



**Belgian Environmental Economics Day  
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# **Beyond Copenhagen**

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# Overview

- 1. Warning**
- 2. Critical view on KBC approach**
- 3. A Workable Alternative**



## **Warning**

**Appraisal and propositions are opposite  
to conventional wisdom**

**Held by:**

**Administrations & politicians (e.g. EU)**

**Corporates & their federations (e.g. Eurelectric)**

**Academics & consultants (e.g. Climate Strategies)**

**Established Environmental NGOs (e.g. WWF)**



# Copenhagen

## **Outcome:**

**Endpoint of 12 year Kyoto-Bali-Copenhagen route**

**Failure in realisations/expectations**

**Failure in results/means**

## **My appraisal:**

**Expected: "none can pressurize a leaking balloon"**

**Hopefull: finally we change track, and**

**Clear the way from bad treaties & illusory progress**

**Shift leadership to USA and China**



## KBC approach (1)

- **Zero-sum game: negative spiral**  
**What you gain, I loose - What I gain, you loose**
- **% Emissions reduction targets by country**  
**Mingling too much: Population, Affluence, Energy**  
**Legally or Politically binding?**  
**Too little, too late: baseline 1990 / horizon 2020**
  - unclear, contentious, ...
  - outdated, hot air, ...
  - blocks & interrupts progress



## KBC approach (2)

- **Emissions Trading**  
**Simplistic theory**  
**=> Crash on the complex, diverse realities**  
**=> Comitology (lobbies dominate)**  
**Swindle profits, fraud (undermines social cohesion)**
- **CDM**  
**Red tape, fraud, perverse effects**  
**OFFSETS (rich buy rights from poor): delay + defect by**  
**rich countries in transforming energy systems**
- **Transfers, redistribution, sustainability**  
**No structural approach**  
**Re-packaging aid (promises), paternalism**



# Cap & Trade: What colour has the chameleon?

## Assignment of permits by

### TAX

- Yearly full auction (renting)
- Full auction every few years
- Auction of futures and options
- Partly auctions / partly gifts

### PERMIT

#### Free GIFTS along

- Marginal reduction costs of sources
- Technical Benchmarks
- Grandfathering
- Expected emissions



## EU-ETS: some questions

1. **Why should actors - refusing Carbon Taxes - accept truly Auctioned Emissions Trading?**  
**How naïve politicians are in thinking the corporate sector is naïve?**
2. **When AUCTIONS: What type of auctions? Who sells to whom (property rights on the atmosphere!)? Who is obliged/ allowed to buy? How to organize 'partial' auctions with efficient & fair allocation of free permits? Who gets the revenues (tax money) for doing what? etc....**
3. **What administration can successfully construct and govern a global, artificial, multi-billion market? See: EU Commission record in regulating electricity sector**





## Plan B: Change What?

Ehrlich-Holdren Decomposition of Emissions =  
People x Affluence x **Energy Intensity** x **Carbon Intensity**  
Or (sidelining demography issues):

$$\frac{\text{CO}_2 \text{ emissions}}{\text{Person}} = \frac{\$ \text{ GDP}}{\text{Person}} \times \frac{\text{kWh energy}}{\$ \text{ GDP}} \times \frac{\text{CO}_2 \text{ emissions}}{\text{kWh energy}}$$

