



SISC
Societa Italiana per le Scienze del Clima
Venice, September 30, 2014

**Design, Process, and Performance Criteria
Provide Structure to Climate Policy**

Aviel Verbruggen
University of Antwerp
IPCC member 1998-2014

www.avielverbruggen.be

TEXT OF CONTRIBUTION: SISC Proceedings pp.166-175

Previous work on the topic:

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

A Turbo Drive for the Global Reduction of Energy-Related CO₂ Emissions. *Sustainability* 3 (2011) 632-48

Preparing the design of robust climate policy architectures. *Int. Environmental Agreements: Politics, Law and Economics* 11 (2011) 275-95

Revocability and reversibility in societal decision-making. *Ecological Economics* 85 (2013) 20-27



Overview

1. Stranded global climate policy

2. Rescue or re-invent?

3. Ten criteria for assessing climate policy

4. Global climate policy **design criteria**

5. Specificity ↔ Uniformity

6. Conclusion

1. Stranded global climate policy



Kyoto Protocol: main flaws

1. Emissions reduction TARGETS by country

Mingle Population, Affluence, Technology, Energy, ...

- **Obscure & contentious numbers; zero sum games**

Too little, too late: baseline 1990 ∞ horizon 2012-2020

- **Politicians "engage" their followers**

2. Global INSTRUMENTS: Emissions Trading & CDM

Simplistic theory of "perfect" market

=> **Crash on complex, diverse realities**

=> **Comitology (lobbies dominate)**

Swindle profits, fraud (undermines social cohesion)

OFFSETS: rich countries delay/defect on transition

3. Transfers, REDISTRIBUTION, sustainability

Not structural, e.g graduation, duties & rights

Paternalism; Re-packaging aid (promises)



2. Rescue or re-invent stranded global climate policy

Rescue what?

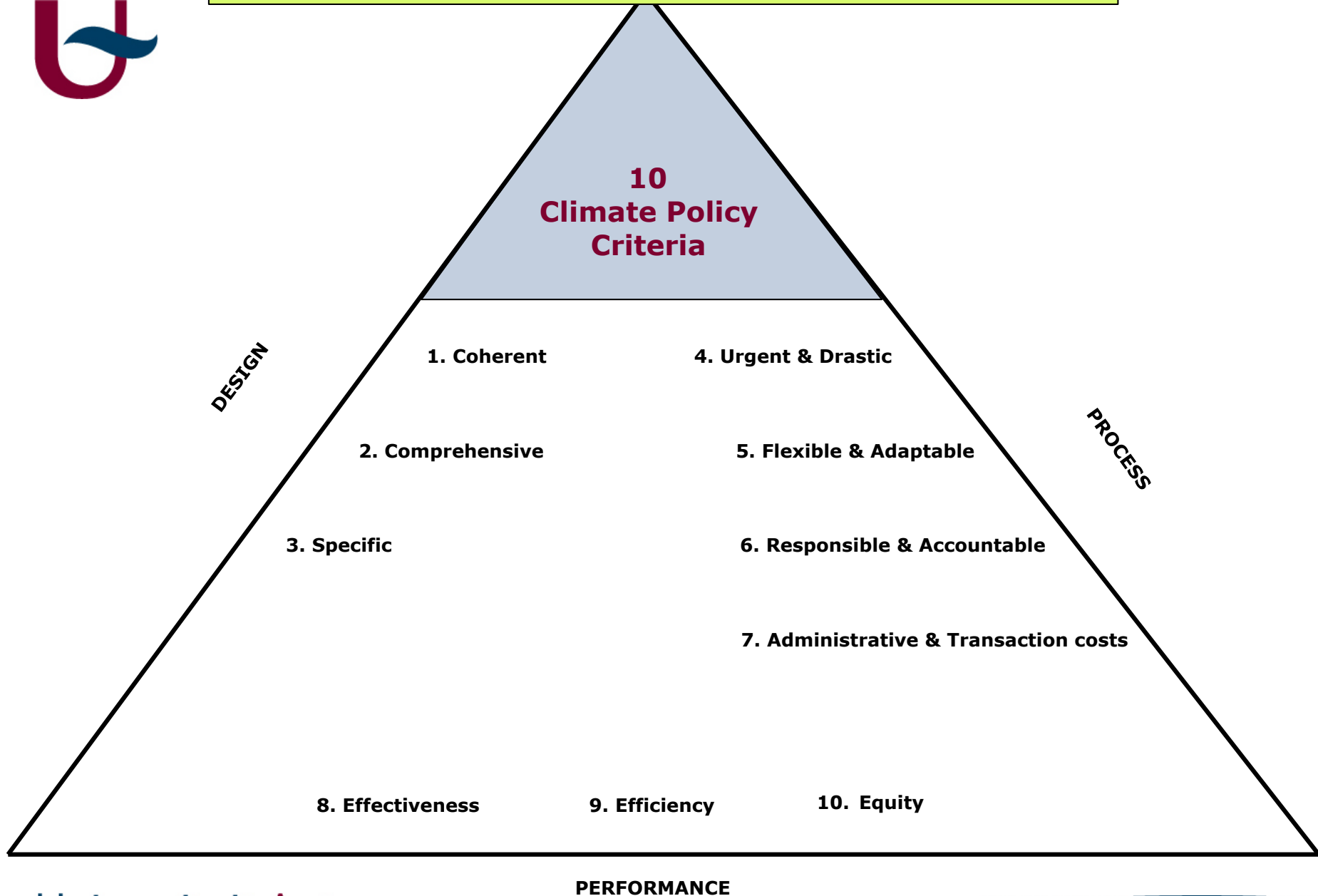
- * Annual UNFCCC meetings: what is their real added value?
- * Clumsy bottom-up regime complexes (Keohane & Victor)?

