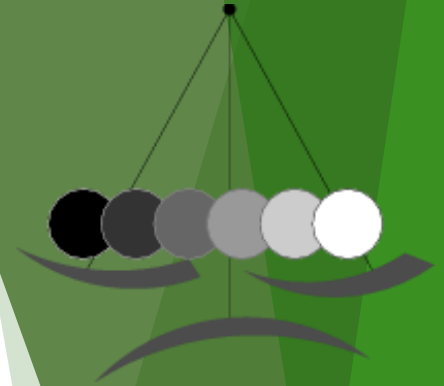


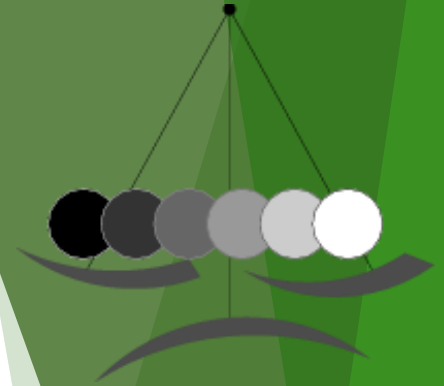
Cost-Benefit Analysis, Economic Instruments, Biodiversity and Climate Change

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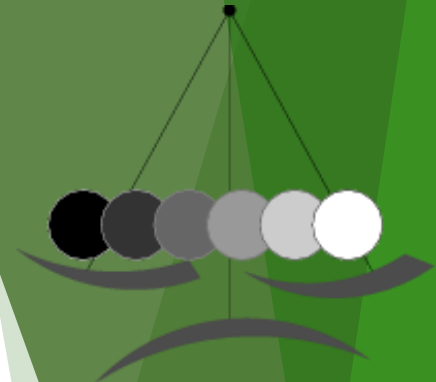
Problem

- ▶ big controversy on „economizing“ nature, climate etc. in science, politics and general public for some years
- ▶ criticism on environmental economic instruments (EEI) = cap-and-trade systems, levies, subsidies (although not primary means of environmental law) - defended by mainstream economists as major solution
- ▶ advocates and opponents connect EEI with basic elements of neoclassical economics (especially with CBA)
- ▶ cost-benefit analysis (CBA) = „rational“ definition of environmental targets by counting costs and benefits of biodiv, climate etc. in terms of money
- ▶ hypothesis: economic instruments are still effective policy approaches for sustainability, if those basic assumptions are wrong - but without CBA
- ▶ six focal points as red thread



Examples: Biodiversity & Climate Change

- ▶ art. 2 Paris Agreement limits climate change to well below 2° C with increased efforts to not exceed 1.5° C → legally binding → fossil fuels cut down to zero by 2027/ 2038 according to IPCC data
- ▶ 60 % increase in GHG emissions since 1990; reductions in industrialized countries (e.g. EU) look better than they are:
 - ▶ absolute per capita emissions far away from zero
 - ▶ displacement effects well above 10 %
- ▶ art. 1 CBD (& Aichi Targets) call for stop of biodiversity/ ecosystem loss (and even improvement of their state)

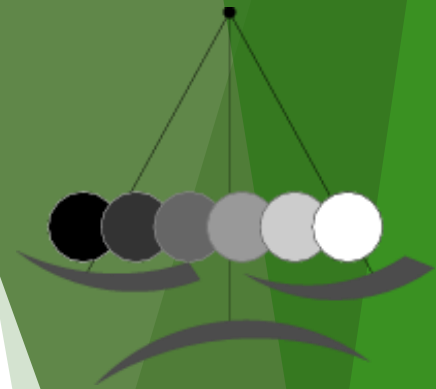


1) EEI and Cost-Benefit Analysis

>>> EEI necessarily based on CBA?

- ▶ EEI and CBA = different elements, but often get confused
- ▶ economists use CBA to identify „optimum states“ (economic efficiency) of e.g. the environment >>> basis to set a tax rate or set a cap
- ▶ problems of CBA
 - ▶ well-known problems of appliance (e.g. some things are hard to quantify due to uncertainties; hypothetical WTP; discounting; amount of data)
 - ▶ empiricist basis of CBA („objective normativity = impossible“ & (normative!) idea of „optimal/ efficient state“ = self-contradiction)
 - ▶ CBA = in conflict to liberal-democratic constitutions, not because of balancing approach, but: decisions based on rights/ balancing rules/ discretion; not based on ability to pay; no plebiscite (existence in USA etc. = no counter-argument)

>>> but EEI don't need CBA as basis



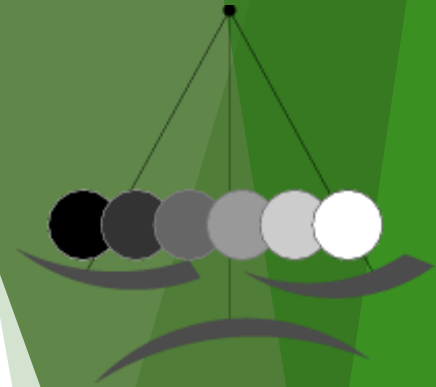
2) EEI, technology and sufficiency

>>> do EEI support only technological (not behavioral) change?