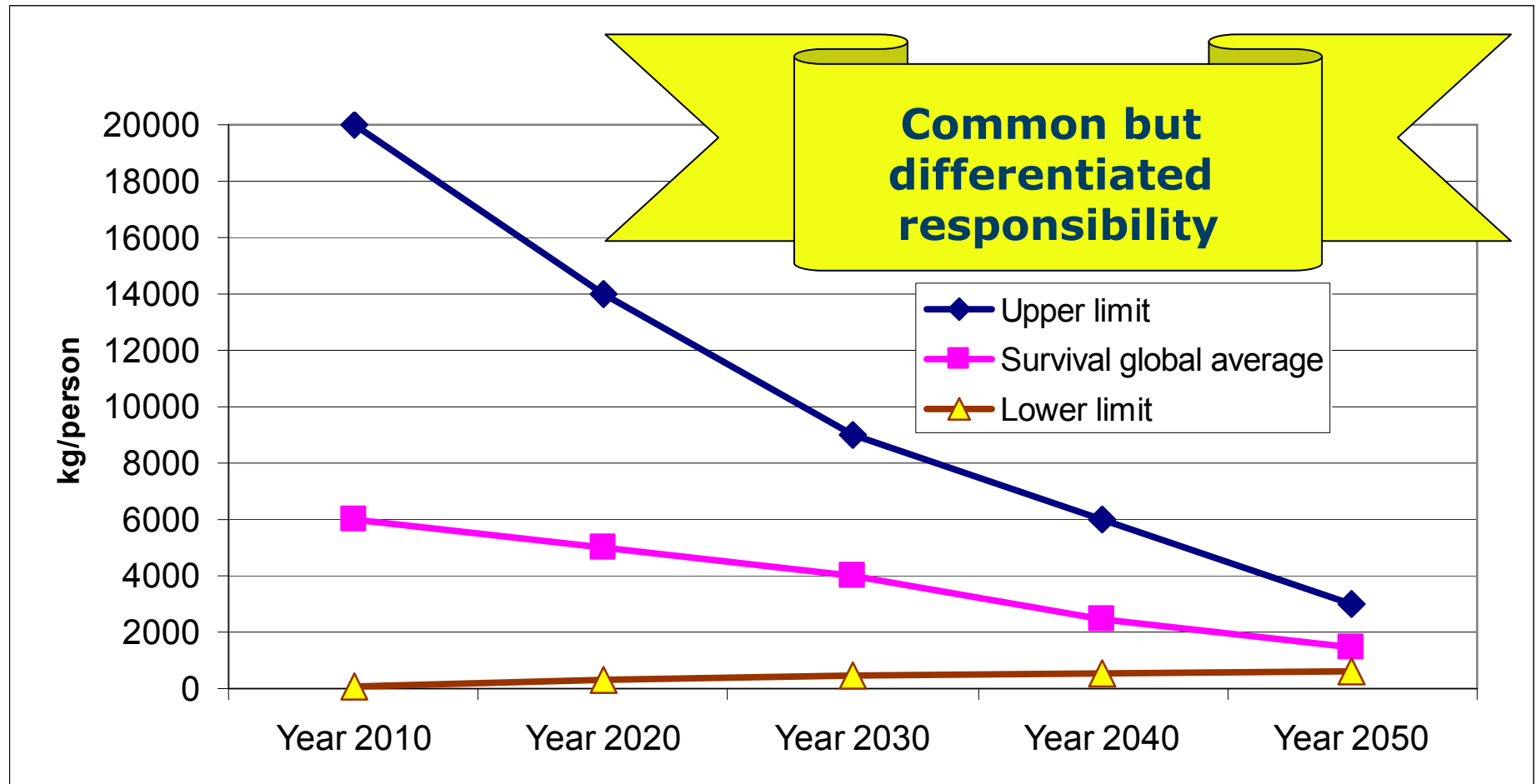
### Pivotal-bridging role of Energy Intensity

$$\frac{\text{kWh energy}}{\$ \text{ GDP}} = \sum_{a=1 \dots A} \frac{\text{Activity}(a)}{\$ \text{ GDP}} \times \frac{\text{kWh energy}}{\text{Activity}(a)}$$

**Energy Intensity = Structure of GDP [1/5] x Efficiency [4/5]**  
**Structure ~ Activities, Lifestyles, Preferences, ...**  
**Efficiency = technical issue, everybody likes**



