



Self-governance in Global Climate Policy

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Based on inter alia:

Self-governance in global climate policy: An essay (2015), 52p. (Research Gate)

Beyond Kyoto, plan B: a climate policy masterplan based on transparent metrics, *Ecological Economics* 68(2009) 2930-37

Europe's electricity regime: restoration or thorough transition. *Int. J. of Sustainable Energy Planning and Management* 5 (2015) 57-68

Meta-review of Belgium's integrated National Energy and Climate draft Plan 2021-2030. *Economics and policy of energy and the environment* (2019) 57-72



Economic goods: private ⇔ public

| | Rivalry in use | People's Access to the good | Property rights |
|----------------------|---|--|---|
| Private goods | High (mostly 100%): e.g., food one eats, the other cannot eat | Owner(s) of the goods decide on access, and may alienate (sell, donate) the goods | <ul style="list-style-type: none"> . Exclusivity in use, returns, changes . Transferrable . Enforceable |
| Public goods | In degrees: from 0 (watching TV) ... to high congestion at peak demand (roads) | Open access (not 0/1) Supervised use ... Paying for access (toll) Privileged access | <ul style="list-style-type: none"> . Inalienable . Rights & Duties . Privileges . Liabilities |

Managing public goods:

- Which (quantity a quality) public goods/commons are wanted/crucial?**
 - Historical, ideological, necessity reasons
- How much of the particular public good provided/ commons preserved?**
 - where marginal benefit = marginal cost (economic cost/benefit logic)
 - benefit = Σ benefits of constituents: identifying, measuring problems
- Who pays?**
 - Finance the supply by treasury, levies, access/use fees, foundations, ...

Preserving commons, public goods from abuse, deterioration, destruction

- Regulate access, contributions for use by groups, communities, nations, ...

ADDRESS the SOCIAL DILEMMA problem



Mainstream economics approach

(excessive influence on climate policy, also via IPCC WG3 reports)

Climate Change problem framed as 'biggest market failure' (Stern, 2006)

GHG emissions are externalities, which should be internalized

Externality= *'unpaid/uncompensated impact occasioned without intent by some agent(s) on the consumption–production possibilities of other agents'* (= the 'exclusivity' attribute of property rights is trespassed)

=> too many harmful externalities (roll-of the costs on others)

=> too little public goods, e.g. knowledge creation

Address externalities by financial internalizing:

=> impose levies on harmful externalities or on activities causing them

=> reward (subsidize) who realizes beneficial externalities

Main instruments of economics & global climate policy:

- * Privatize public goods (common pastures; the oceans?; the atmosphere?)
- * Install a Global Uniform Carbon Tax
- * Create an artificial global market for carbon permits (= licenses to emit)

HOWEVER, economic recipes did & do not heal the climate patient
HOW TO SAVE THE CLIMATE COMMONS?



Social Dilemma as prisoner dilemma mechanism (communication/cooperation among actors precluded)

Individual contribution (**yes/no**): financial impact

- Support Budget Reform and Restraint in C-emissions: €0
- Business-as-usual: + €1000 (personal wealth)

What happens to climate: individual impacts of two outcomes

- Climate Stable: €0
- Climate Collapse: - €50,000 (personal harm)

| Individual pay-off matrix | Probability [p] Climate Stable (€0) | Probability [1-p] Climate Collapse (- €50,000) |
|------------------------------|---|--|
| Contribution (€0) | €0 | - €50,000 |
| No contribution (+ €1000) | + €1000 | - €49,000 |

Address free-riding: privatize or nationalize commons

⇔ self-governance of commons by constituencies



Self-governance of common pool resources according Elinor Ostrom

Conditions to fulfill for people swap from individual to coordinated strategies

Common understanding of the problem

Recognition not sufficient: users must place a high value on the Common Pool Resource (CPR) itself in terms of their own economic and social survival

Common understanding of Alternatives for Coordination

Common perception of Mutual Trust and Reciprocity

Assurance may also be obtained through reliance on formal police, formal surveillance and investigations, and formal courts

Common perception that Decision-Making Costs do not exceed Benefits, i.e.:
the self-interest must be better served via the common interest

Self-governance institute of climate commons: indispensable components

- 1. Create new set of self-governing structures and rules**
- 2. Credible commitments by participants**
 - enhanced by reciprocity, trust and fairness
 - grows step by step (year after year)
- 3. Mutual monitoring, accurate, transparent and regularly**
 - yearly feasible for a few, crucial indicators at the global level



Global climate policy via UN Framework Convention on Climate Change & Conferences of Parties (COPs)

