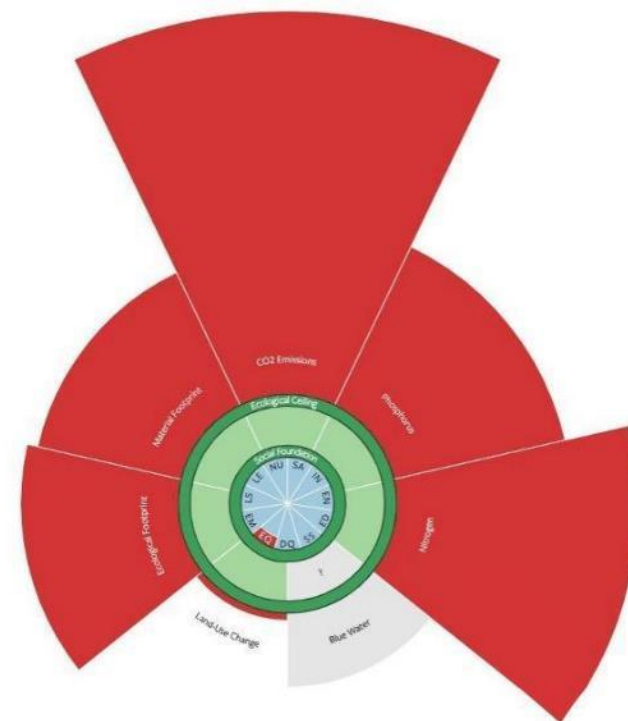
**Malawi**  
\$1,700 pc



**China**  
\$21,300 pc



**Denmark**  
\$66,700 pc

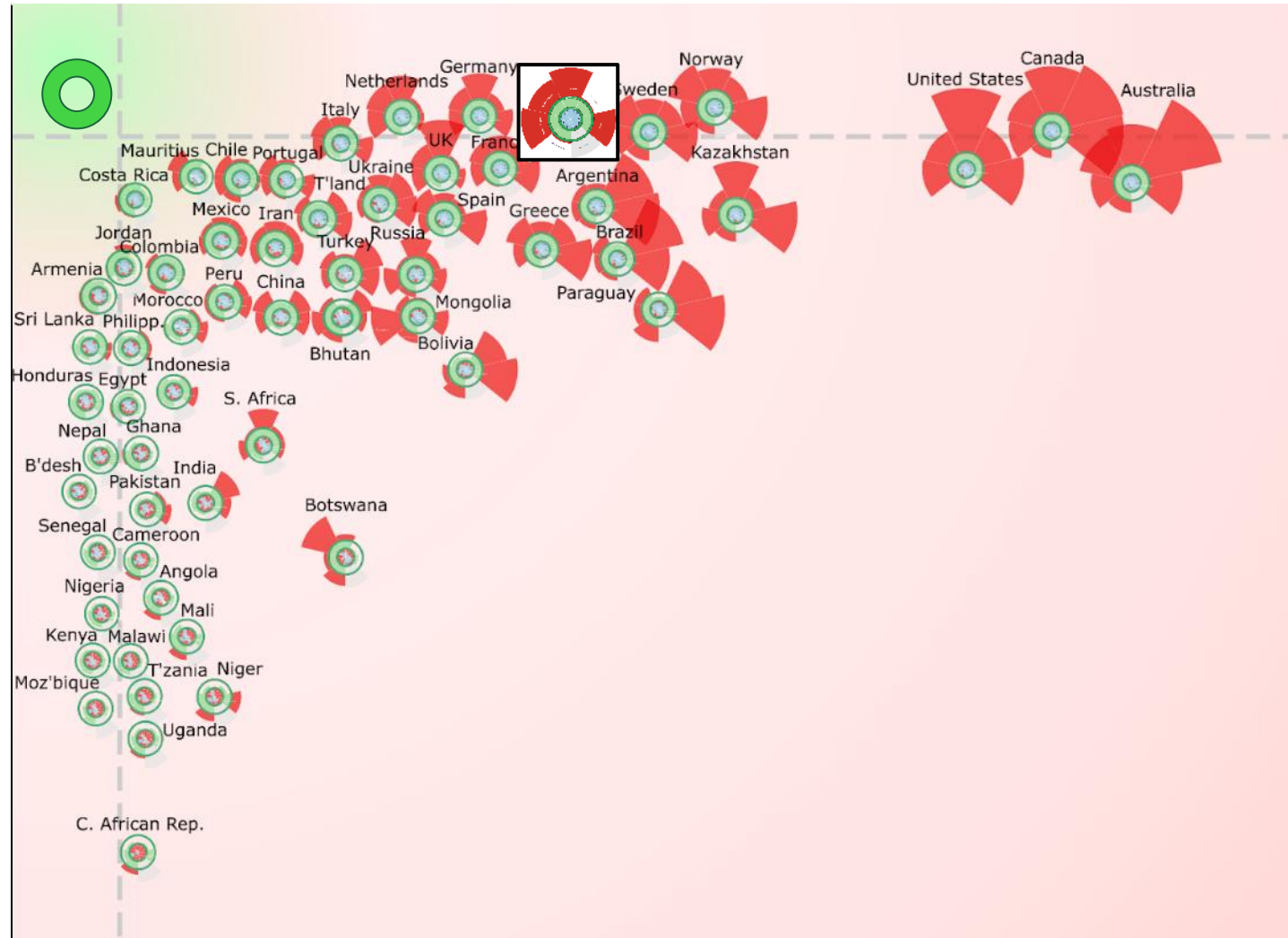


**United States**  
\$78,000 pc



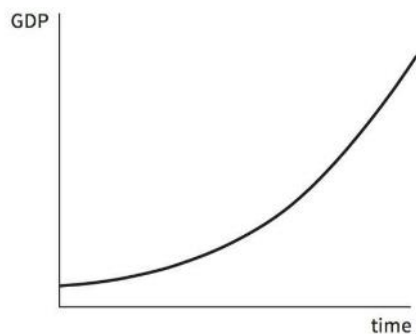
# Alle lande er udviklingslande

# Meeting the needs