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***THE POLITICAL ECONOMY OF ENERGY  
TRANSITION IN THE EU***

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# Overview

- **Political Economy**
- **Energy transition for climate**
  - **Necessary (& sufficient?) mitigation process**
  - **Transitions: Deficient ⇔ Thorough**
- **EU energy-climate policy today**
  - **Three policy goals**
  - **2014 restoration**
- **Control the “Energy Policy” discourse**
- **Conclusions + final teaser**



# Political Economy

**Definition: “Study of rational decisions in a context of political and economic institutions”**

- **Institutions** appear as internalized conventions & norms [≠ values] and externally sanctioned formal rules [≠ law]
- Paramount is the interaction of individuals, institutions, and markets as **human made & governed constructions**
- Ideas help frame interests and incentives to bring about transformative change
- Discourses bundle ideas to action

**Political economy is like studying icebergs**

Part is visible – most happens below the surface  
... networking, lobbying, advocacy, discourses ...  
Usual standards of scientific analysis not applicable

**Political economy = economics science 1776-1876**

Renewed attention from sectors where neo-classical economics fails: development aid, financial crisis, ...

**?What about global climate policy?**



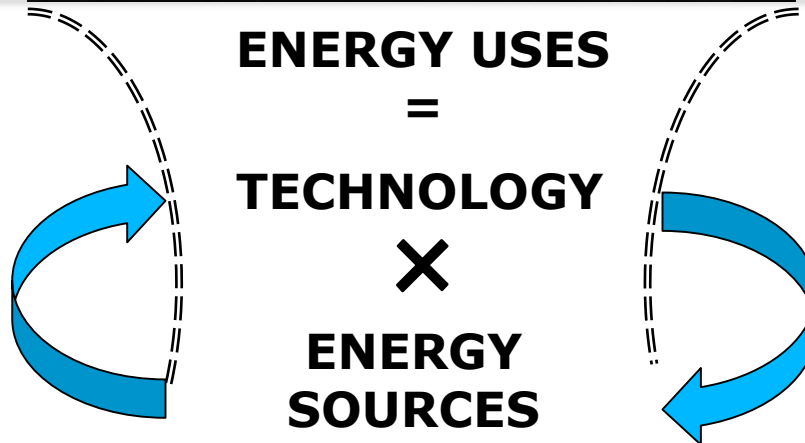
# Civilization ⌘ Energy uses



## Civilization

### Lock-in

- paradigms
- discourses
- social constructs
- financial interests



## Substrate

### Lock-in

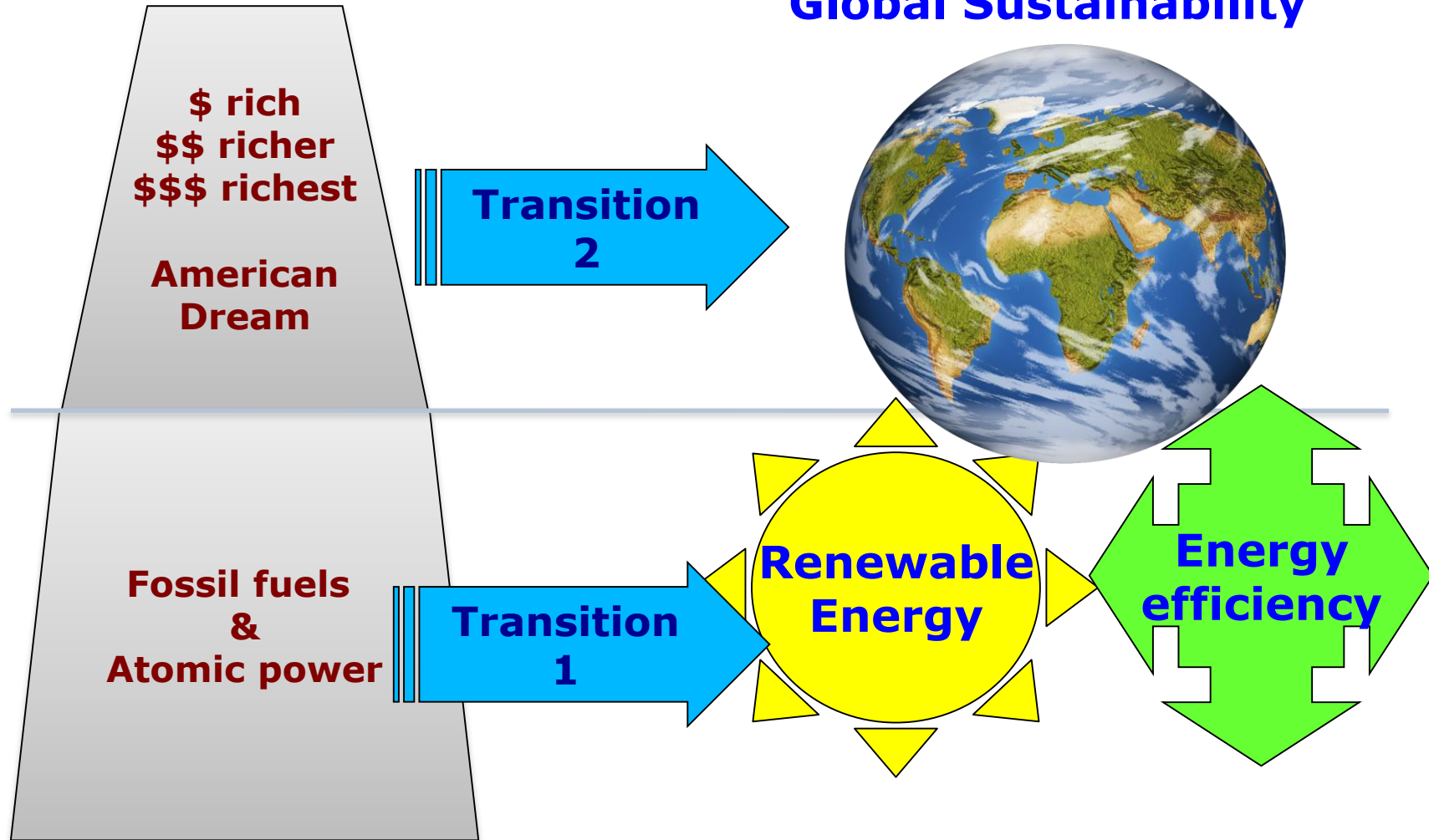
- infrastructures
- habits (!mobility)
- vested interests

# Energy ☸ Civilization: Present – Future



**Present**

**Future**  
**Global Sustainability**





# Energy system transitions

**As old as human race, voluntary because of progress:**

• **Intertwined with tools, technique, technology**

Wheels, sails, levers, ... electronics, new materials, ICT, ...

• **Revolutionizing societies**

**Industrial revolution: convert fuels → heat → work (steam, engines)**

**Now: tap electricity from ambient sources (light, air, water currents)**

**Today a necessity:**

- **Environmental pollution (particulates, ozon, dioxines)**
- **Atomic power: risks, waste, security, habitat loss by accidents**
- **Irreversible destruction of unique atmosphere, climate**

**Boosted by *pursued Sustainable Development***

**Barried by *lock-in*: infrastructures, vested interests**

**Layered energy transitions:**

- 1) **Most oil, gas, coal must stay in the ground → geopolitics of war**
- 2) **Commercial energy use → Electricity everywhere**
- 3) **Fossile + Atom → Renewable electric sources everywhere**

