

Footprint = Population x
average Footprint per person

Quintijn Hoogenboom

Dutch Footprint Group

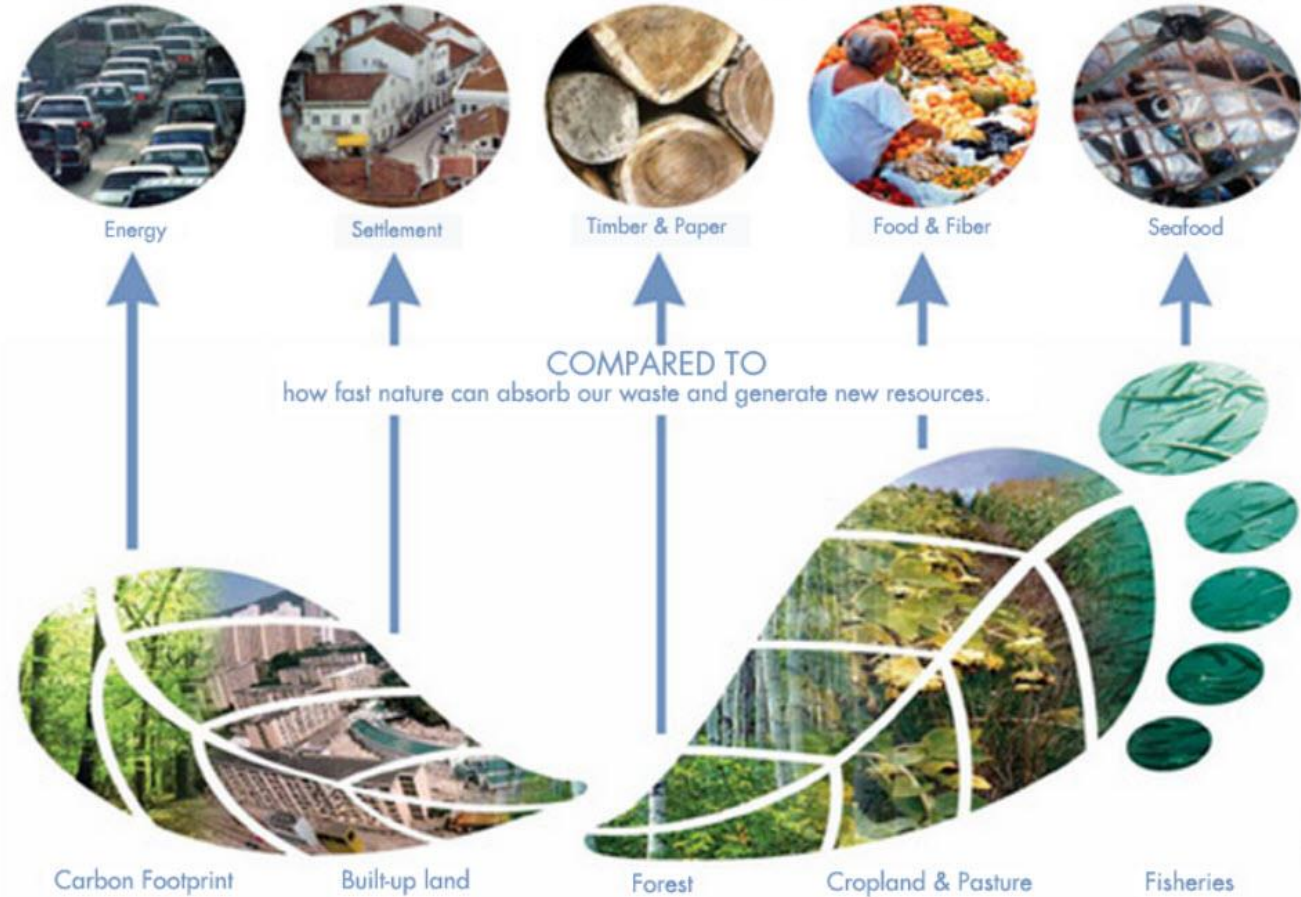
www.voetafdruk.eu (Dutch)