of all people →

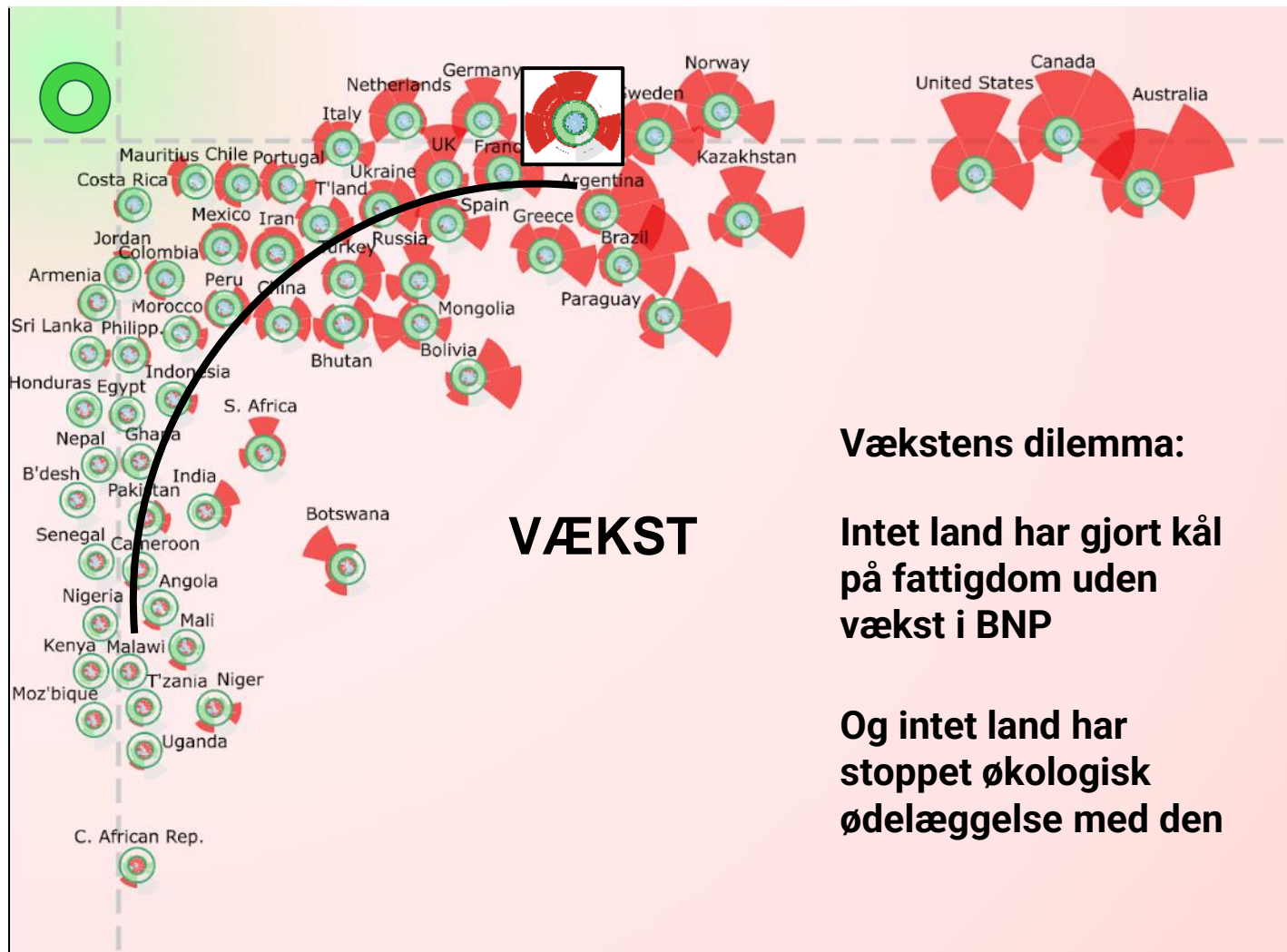


← **Within the means of the living planet**

# Vækstens dilemma



Meeting the needs of all people ↑



**Vækstens dilemma:**

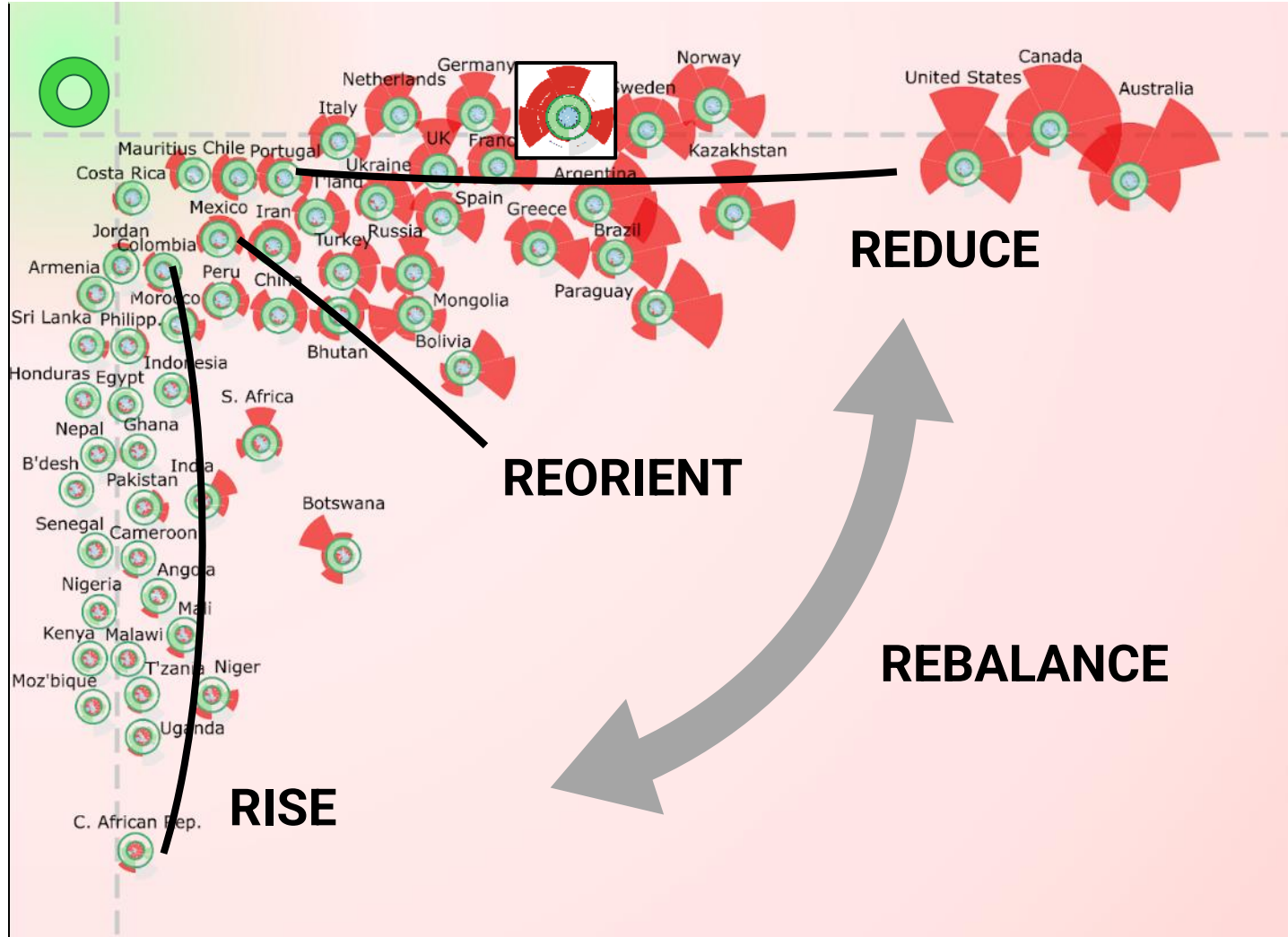
**Intet land har gjort kål  
på fattigdom uden  
vækst i BNP**