## Plan B: Emissions/person LT targets Contraction & Convergence funnels





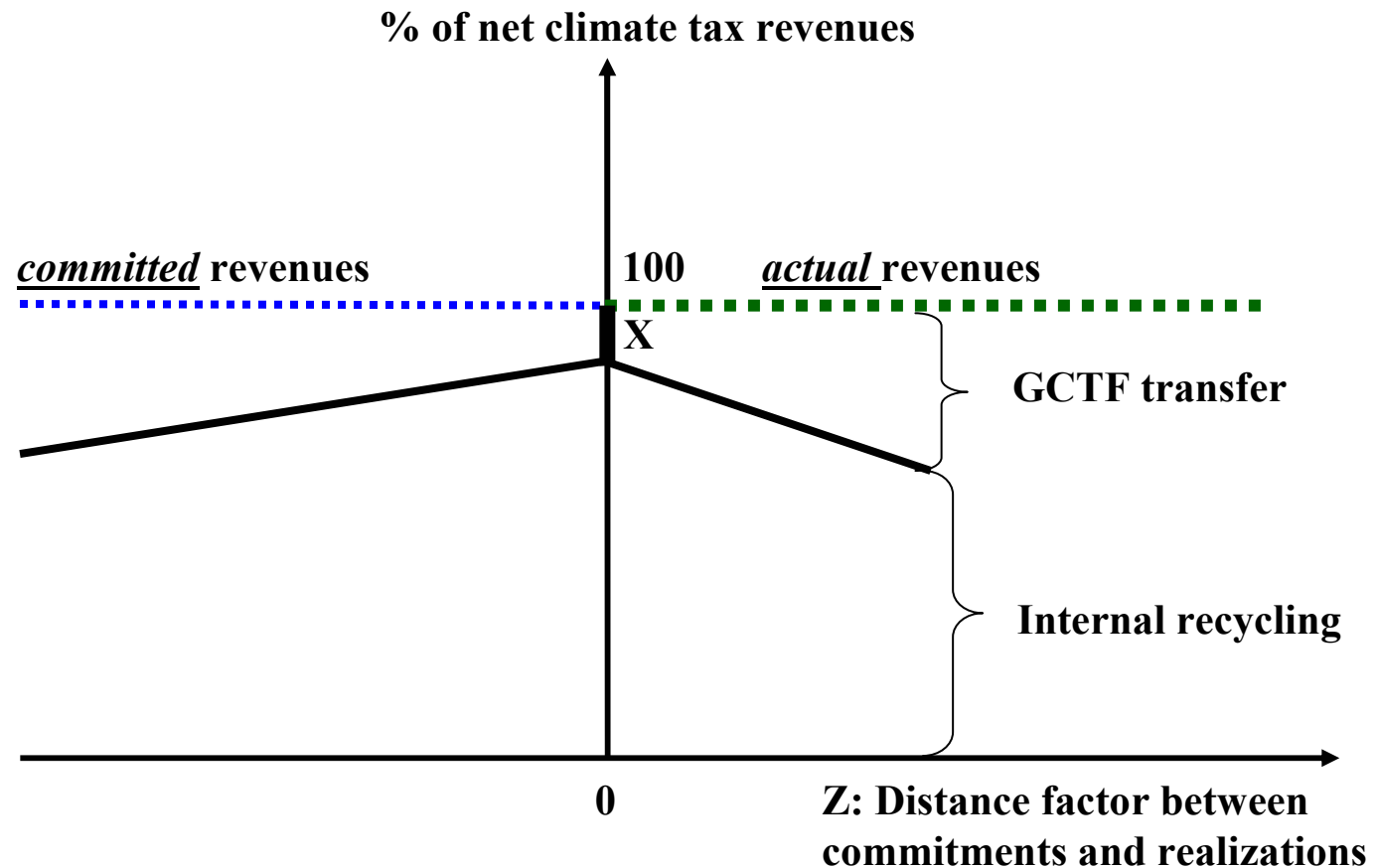
## Plan B: UN Convention

**YEARLY PROGRESS by rich+ poor countries  
on MEASURED indicators:**

- 1. Restructure GDP by Budget/Tax REFORM**
- 2. Reduce Energy Intensity**
- 3. Develop Renewable Energy**
- +**
- 4. TRANSFERS from rich to poor countries,  
commensurate their performance on 1-3,  
ability to pay (rich), ability to spend (poor)**