www.footprintnetwork.org

The Ecological Footprint

MEASURES

how fast we consume resources and generate waste



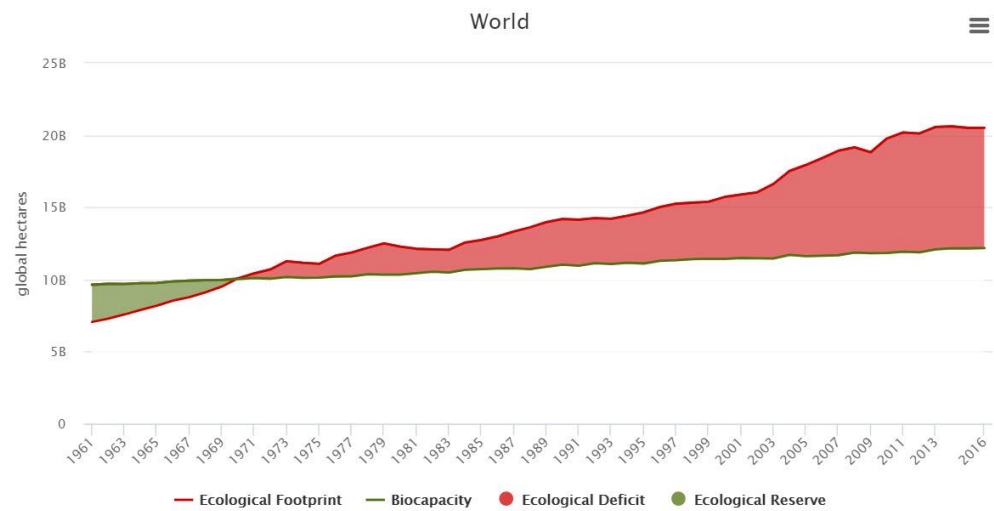
Both the Ecological Footprint and biocapacity are expressed in **global hectares**—globally comparable, standardized hectares with world average productivity.

Footprint consists of:

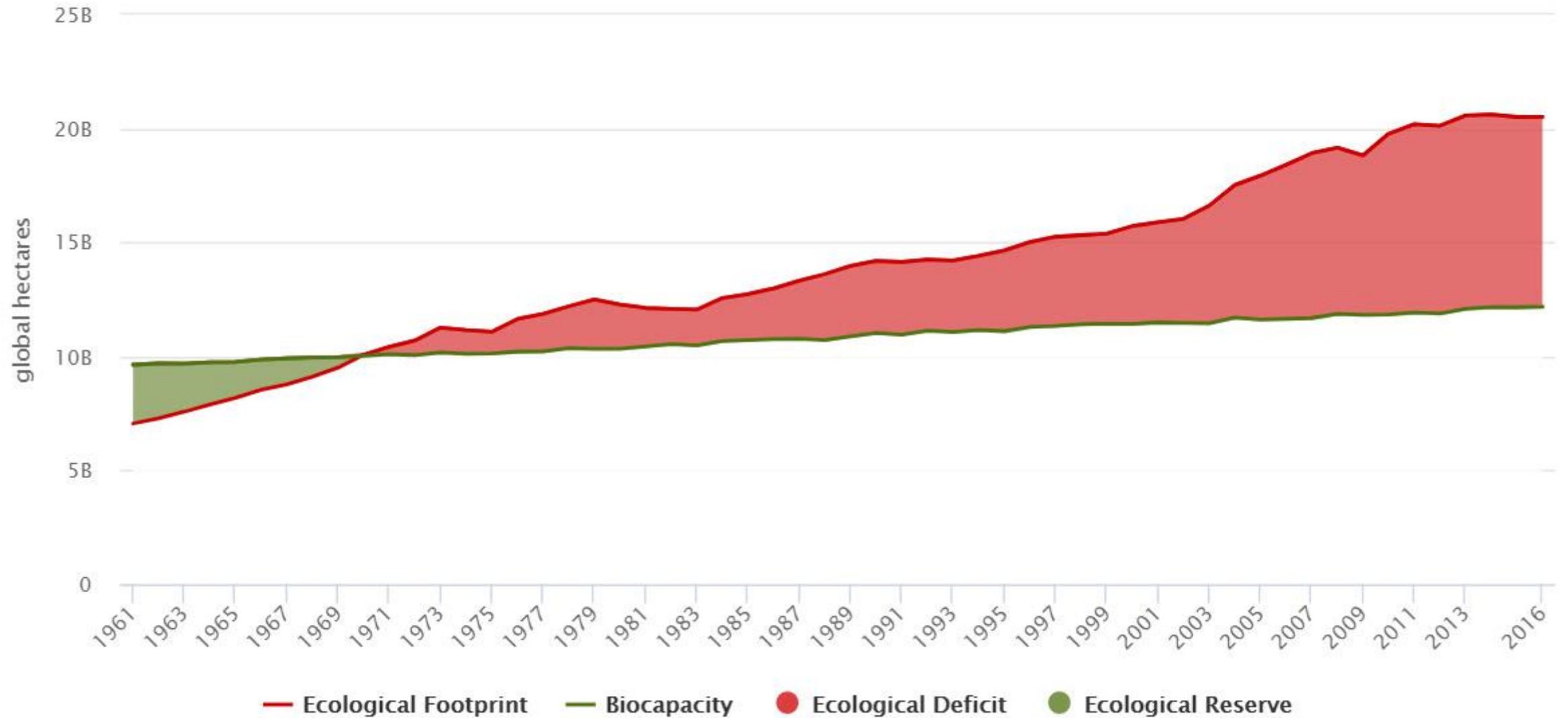
- Agricultural land (cropland and pasture)
 - Forest (wood (timber) and absorption of CO₂)
 - Carbon Footprint (see forest)
 - Built-up land
 - Fisheries
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- Biodiversity and nature are not in this model! ☹️
 - The footprint model is an underestimate of the real world!!