**Og intet land har  
stoppet økologisk  
ødelæggelse med den**

← **Within the means of the living planet**

# Trivsel i planetær balance

# Meeting the needs of all people →



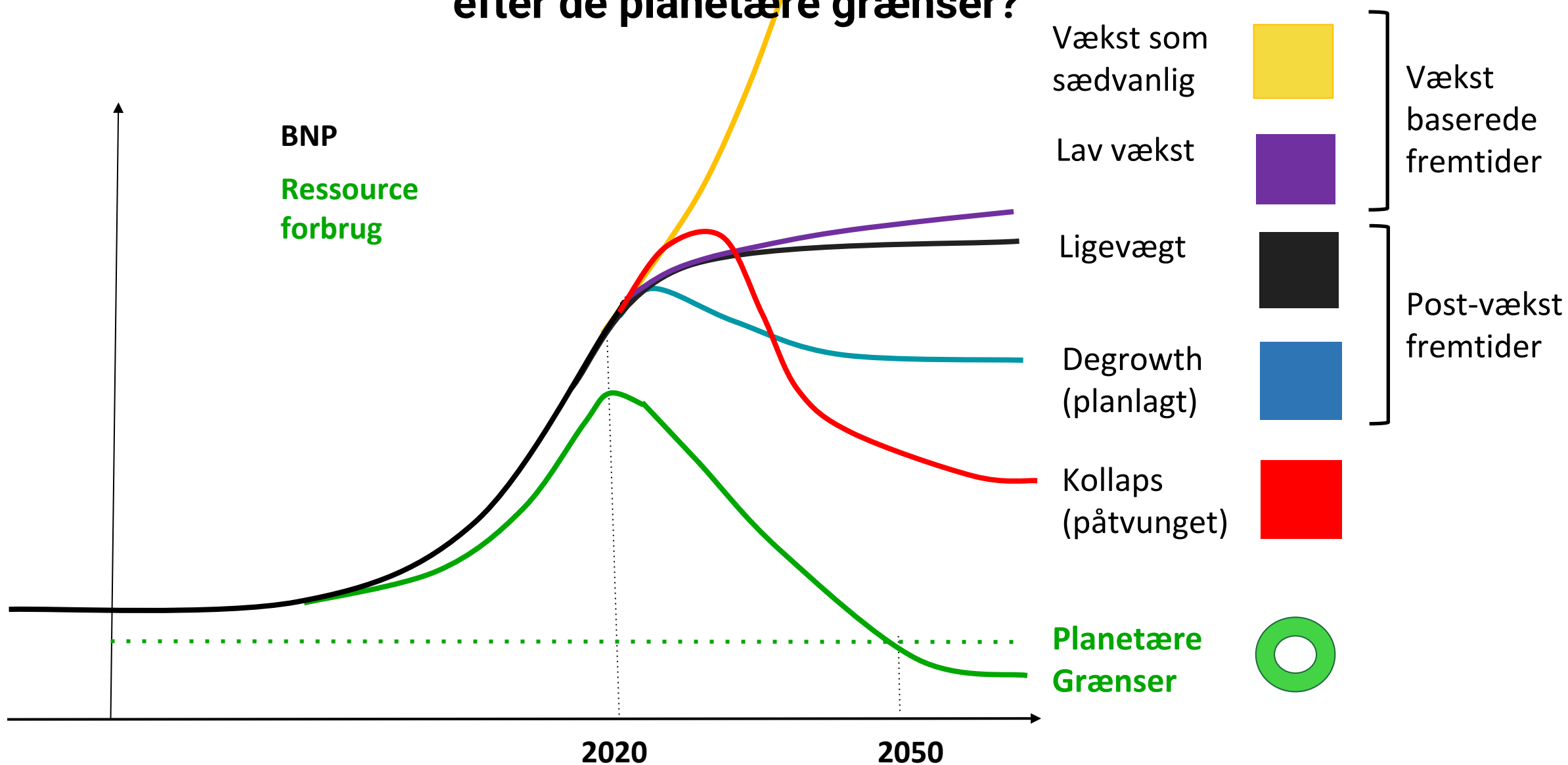
← **Within the means of the living planet**



**Sund økonomi?**



# Sandsynlig udvikling af BNP i højindkomstlande som sigter efter de planetære grænser?



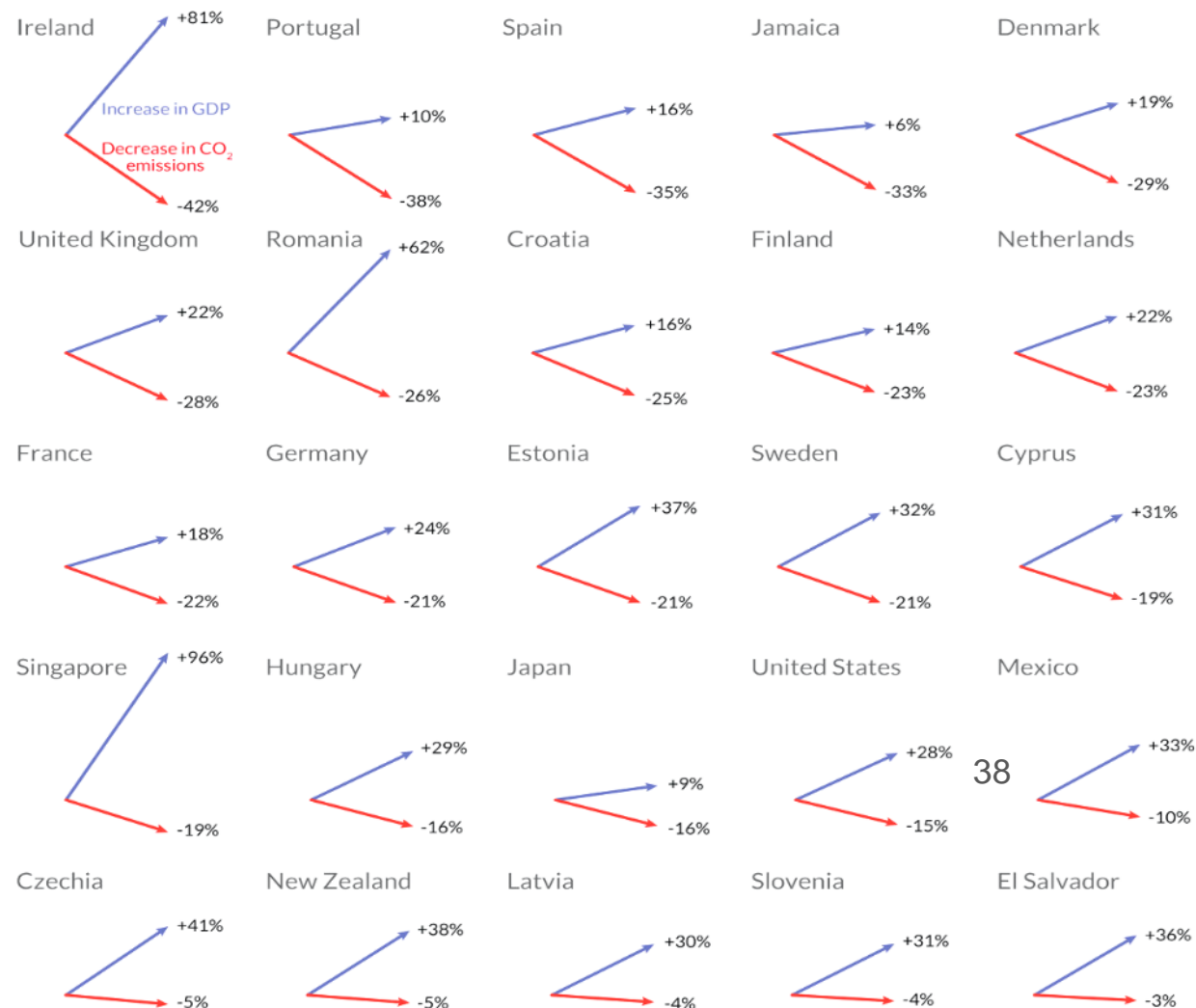
# Tegn på afkobling?