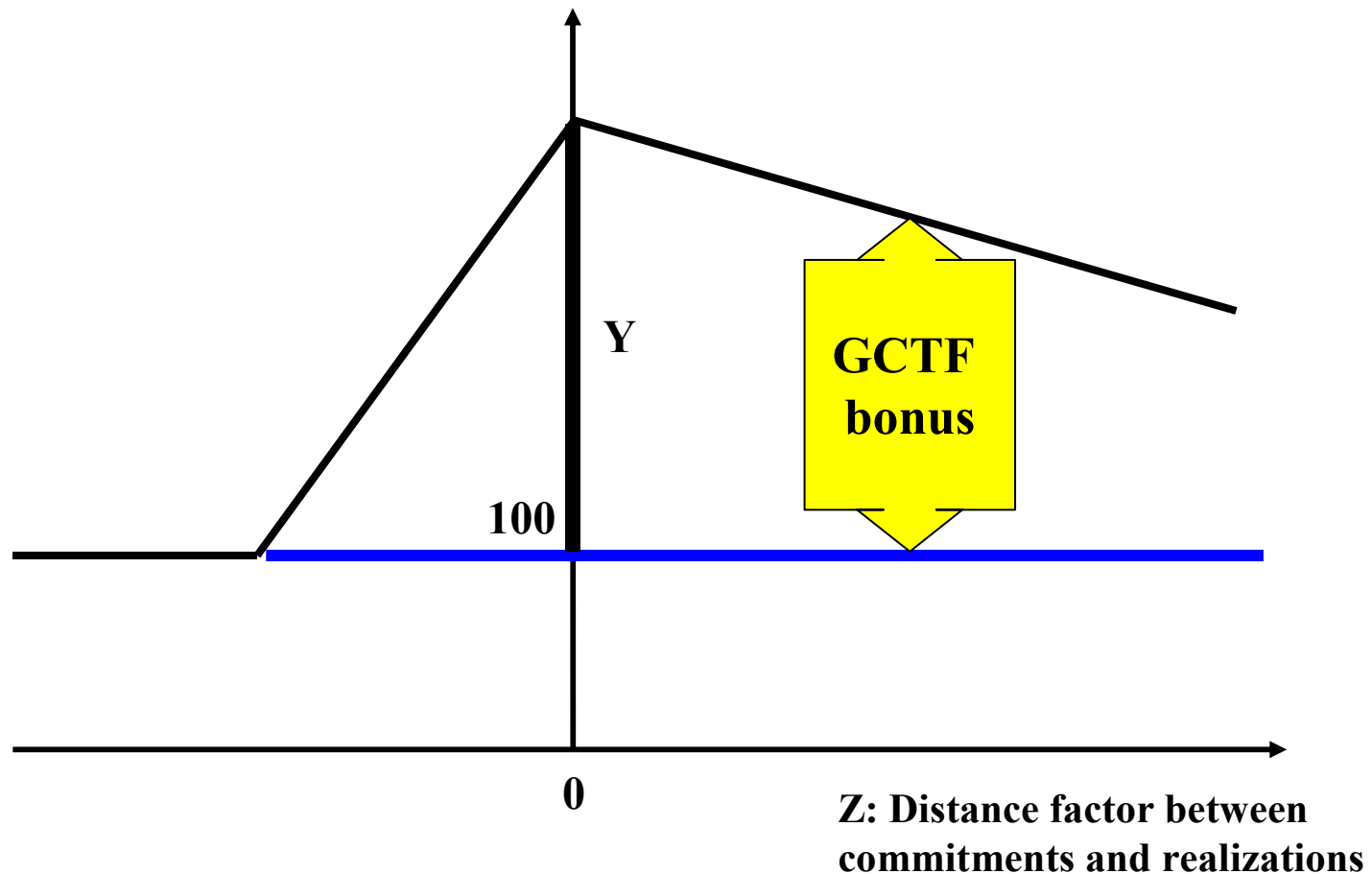
## Plan B: Rich nations fund GCTF (Global Climate Transfer Fund) X depends on GDP/person