# Two energy transition paths

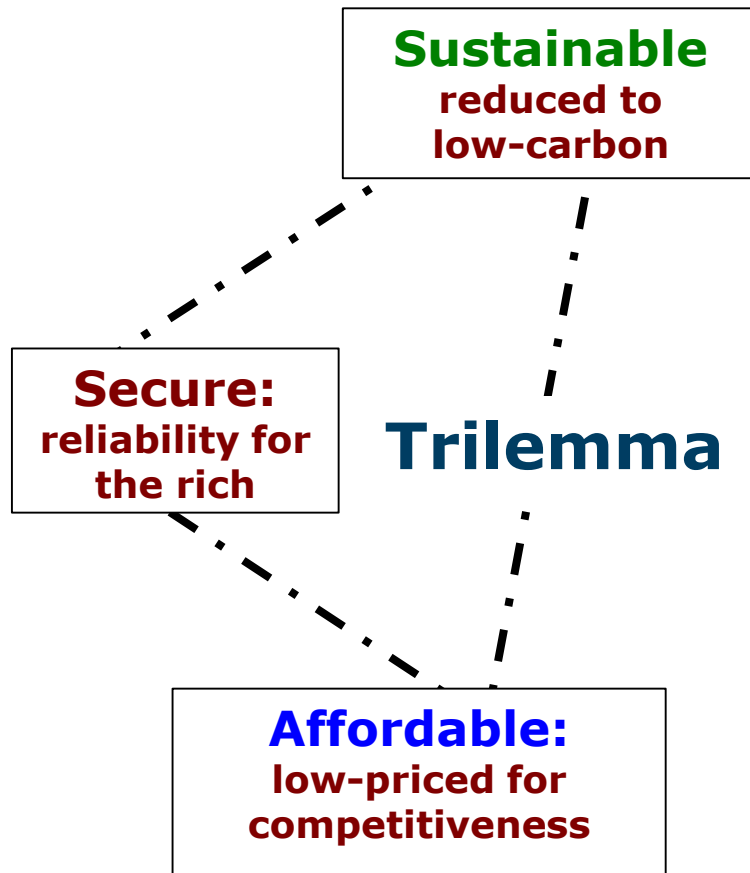
**Deficient** ↔ **Thorough**

<b>Deficient</b>	<b>Thorough</b>
<p><b>Low-carbon tripod mantra:</b></p> <ul style="list-style-type: none"> <li>• Renewables</li> <li>• Nuclear power</li> <li>• Carbon Capture &amp; Storage CCS</li> </ul>	<p><b>ONLY renewable energy (RE)</b></p> <ul style="list-style-type: none"> <li>• Direct harvesting of electricity</li> <li>• Not compatible with nuclear</li> <li>• Ban large-scale fossil fuel use</li> </ul>
<p><b>Sustainable development:</b></p> <ul style="list-style-type: none"> <li>• Obligated window dressing</li> <li>• No sustainability assessment</li> </ul>	<p><b>Sustainable development:</b></p> <ul style="list-style-type: none"> <li>• Prevailing paradigm</li> <li>• Strict sustainability assessments</li> </ul>
<p><b>Centralized power systems reign</b></p> <ul style="list-style-type: none"> <li>• Reconstruct vested interests:             <ul style="list-style-type: none"> <li>- large-scale off-shore wind</li> <li>- solar Mega/Giga Watt fields</li> </ul> </li> <li>• Not affordable for poor nations and poor people</li> </ul>	<p><b>Priority: RE harvesting by prosumers</b></p> <ul style="list-style-type: none"> <li>• Mediocre RE sources harvestable</li> <li>• Redundant powergen capacities</li> <li>• Regulatory solutions needed</li> <li>• Independent public regulators</li> <li>• Rich countries lead (↔ offsets)</li> <li>• Developing countries emulate</li> </ul>