## Absolut afkobling af BNP og CO<sub>2</sub> finder sted i enkelte lande

### Decoupling: Countries that achieved **economic growth** while **reducing CO<sub>2</sub> emissions**, 2005-19

Our World  
in Data

Emissions are adjusted for trade. This means that CO<sub>2</sub> emissions caused in the production of imported goods are added to its domestic emissions – and for goods that are exported the emissions are subtracted.



38

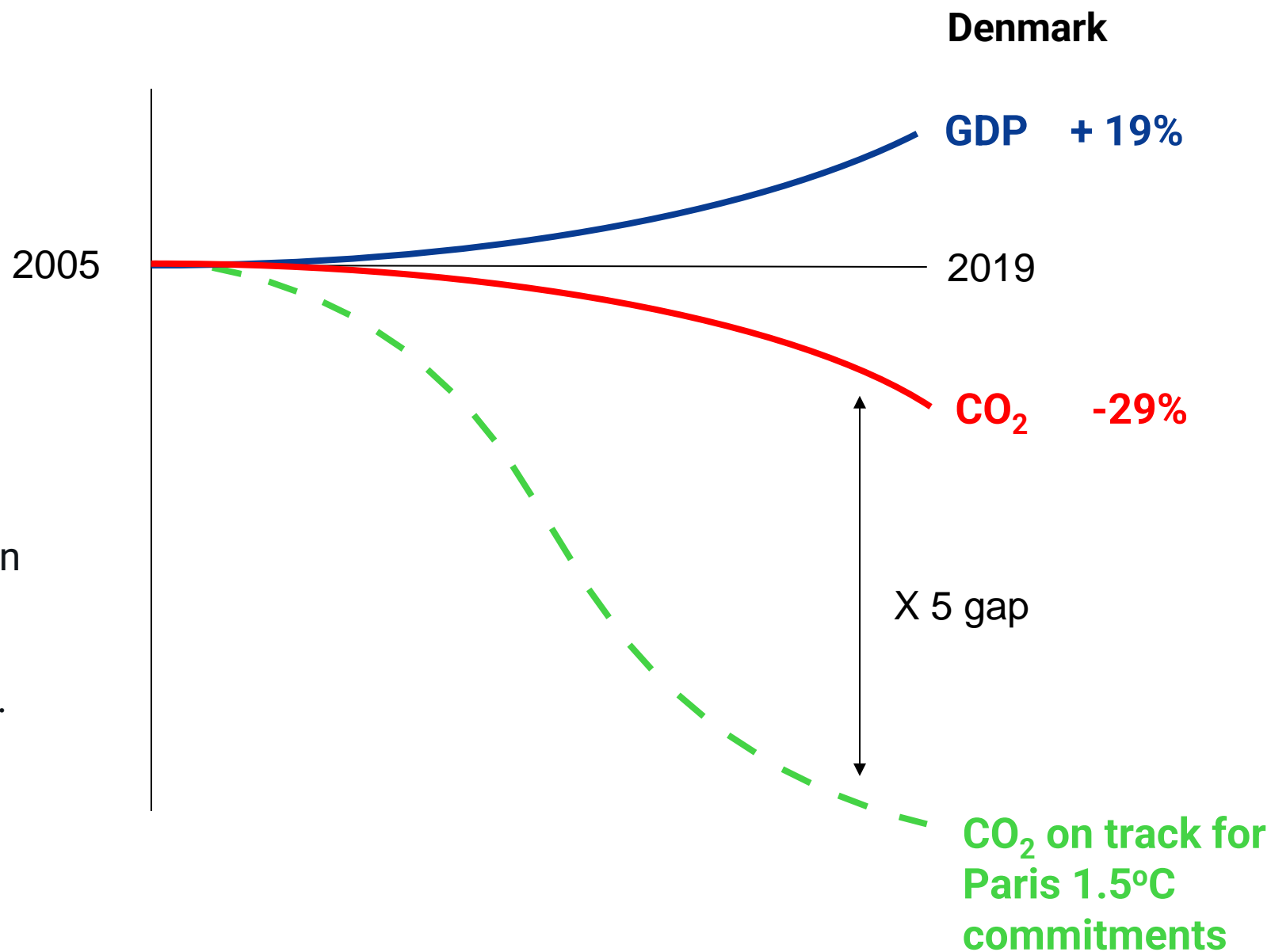
Data: Global Carbon Project & World Bank. There are more than these 25 countries that achieved the same.  
OurWorldinData.org – Research and data to make progress against the world's largest problems.

Licensed under CC-BY by  
the author Max Roser



# Men det er langt fra tilstrækkelig afkobling

Danmark som eksempel:  
afkoblingshastigheden skulle være over 5 gange hurtigere for at for at være hurtig nok. Og ingen lande afkobler i dag hurtigt nok, ifølge Hickel & Vogel (2023)