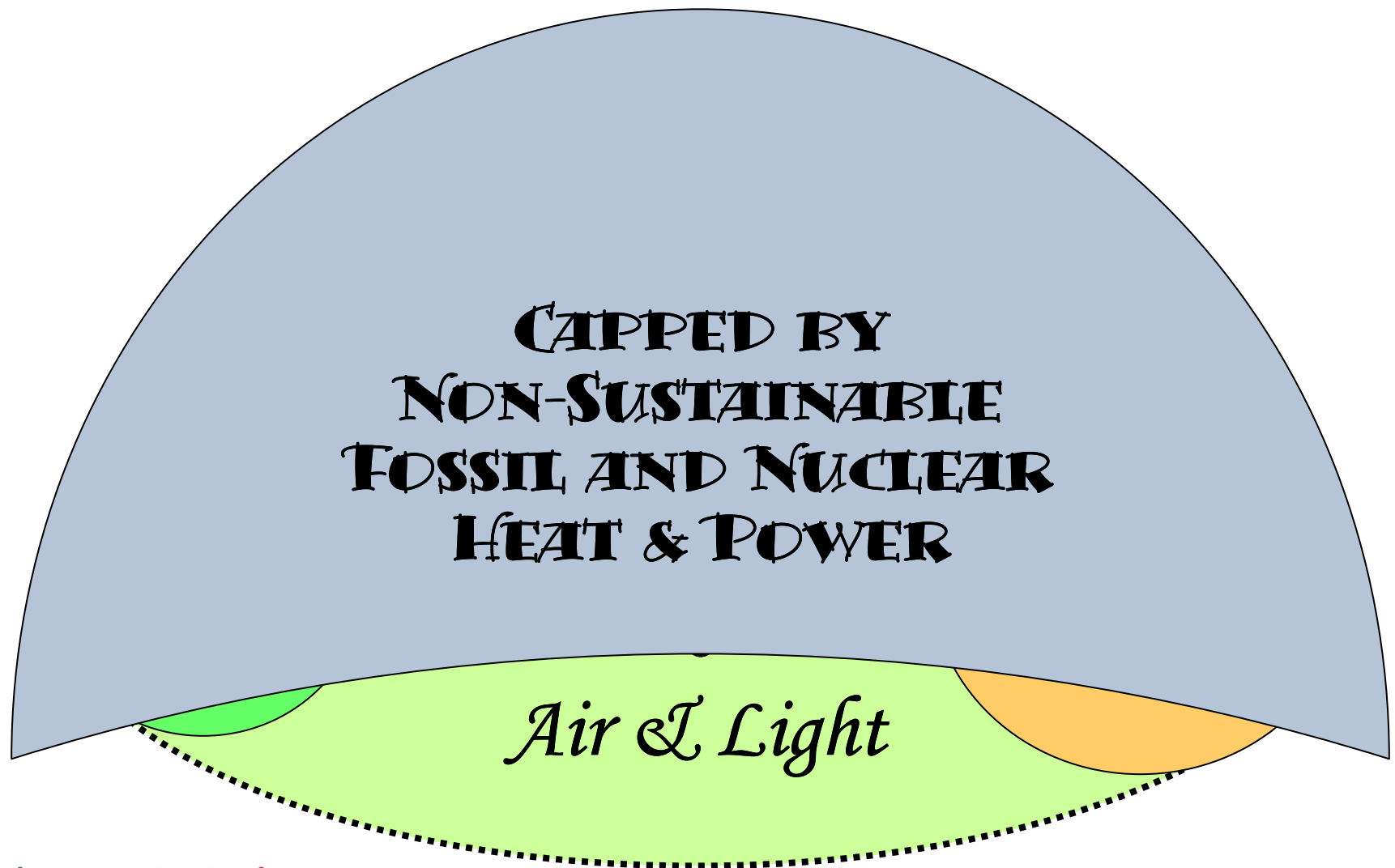
## Plan B: Poor nations get GCTF bonus Y depends on GDP/person

