



The Sustainability Imperative despite Staggering and Interconnected Crises

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- Efficiency
 - Substitution
 - „Engineering“
 - Sufficiency

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- Acceleration of knowledge:
acceleration of change

Dimension „Time“



„The extent of our knowledge must be equivalent to the consequences of our actions!“

(Hans Jonas)

„Human activities are a quasi-geological force.“

“Mankind will remain a major environmental force
for many millennia.

A daunting task lies ahead for scientists and
engineers to guide society towards environmentally
sustainable management during the era of the
Anthropocene.

This will require **appropriate human behaviour**
at all scales, and may well involve internationally
accepted, large-scale geo-engineering projects, for
instance to ‘optimize’ climate.”

(Paul Crutzen, Nature 2002)

"Human dominance of biological, chemical and geological processes on Earth is already an undeniable reality,..."

“...It's no longer us against
'Nature.' Instead, it's we who
decide what nature is and what it
will be.”

*(Paul Crutzen, The geology of mankind, Nature
2002)*

„Nature is over“

*(Time Magazine, März 2012, Bryan
Walsh)*



„Das Wissen muss dem kausalen Ausmaß
unseres Handelns größengleich sein!“
(Hans Jonas)

„A daunting task lies ahead for scientists
and engineers to guide society towards
environmentally sustainable management
during the era of the Anthropocene....“
(Crutzen, 2002)

„Engineering“



- Geo-Engineering
- Nature-Engineering
- Climate Engineering

Natur im Anthropozän



- Hybridisierung von „Natur“
- „Natur im 21. Jahrhundert wird vom Menschen gemacht sein.“ (Daniel Botkin, 1990)

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- Langfristige Konsequenzen des Handelns
- VS.
- Diktat der Kurzfristigkeit der Entscheidungen

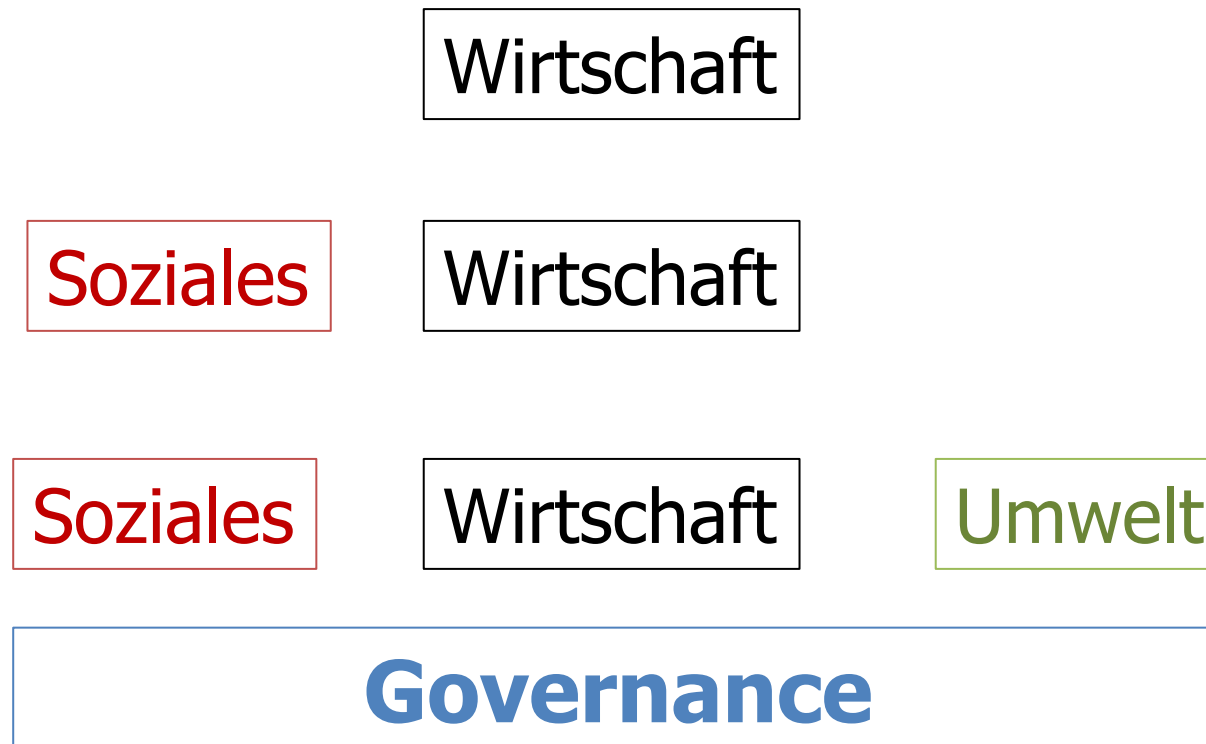
TINA: There is no alternative



Das „Urbane Millennium“



Funktionen von Städten



Ein „Sustainable Development Goal“ für Städte



„Make all cities

- socially inclusive,
- economically productive,
- environmentally sustainable,
- secure,
- and resilient to climate change and other risks.

Develop

- participatory,
- accountable,
- and effective governance to support rapid and equitable urban transformation.“

(The Leadership Council of the Sustainable Development Solutions Network, 2013)

Vielfalt statt Gleichwertigkeit

Was Bevölkerungsrückgang für die Versorgung ländlicher Regionen bedeutet



- „Die Risiken der Automationsarbeit“, Johannes Weyer, 1997
- Den menschlichen Entscheider durch den Einsatz von Informationstechnologien tendenziell zu eliminieren
- Anthropozän 2.0?

Vielen Dank für Ihre Aufmerksamkeit!



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