## GDP and resource use, 1990 - 2017

**Absolut  
afkobling af  
BNP og  
materiale  
forbrug finder  
slet ikke sted**

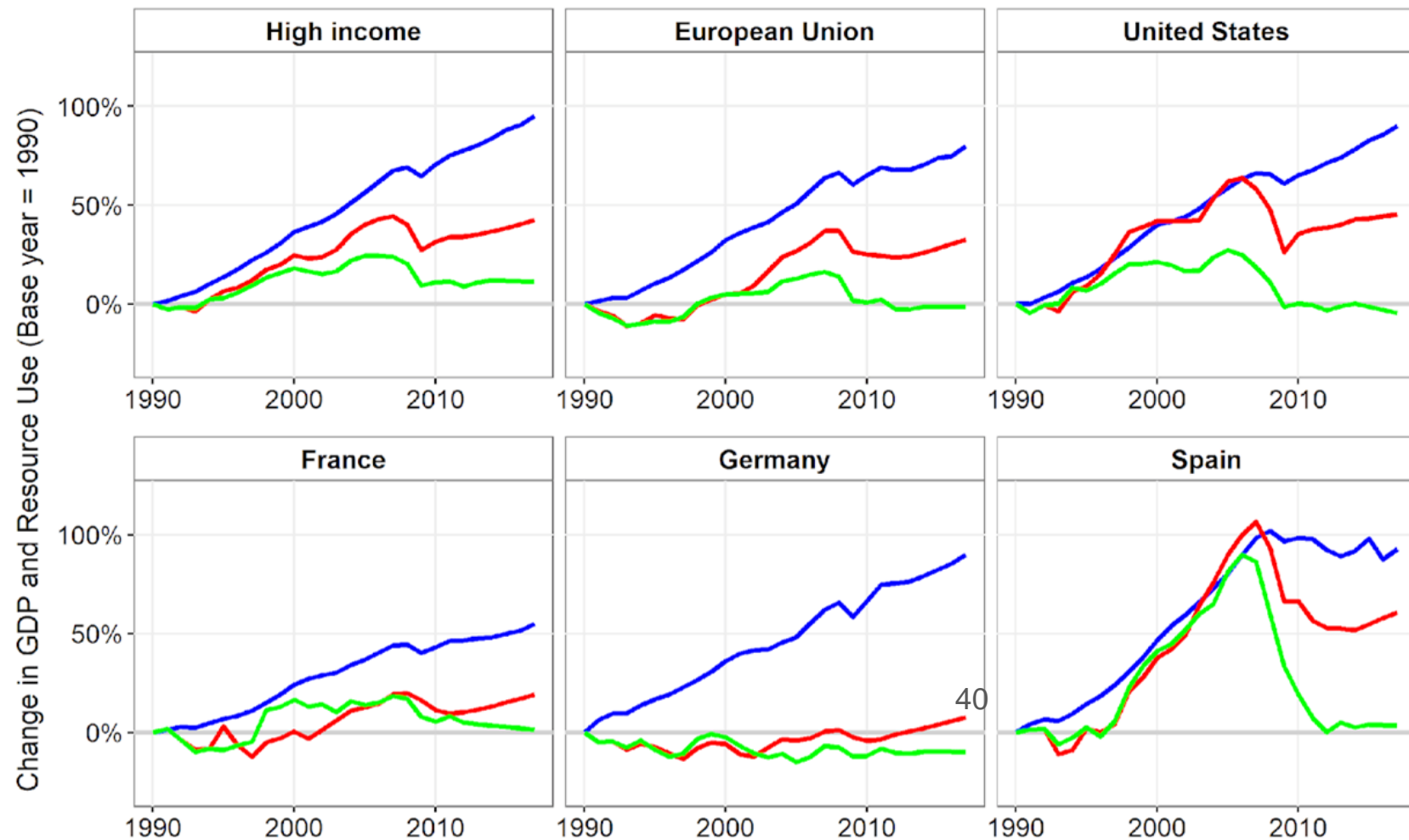


Image by @AndrewLFanning  
Data from UNEP IRP 2021  
and Maddison Project 2020

- GDP (constant 2011 prices)
- Domestic material consumption
- Material footprint = consumption-based metal ores + minerals + fossil fuels + biomass

# Fem hurtige til grøn vækst

**'Grøn vækst' anses opnået i højindkomstlande, hvis vores  
BNP stiger, mens planetært pres falder...**



Empirisk  
observeret i  
nogle lande



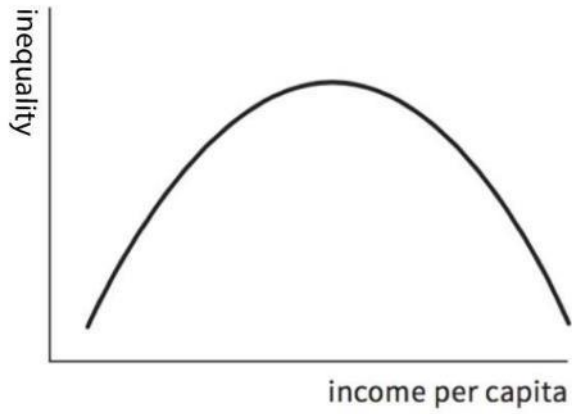
Empirisk  
endnu ikke  
opnået noget  
sted pr. 2023

1. På tværs af alt ressourceforbrug:	CO <sub>2</sub>	Alle GHGs	Alle materialer
2. Baseret på forbrug og ikke produktion			
3. Absolut afkoblet fra BNP vækst			
4. Tilstrækkeligt hurtigt			
5. Sandsynlig at opretholde over tid			

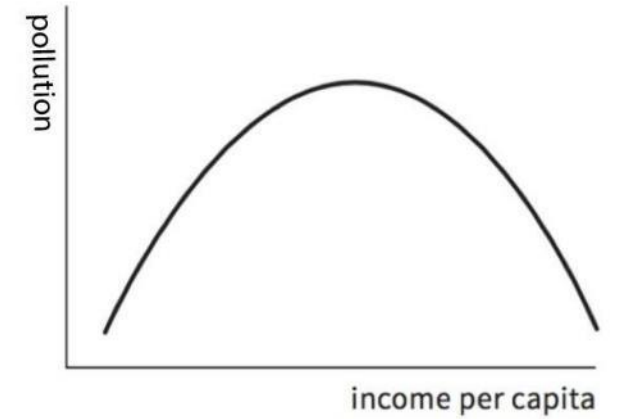
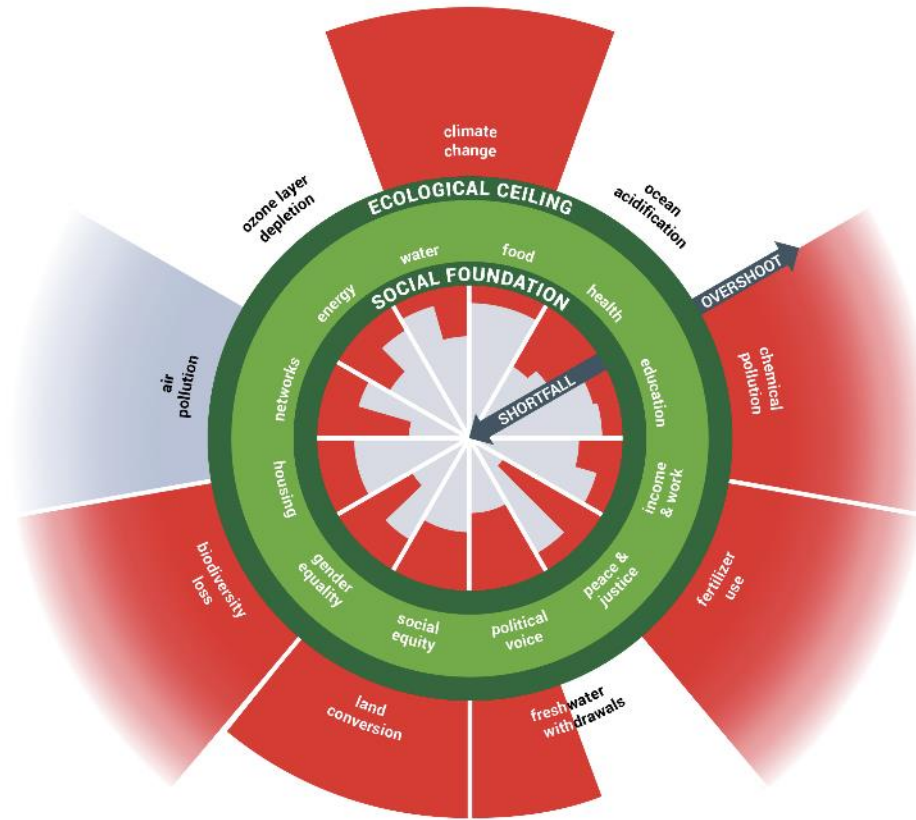