% of actual net climate tax revenues in a poor nation



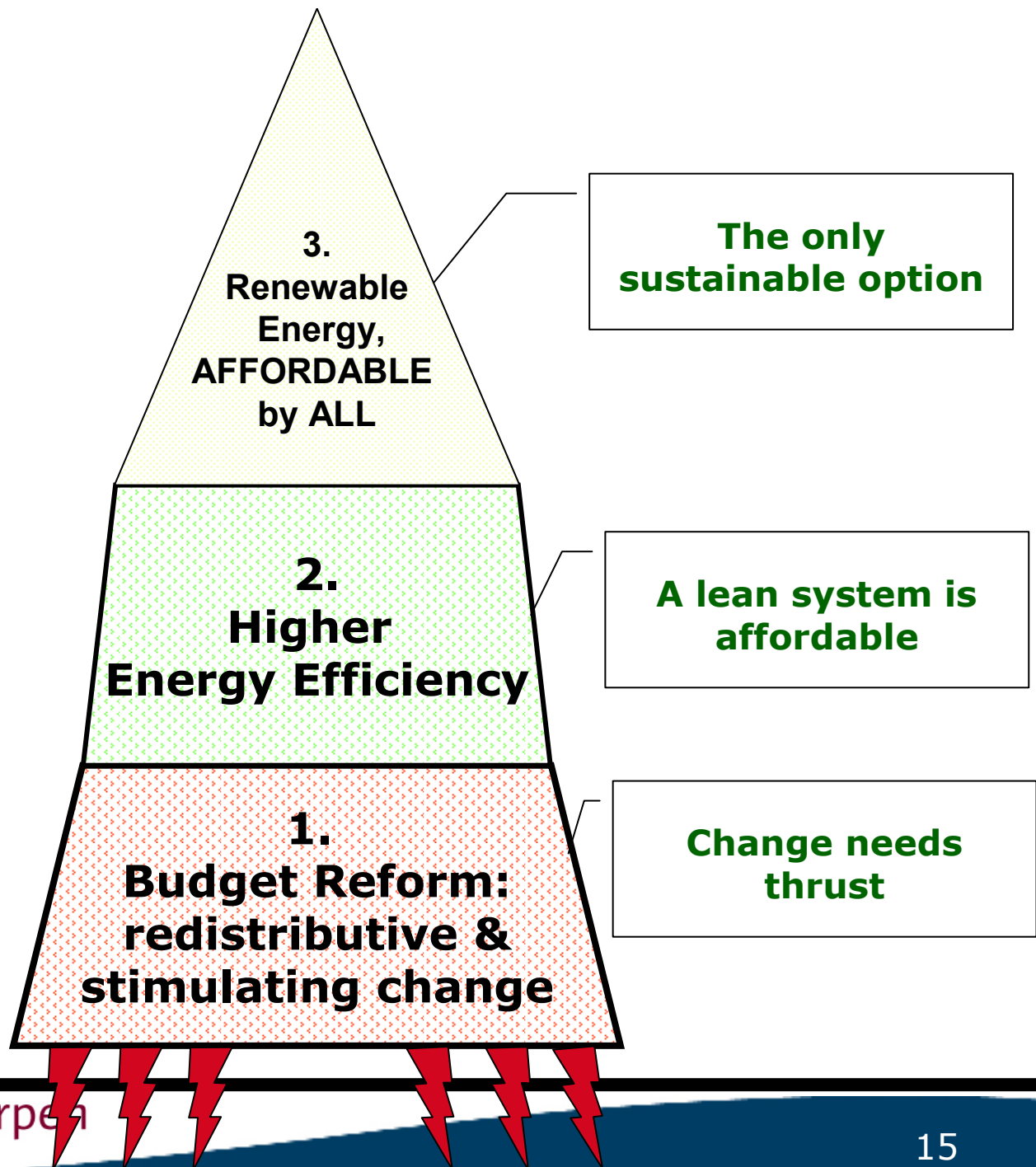


## Energy: Free or Expensive?





**Blow up  
the CAP  
by  
3-staged  
rockets**





**More Info?**

**Book (Dutch)**

**Website (English)**

**[www.avielverbruggen.be](http://www.avielverbruggen.be)**

**QUESTIONS?  
COMMENTS?**

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