

ZORLU ENERJİ GRUBU

ATC / TAIK
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Energy-Security & Global Warming – Conflicting Requirements

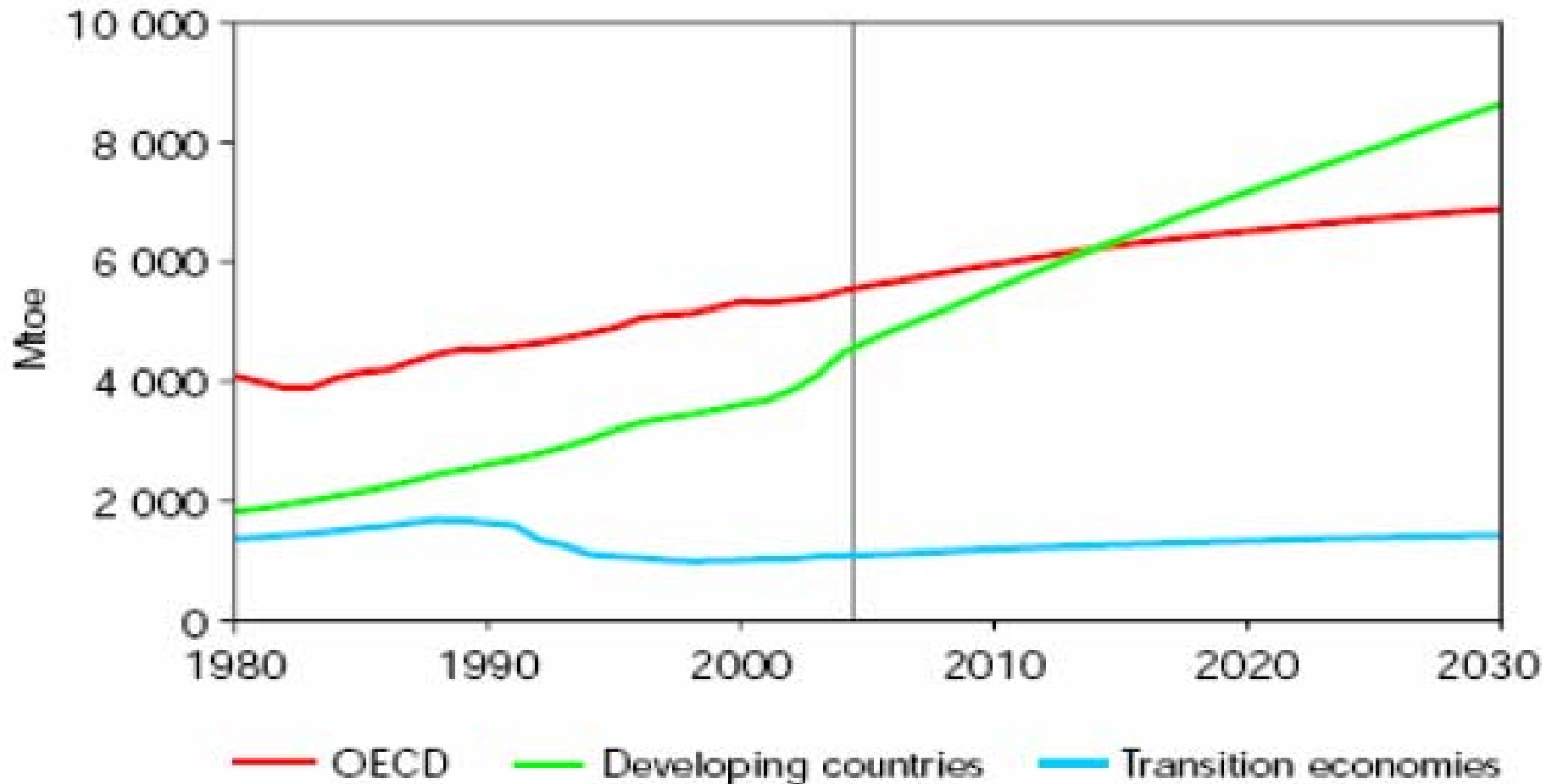
- **“Crude oil in a fine crystal pitcher...”**

Photographed
in June 1974



Energy-Security & Global Warming – Conflicting Requirements

■ World Energy Demand 2005-2030 (IEA Reference Scenario)