Overshoot

- Compare footprint (what we use) with biocapacity (what the planet gives us, year after year)
- At least 30%, Earth Overshoot Day is this year on August 22



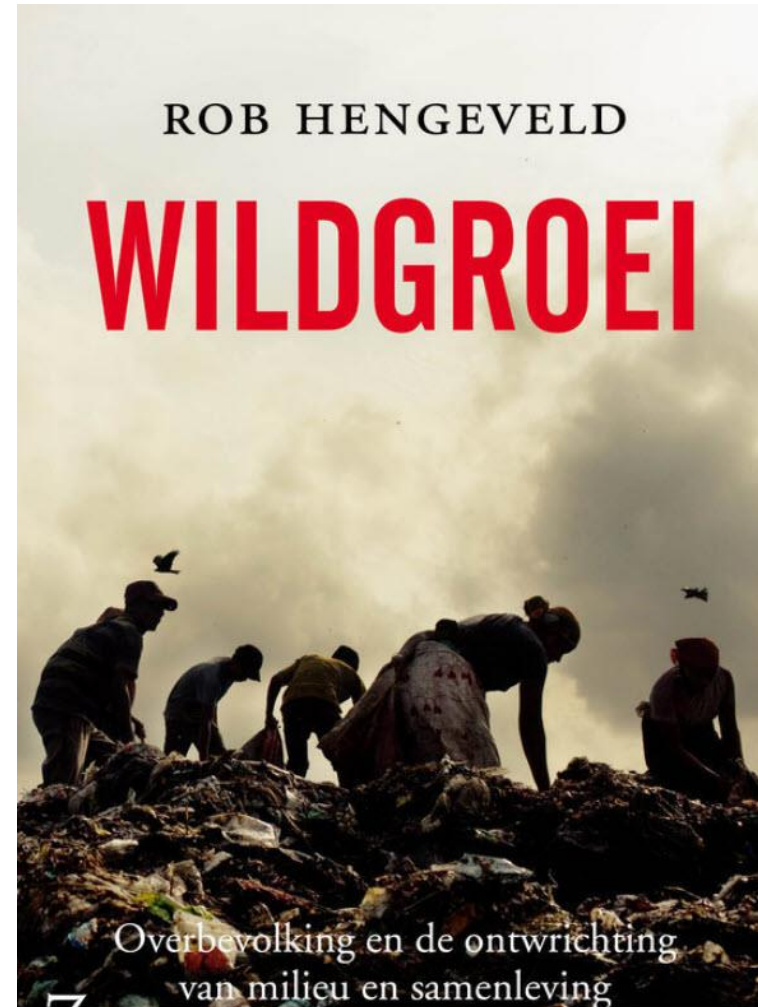
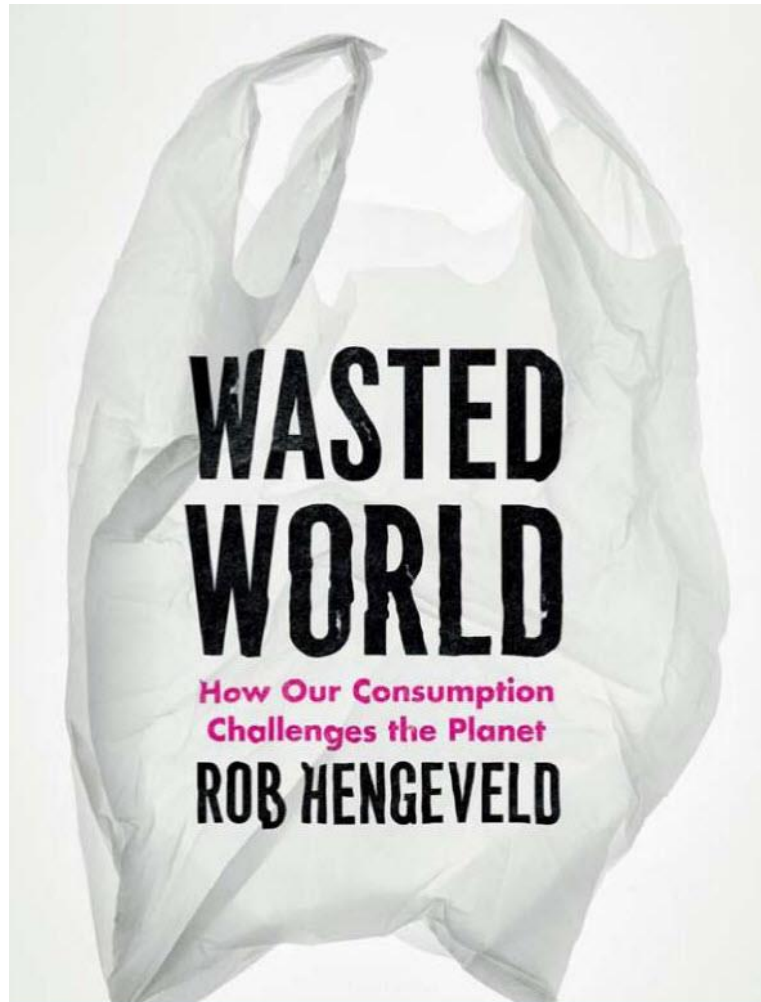
World



(Video)

- Before fossil fuel time, population was about 700 million
 - In 200 years this increased by a factor of 10
 - Consumption per person increased 10 times
 - Total consumption, energy use, increased by a factor 100
 - This all was possible with the exploding use of fossil fuels
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- What could help?
 - Shower short, wear thick pullover in winter?
 - Eat less meat, fly less?
 - Stop population growth?

Footprint of society



EROI

- Energy Return on Investment

- EROI =
$$\frac{\text{Energy returned to society}}{\text{Energy required to get that energy}}$$

- All renewables have an EROI too low to sustain a complex society

Planet of the Humans

- The essential contents of the film are correct, IMO.
- In discussions, Michael Moore blames capitalism, big enterprises and the fossil fuel consuming industries.
- I think these are inevitable consequences of a too crowded and too complex society.

What can we do?

- For the long term: reverse population growth.
- For government/politics, inform potential parents:
Think well before you choose for children. For society, less is better (0, 1 or maximum of 2 per family).
- Regonalize economies, stop flying, minimize transports across the world.
- Also stop 5G, be satisfied with what we have by now.
- Introduce a rationing system on energy or footprint on a consumer level. This could even be a system of basic income. See voetafdruk.eu
- And do not forget: minimise or stop meat and fish consumption.