- ▶ scope is too big even with regard to climate change: reductions need to be faster than innovation cycles
- ▶ interlinkage of environmental problems (e.g. biodiv and climate change)

>>> behavioral change (sufficiency) is necessary

>>> EEI are fit to trigger behavioral change (e.g. with an ambitious cap)

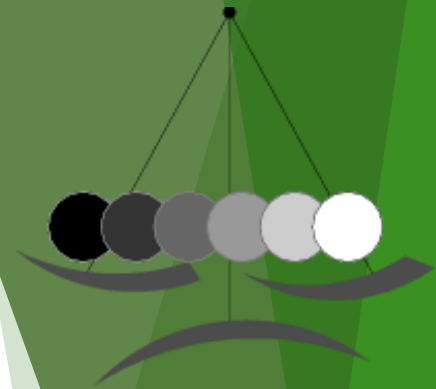


3) EEI, sufficiency and (de-)growth

>>> sufficiency = degrowth - EEI bound to growth society?

- ▶ consistency and efficiency create new markets - sufficiency usually means: consuming, buying, producing less!
- ▶ questionable whether „qualitative growth“ exists (myth of service society)
- ▶ a transition should not hit us unprepared (regarding social systems etc.)
- ▶ degrowth still comparably “cheaper” than alternative strategies
- ▶ EEI (maybe) bound to markets, but not to growth

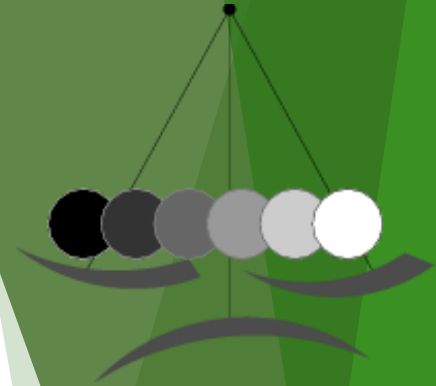
>>> no contradiction between EEI and degrowth



4) EEI as answer to rebound/ shifting effects

>>> only rationale of EEI = maybe not CBA, but cost-efficiency („cheap environmental protection for enterprises“)?

- ▶ primary justification of EEI = not cheap environmental standards (as critics and defenders think), but solution of some typical governance problems of environmental law
- ▶ ambitious (!) caps or high (!) levies (given they are set up on a broad geographical and sectoral scale, e.g. covering all fossil fuels in the EU >>> upstream ETS) ...
 - ▶ can reduce enforcement problems of environmental protection
 - ▶ will not allow for rebound effects (given a broad geographical/ substantial scale!)
 - ▶ will not allow for shifting effects (additional tool: border adjustments)



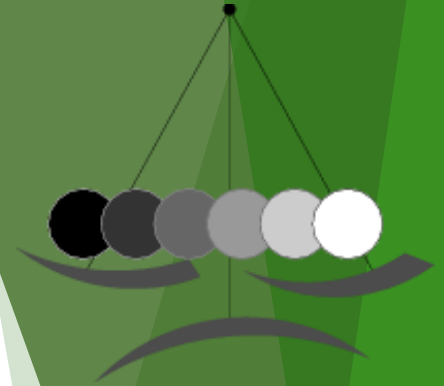
5) EEI without Homo oeconomicus

>>> EEI: based on assumptions of reactions by the addressees;
advocates = homo oec.! critics = homo oec. as refutation of EEI

- ▶ complex behavioral research instead of homo oeconomicus;
motivations and behavior influenced by
 - ▶ self-interest
 - ▶ conception of normalities
 - ▶ Emotions
 - ▶ etc.
- ▶ based not only on interviews, questionnaires, experiments, but also on
participatory observation, self-observation, sociobiology etc.

>>> EEI influence many motivational factors (not only self-interest)

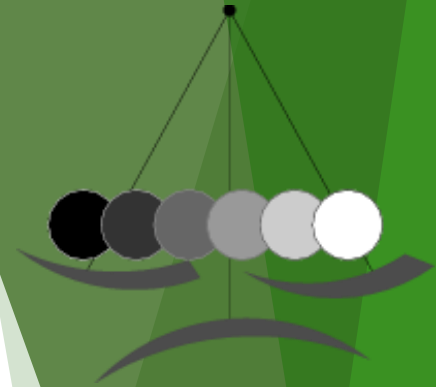
>>> EEI don't need homo oeconomicus



6) EEI as integrated solution for different environmental problems

>>> EEI necessarily bound to addressing just one environmental problem? (as critics and defenders seem to think)

- ▶ many environmental problems are interrelated
- ▶ pricing fossil fuels (or cap) & including livestock farming (cattle herds) impacts
 - ▶ climate change
 - ▶ Biodiversity
 - ▶ soil, water, air
 - ▶ public health
- ▶ can be linked with progressive pricing in agriculture, BTA, etc.
- ▶ problematic: detailed pricing of biodiversity (enforcement, shifting effects, problem of depicting)



Conclusions

- ▶ EEI go beyond their neoclassical foundation
- ▶ have a high potential to address sustainability issues
- ▶ work despite human tendency to non-sustainable behavior
- ▶ provide an answer to rebound and displacement effects
- ▶ might tackle different issues at once
- ▶ are not necessarily connected to CBA which is to be rejected



Publications (Selection)

- ▶ Defending Environmental Economic Instruments against the Economists and their Opponents, in: Mathis (ed.), Environmental Law and Economics, Berlin 2017, p. 83
- ▶ Further articles in English on www.sustainability-justice-climate.eu
- ▶ Theorie der Nachhaltigkeit: Ethische, rechtliche, politische und transformative Zugänge - am Beispiel von Klimawandel, Ressourcenknappheit und Welthandel, 3. Aufl., Nomos 2016
- ▶ Jahrhundertaufgabe Energiewende: Ein Handbuch, Taschenbuch, Ch. Links Verlag 2014 (auch über Zentralen für pol. Bildung)
- ▶ Wir können uns ändern: Gesellschaftlicher Wandel jenseits von Kapitalismuskritik und Revolution, Oekom 2017