UNFCCC & COPs timeline

- 1992 Rio UNFCCC: avoid dangerous climate change; common but differentiated responsibilities and capabilities of the Parties
- 1995 Berlin COP1: hint to ceil global warming to +2° C
- 1997 Kyoto COP3: Protocol, dominance of market proposals (flexmechs & offsets)
- 2009 Copenhagen COP15: Accord among world political leaders about 2° C (1.5° C) maximum, \$100bn transfers, Green Climate Fund
- 2015 Paris COP21: Unanimous agreement on Copenhagen Accord content

COP21 Strengths

- Higher awareness of Climate Change risks
- Curbed ambitions on global control; emission permits trading no longer on top
- Full focus on local & national mitigation/adaptation efforts
- End the split of Parties as Annex1 / non-Annex1

COP21 Weaknesses

- 2° C emission budget seen as target, not as a risky limit to avoid by all means
- Fully based on INDC (Intended Nationally Determined Contributions)
- Public interests are not leading, high influence of corporations [↔ mission SD]
- Initiatives are voluntary; weak enforcement by 'naming & shaming'
- No full graduation of countries by GDP/capita and GHG emissions/capita

Mysterious Support for Paris Agreement

Paris Agreement

Vague, opaque text

+3°C if all intentions fulfil

Mocks science on

- Commons (Hardin, Ostrom)
- Strategic management

Policy zombies survive

- Energy policy triptych mantra
'renewables-nuclear-CCS'
- Emissions trading
- Offsets

Private corporate influence & discourses

● *Myths* ●

- Unanimity necessary
- Mitigation by Voluntarism
- Paternalism cares for \$100bn/year extra climate aid in 2020 and in following years



Unanimity may be positive or negative

Positive effects of unanimity

- Boosting the willingness to commit, related to reciprocity: one commits when the other commits
- Valuable to enshrine new paradigms, generic commitments like UNFCCC at 1992 – Rio World Summit

Negative effects of unanimity at all price

- disproportional power for every single party
- meagre intersection of divergent interests-goals sets, results in vague & opaque Paris Agreement [except contents of Copenhagen Accord]
- minority views suppressed (by assimilation)
- effective action requires spearheads, not mediocre unanimity
- responsible parties are released from liability and 'urgent & drastic' action
- breaking unanimity spoils the process (USA leaving Paris Agreement)

Unanimity desirable when founding new paradigms
In the executive phase, imposed unanimity is mistaken



Alternative for COP21 approach

| Nationally Determined Contributions | What should be: |
|---|--|
| Zero-sum game: You win = I lose; I win = You lose: negative spiral, distrust, reluctant cooperation, mutual blaming. | Common resolve: team spirit, mutual learning, emulate. Cooperation for sustainable energy systems, resilient when climate changes |
| Messy, opaque contributions: incomparable actions; emissions quota cover too many factors; MRV not doable | Performance indicators: clear, equal for all countries (e.g. carbon intensity of energy use); workable MRV (available indicators) |
| By 2030: diluting urgency, delay, erodes responsibility for acting now, engaging future politicians | Immediate steps: year-by-year improving on crucial indicators; pledges added on rolling baselines |
| Voluntary - Intended: mostly unclear; unstable over time; too little effective change; unfair (free-riders gain) | Agreed upon coercion: global, lean regime advantageous for sovereign parties with common but differentiated responsibilities |



Structured policy by decomposition and political economy

Climate *policy* is complicated, wicked, contentious, ...
but not complex if managed by

(1) Problem decomposition

- ❖ **Mitigation:** by GHG source: energy-related, land use, industrial gases; by societal-economic sector; by region; by emitting activities & related actors
- ❖ **Adaptation:** by hazard, sector, region, exposed people, ...

(2) Time-sequential decision-making

- ❖ **Yearly rolling baselines**
- ❖ **Yearly pledges & reviews** on reducing Cpp and its main drivers