Re-invent

- * Learn from failures (e.g., emissions trading: EU ETS + CDM)
- * Address the four Sustainable Development dimensions
- * Prepare global treaty via agreements on components:
 - E.g., problem statement, principles, criteria, ...
 - Blueprint the headlines first
 - Design the process, plan the timing, ...

**This contribution discusses 10 criteria
for assessing global climate policy**

3. Ten criteria for assessing climate policy



4. Global Climate Policy Design Criteria



1) Coherence

- ❖ Across many issues, activities, scientific disciplines, diverse societies, interests, ...
- ❖ Reconcile top-down & bottom-up & levels in between to 'nested polycentric and multilevel institutions'

2) Comprehensiveness

- ❖ Optimum scope of global climate policy = minimum scope (mitigation + adaptation: see DPSI@R)
- ❖ Mainstreaming global climate policy in the Sustainable Development agenda blocks progress (by overload)

3) Specificity

- ❖ Decompose complexity in subsystems, with spatial & temporal identifications
- ❖ Address real diversity ⇔ **construct mirages of uniformity (global emissions trading, universal carbon tax)**

5a. DPSI@R framework for preparing policies



D

P

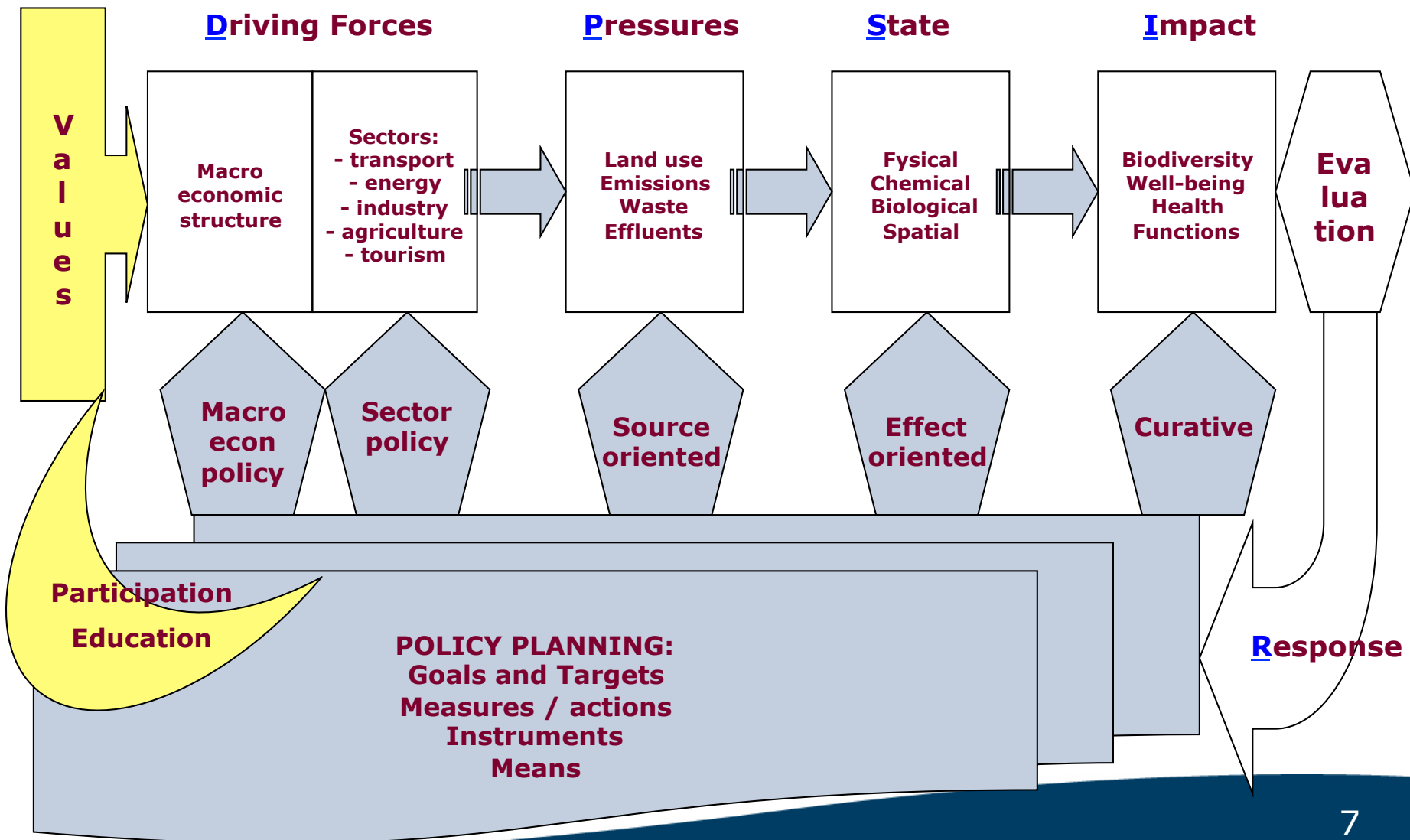
S

I

@R

Mitigation – Abatement

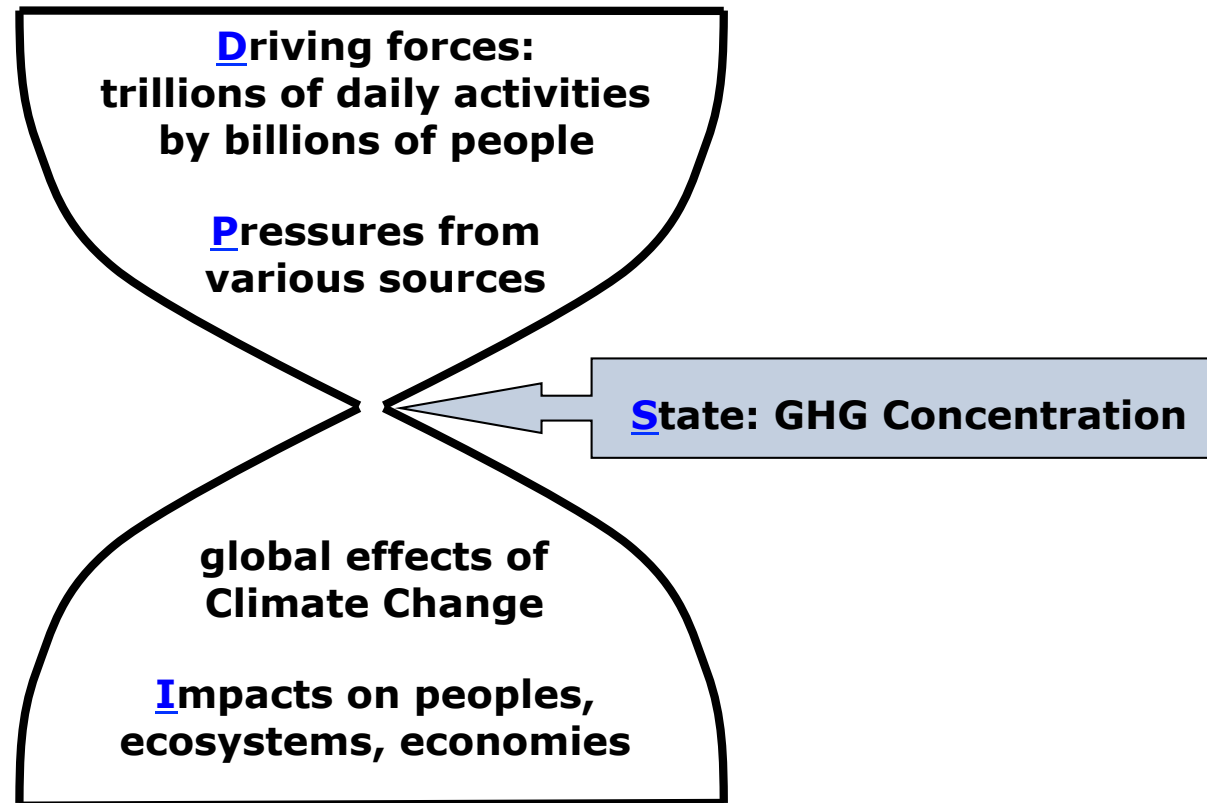
Damage - Adaptation





5b. Uniformity in global State [GHG concentration] wrongly transferred to Driving forces and Pressures

**Climate Change:
DPSI hourglass structure**





6. Conclusion

Global climate policy

- Elephant in the room
- n experts = n^2 opinions

Re-invent the evident

- * What is the global minimum needed?
- * Address the four Sustainable Development dimensions in an applied way, e.g., assess sustainability of technologies
- * Be practical
 - Reinforce what works (budget reform; RE support)
 - Delete what doesn't work (global emissions trading)

**Construct the global networks
for fresh, workable solutions**