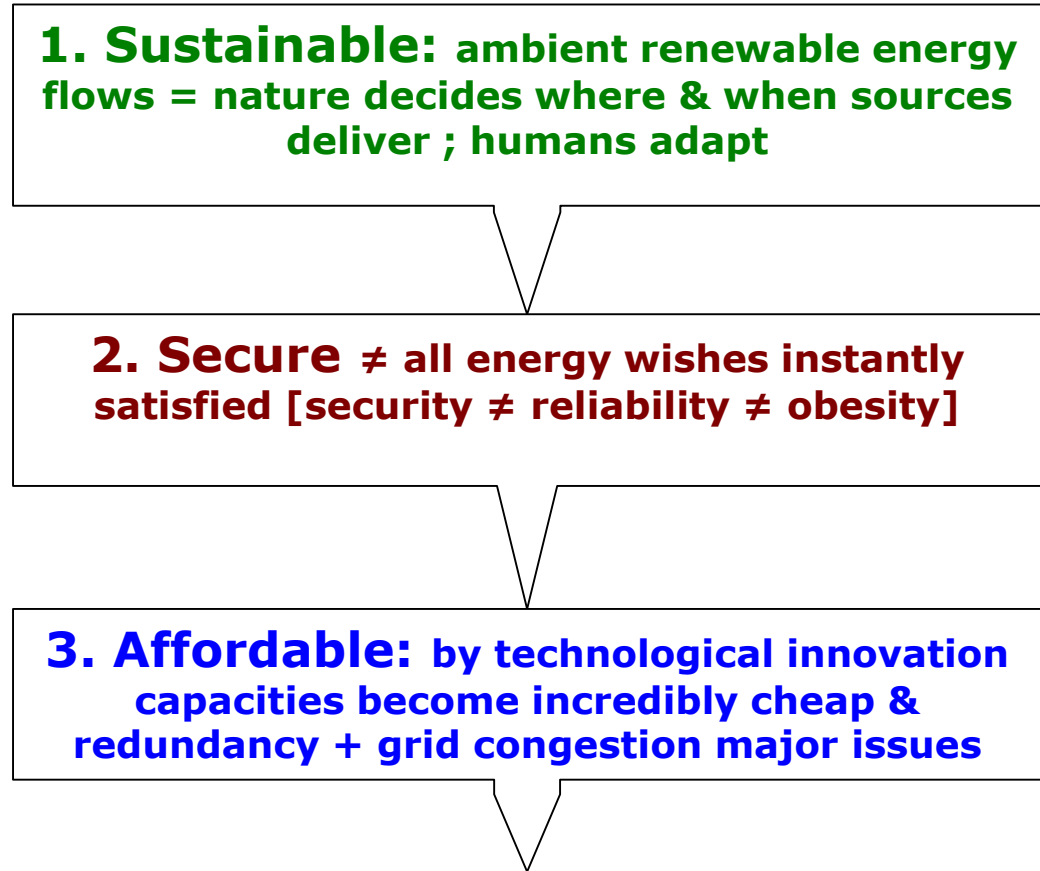


# EU energy policy goals

## Flawed Trilemma ↔ Cascade Logic



## Cascade







## Lock-in (2014-....) Large energy companies ☸ EU Commission ☸ Nuclear discourse

- **Magritte Group (March 19, 2014) recommends:**
  - **Preference for 'mature renewables in the regular market'**
  - **Priority to the utilization of existing competitive power capacity rather than subsidizing new constructions**
  - **Restore ETS as flagship of climate and energy policy**
- **EU (April 9, 2014) New Energy State Aid Guidelines**
  - **Refrain the German Energiewende**
  - **Payments for coal powerplant capacity**
  - **Guarantee £92.5/MWh during 35 years for Hinkley Point**
- **Nuclear discourse molds fake reality**
  - **IAEA & IPCC accept nuclear as option (⇔ renewables)**
  - **Nuclear not submitted to sustainability assessment**



# Control the “Energy Policy” discourse

## In the EU, vested energy interests

- are centralized power houses
- principal in the Brussels and national lobbyism webs
- active in universities and on scientific fora

## Control EU and Member State regulation

Stakeholders participate (**victoriously**) in comitology

EU officials are **limited** in capability, capacity, action radius

Member States maintain significant energy authority

## Control the hearts and minds

**Dominant discourse** by supreme advocacy

**Changed editors** of *Energy Policy* **reject** disclosing analysis

IPCC accepts nuclear power as valid mitigation option, by **skipping the assessment of critical publications**



# Concluding Considerations

- **Political Economy**
  - **Founding economics, crowded out by neoclassical construct**
  - **Crucial for understanding present actuality**
  - **Requisite for due diligence on climate  $\rightarrow$  energy transition**
- **Energy transitions: thorough  $\leftrightarrow$  deficient**
  - **Renewable energy + efficiency  $\leftrightarrow$  energy 'Pantheon' (IEA)**
  - **Interlaced with sustainable development  $\leftrightarrow$  neoliberalism**
- **Energy Policy**
  - **EU's inaccurate & flawed framing of energy issues**
  - **2014 restoration: vested interests capitalize on neoliberal ideology of the EU Commission**
  - **Energy corporate stock-stakeholders master the discourse, influencing also scientific circles**



## Final Teaser

**Adopt the right reference state & “discourse”**

**NOT**

**the obsolete, non-sustainable inherited, present state**

**&**

**“integrating flow renewable power in electric power systems”**

**BUT**

**the requested 100% renewable future state**

**&**

**“nature provides the currents - humans adapt their systems  
and practices”**