# Hvordan skaber vi en sund økonomi?

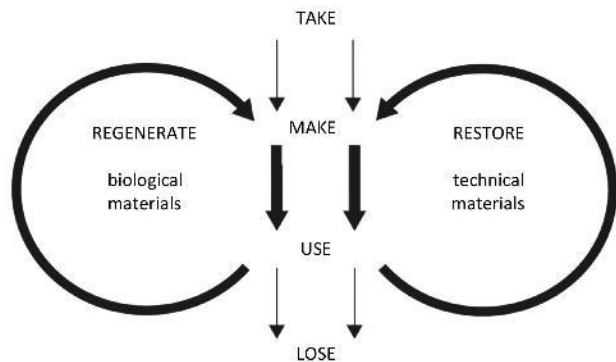


**Mere vækst vil ikke  
gøre os lige**

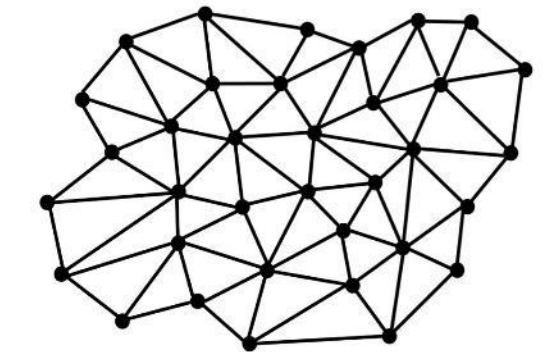
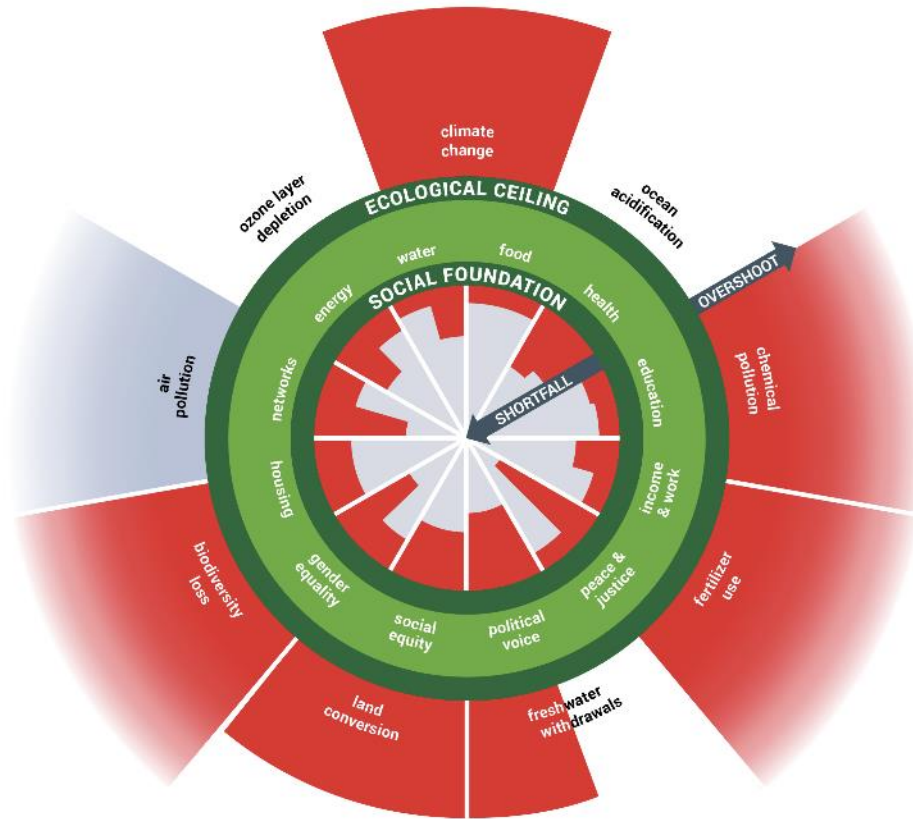


**Mere vækst vil ikke  
rydde op igen**

# Hvordan skaber vi en sund økonomi?



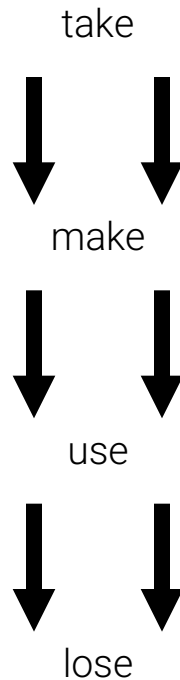
Vær regenerativ med vilje



Vær distributiv med vilje

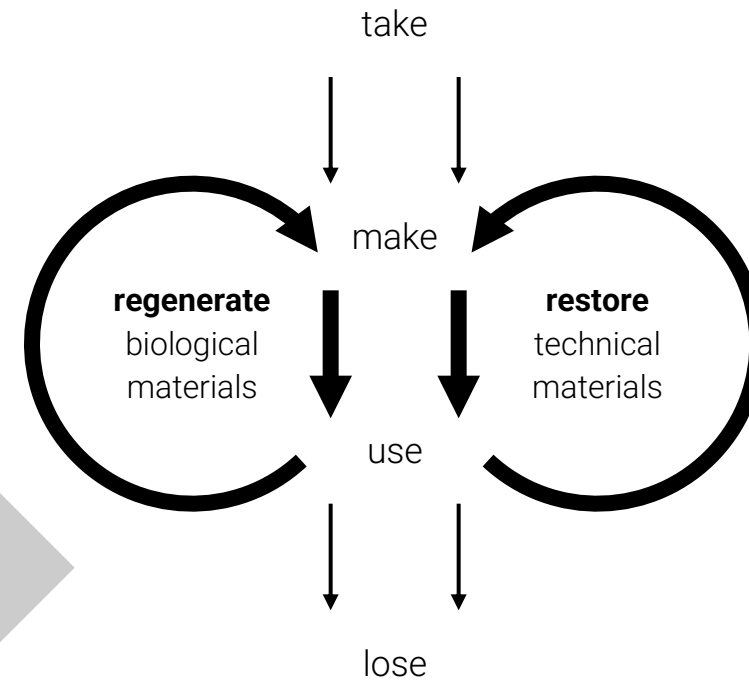
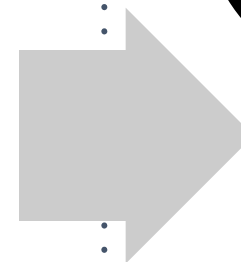


**For at skabe  
en sund  
økonomi, må  
vi ændre de  
dynamikker  
som driver  
den**



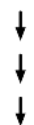
### **Degenerativ**

Nedbryder Jorden, livet og  
økosystemerne



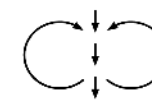
### **Regenerativ**

Arbejder med og indenfor  
Jordens og livets kredsløb.



**Degenerativ**

Bæredygtig



**Regenerativ**



**Jordudpining**



**Nul afskovning**



**Jordgenopbygning**



**Planlagt forældelse**



**100% genbrug**



**Reparation og modulært design**





### NY UDVIKLINGSGRUPPE I KBHFF

Ny gruppe der skal arbejde med at udvikle KBHFF udadtil. Første møde er torsdag den 19. maj.