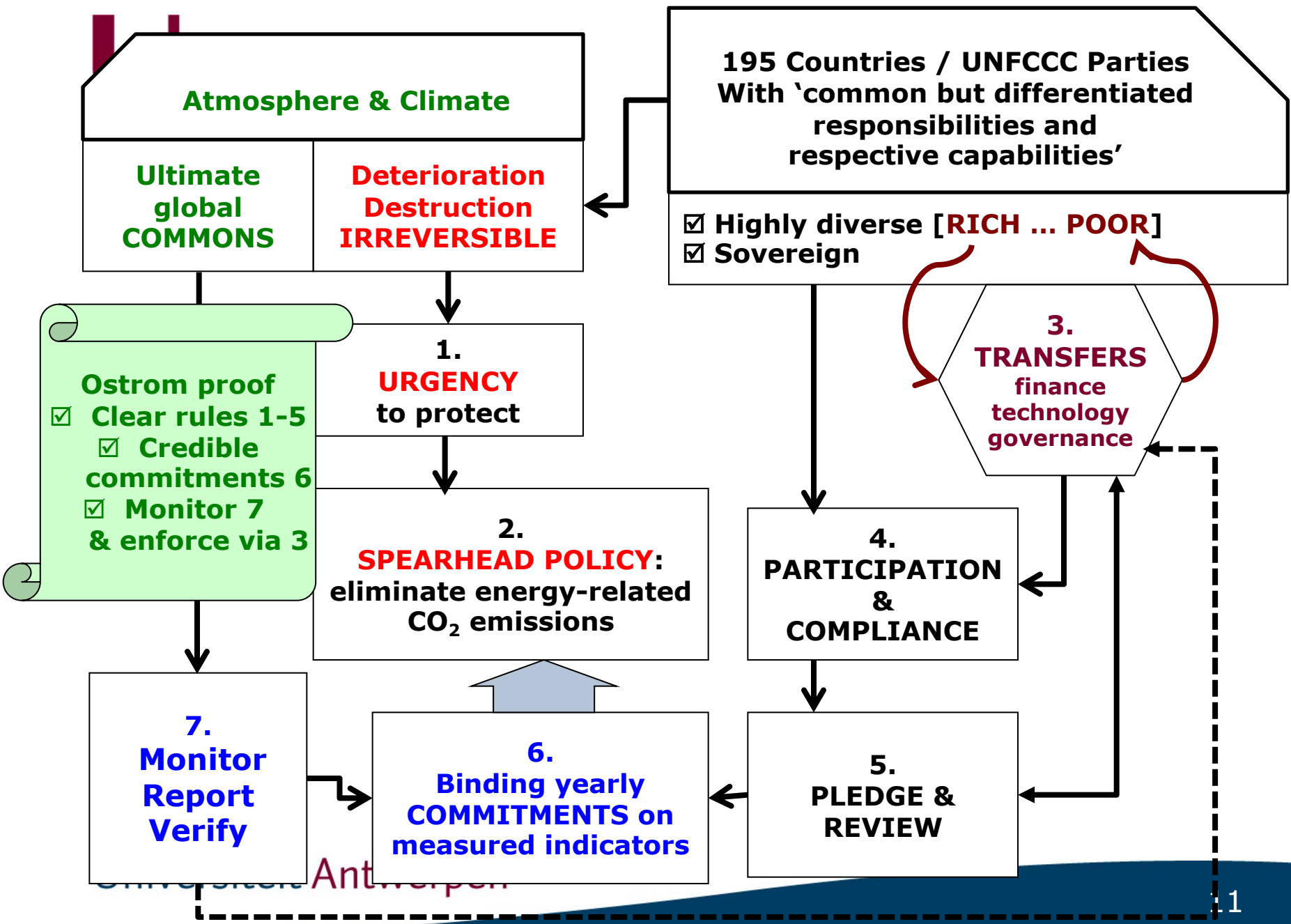
IPCC 2014 WG3 report, Ch. 6 studies emissions by countries with *decomposition* of energy-related CO₂ emissions per person (C_{pp}) as:

$$C_{pp} = \underbrace{\{\text{€GDP}_{pp}\}}_{\substack{\text{wealth} \\ \text{per person}}} * \underbrace{\{\text{kWh energy/€GDP}\}}_{\substack{\text{energy use intensity} \\ \text{of wealth}}} * \underbrace{\{\text{kg CO}_2 \text{ emitted/kWh}\}}_{\substack{\text{CO}_2 \text{ emission intensity} \\ \text{of used energy}}}$$

*This ready knowledge + data are not used in global policy design
Although most suitable & needed for a global self-governance regime*

(3) Political economy of **energy and industrial corporate interests**

- ❖ **Priority for neoliberal inequity and economic growth**
- ❖ **Perverse influence of fossil fuel & electric power companies on global climate policy (EU ETS; COP21 Paris Agreement)**





Concluding considerations

1. Societal resolve & action ≠ Paris Agreement

- . Citizens, grassroots ⇔ corporations influencing Paris COP-21
- . Will corporations succeed where governments fail in saving the most essential commons, climate & atmosphere?

2. Dysfunctional myths paralyze urgent & drastic change

- . Denouncing tricky myths means tough & tedious work
- . Cassandra's warnings were stamped by the Trojan horse

3. Global climate policy

- . Based on words, voluntarism, paternalism: talk without walk
- . Sideline policy proposals based on decomposition & policy planning science
- . Technology development-deployment: NOT neutral processes
- . Sustainable technology is decisive in sustainable energy transformation
- . Learn from corporate strategy methods, theory & practice
- . Self-governance is a set of tightly structured processes, multi-leveled, diverse, polycentric (Ostrom): they can deliver what is needed.