### INCORPORATION OF NEW, FUN, JOYFUL FLAVORS FOR A HEALTHY LIFESTYLE

Join us for a KBHFF workshop about health and lifestyle. We will share our delicious recipes and tips for a healthy lifestyle.

### GENVEJE

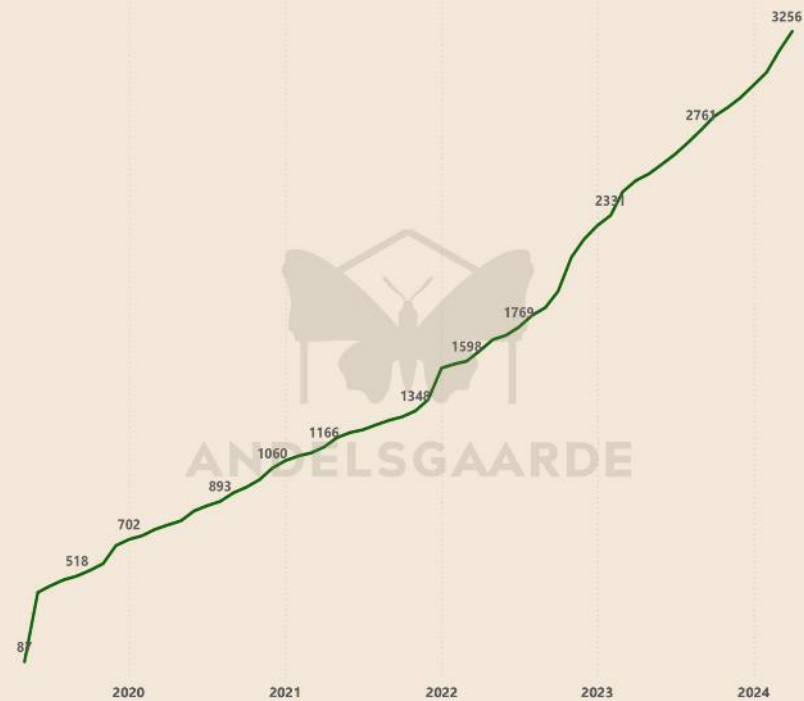
[Ta' en vagt](#)

[Bestil en pose](#)

[Bliv medlem](#)

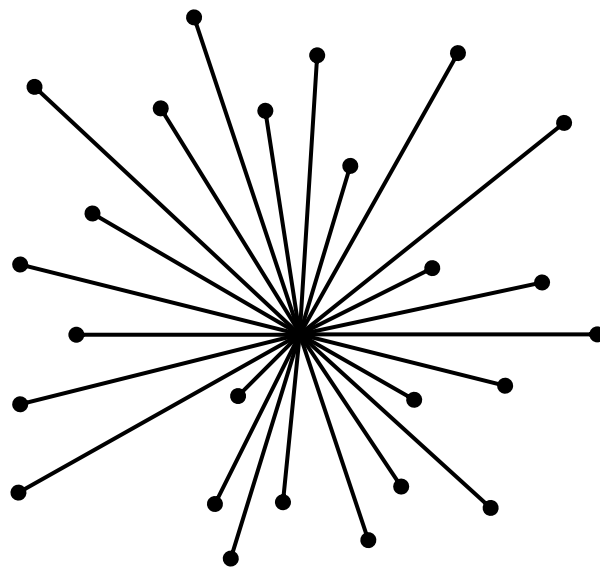
### UGENS POSE

Ugens pose er endnu ikke oprettet.



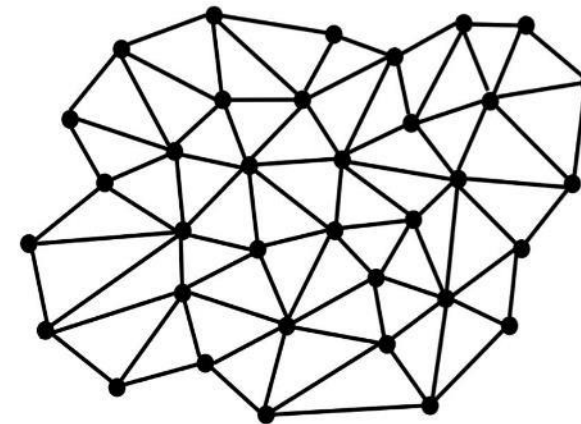
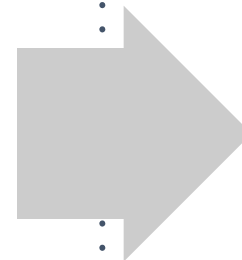


**For at skabe  
en sund  
økonomi, må  
vi ændre de  
dynamikker  
der driver den**



### **Splittende**

Koncentrerer velstand og muligheder på få hænder



### **Distributiv**

Deler muligheder og værdi, med alle som skaber den



**Trafikprop**

Inkluderende



**Bus i trafikprop**



**Udbygget offentlig transport**



**Sulteløn**



**Mindsteløn**



**Mindsteløn + overskudsdeling**







## FOR ET DEMOKRATISK ERHVERVSLIV OG EN BÆREDYGTIG FREMTID

Tænketanken Demokratisk Erhverv arbejder for at styrke og udbrede den demokratiske virksomhedsform og kendskabet til erhvervsdemokrati i Danmark.

### Hvad er demokratiske virksomheder?

Vil du gerne vide mere om demokratiske virksomheder, deres kendetegn, egenskaber, historie og erhvervsmæssige fordele?

[LÆS MERE](#)

### Søger du rådgivning, kurser eller netværk?

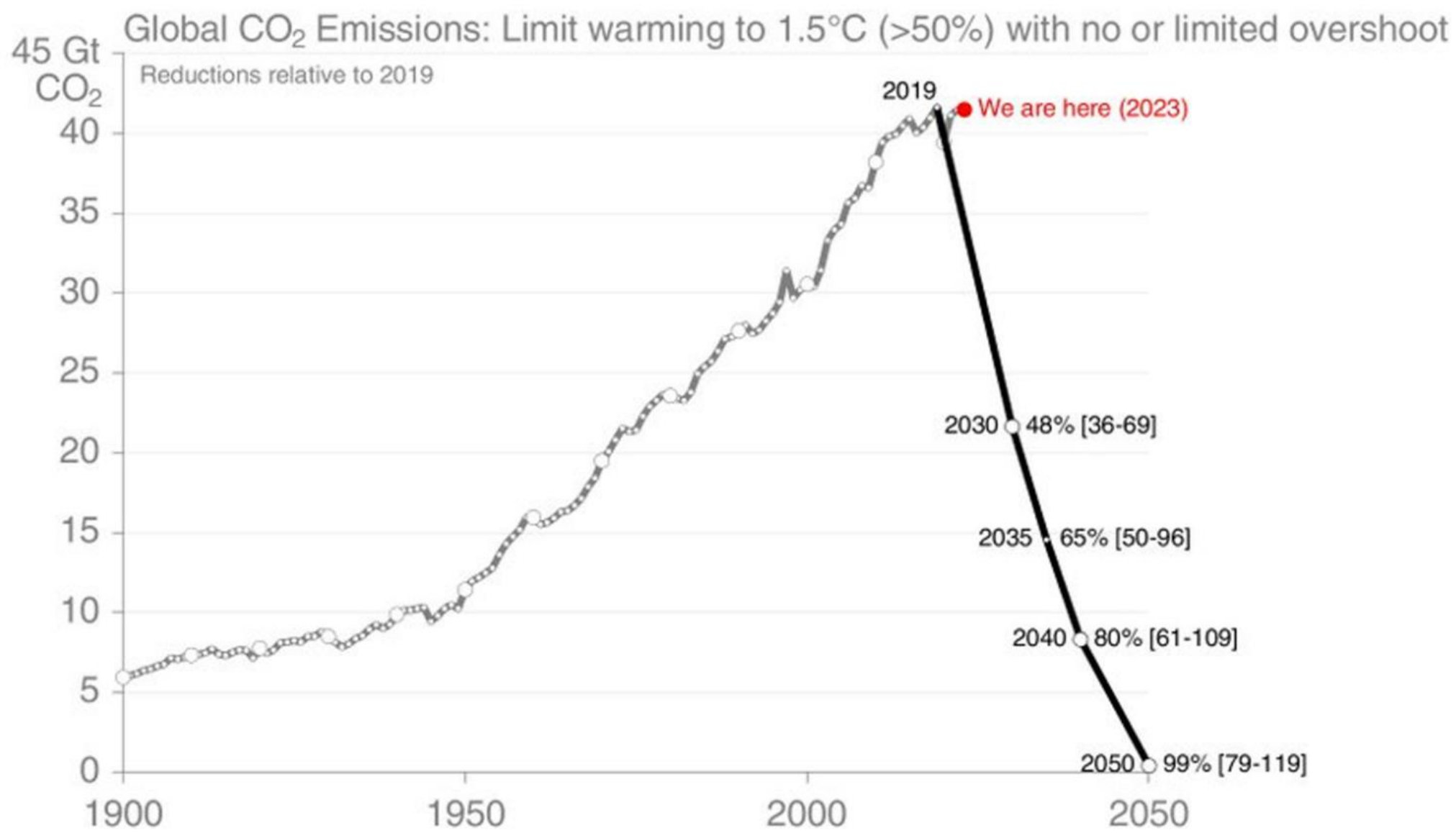
Vi rådgiver, holder foredrag, udvikler projekter, faciliterer netværk, laver bestilte analyser og meget mere.

[SE HVAD VI TILBYDER](#)

### Vil du se vores rapporter og analyser

Se fx vores årlige kortlægning af Danmarks erhvervsdemokrati, banksektoren eller trivslen i demokratiske virksomheder.

[SE ALLE UDGIVELSER](#)



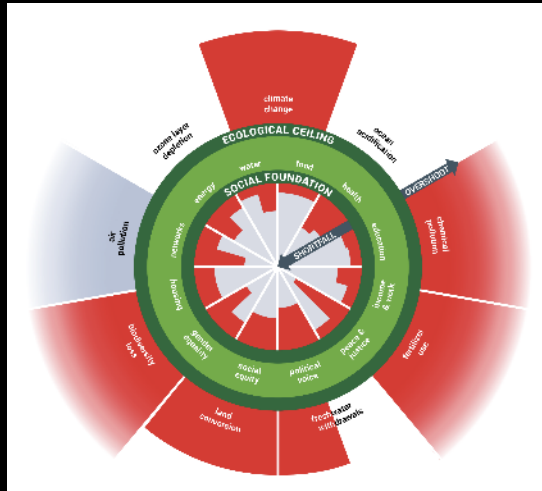




SARA HOUMANN MORTENSEN  
Dagbladet Information



# Fremskridtets form i det 21. århundrede?

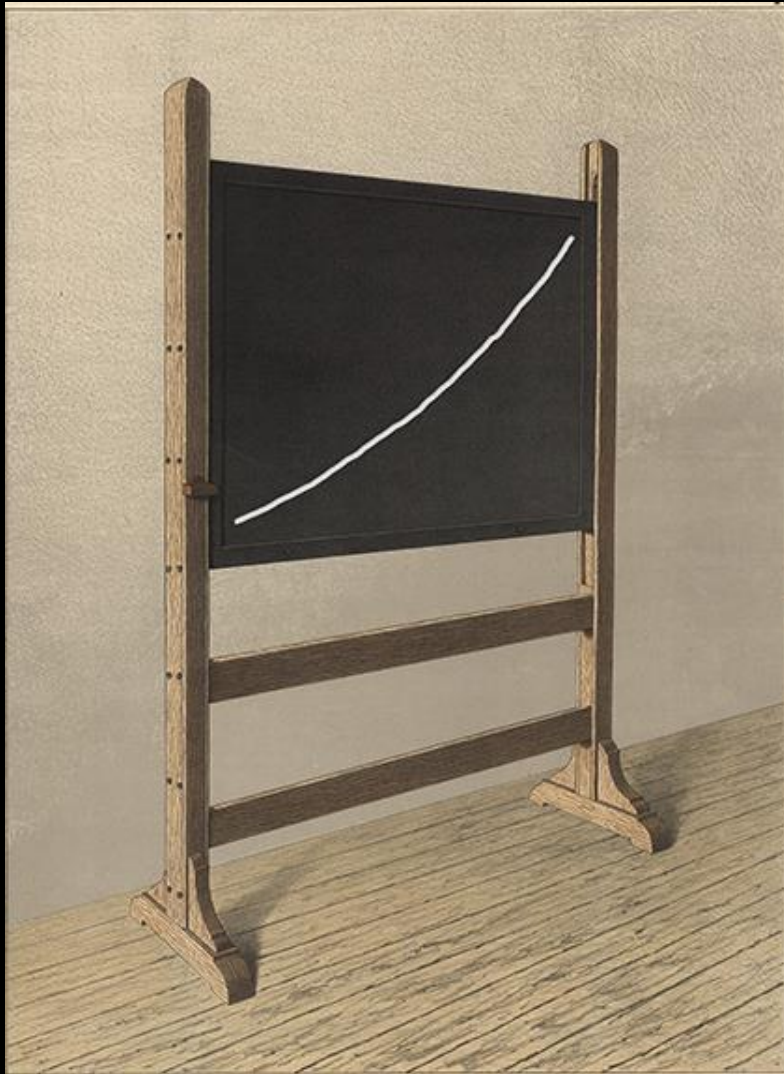


2000

2050

2100

# Tak!



20th century economics - GROW!



21st century economics - THRIVE!

# Tak til **Jacob Rask**

Director, Regenerative Built Environment Network

## Nu en kort kommentar

fra **Stefan Jüngling**

Københavns Kommune





# KØBENHAVNS DOUGHNUT 2024

## Det sociale fundament:

- 12 parametre med 2-8 indikatorer
- 60 indikatorer i alt
- Heraf kræver 21 handling

## De planetære grænser:

- 7 ud af 9 parametre med 2-6 indikatorer
- 18 indikatorer i alt
- Heraf kræver 16 handling

[Link til rapporten](#)