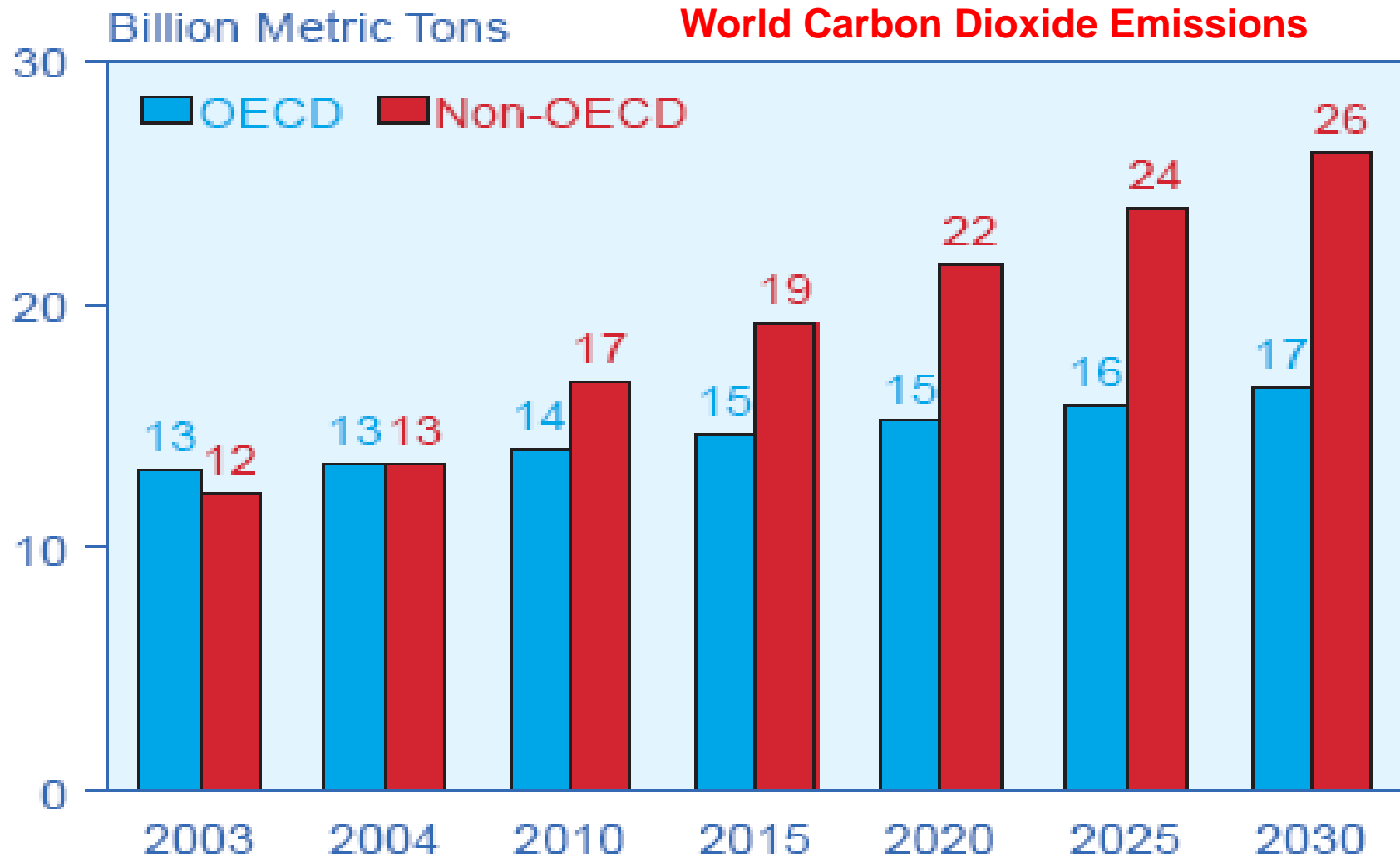
Energy-Security & Global Warming – Conflicting Requirements

- **Cumulative energy investments 2005-2030: *20.2 trillion USD.***
- **Energy is the main factor in climate change.**
- **Energy accounts for *80% of greenhouse gases* in Europe.**

Energy-Security & Global Warming – Conflicting Requirements

- **1kW** of electricity not delivered costs: **0.60-up to 1.25 USD** of income loss.
- Undelivered electricity causes **ten times** loss on income.
- Lack of investment to meet increasing demand in the coming 25 years may cost loss of **100-200 trillion USD**

Energy-Security & Global Warming – Conflicting Requirements

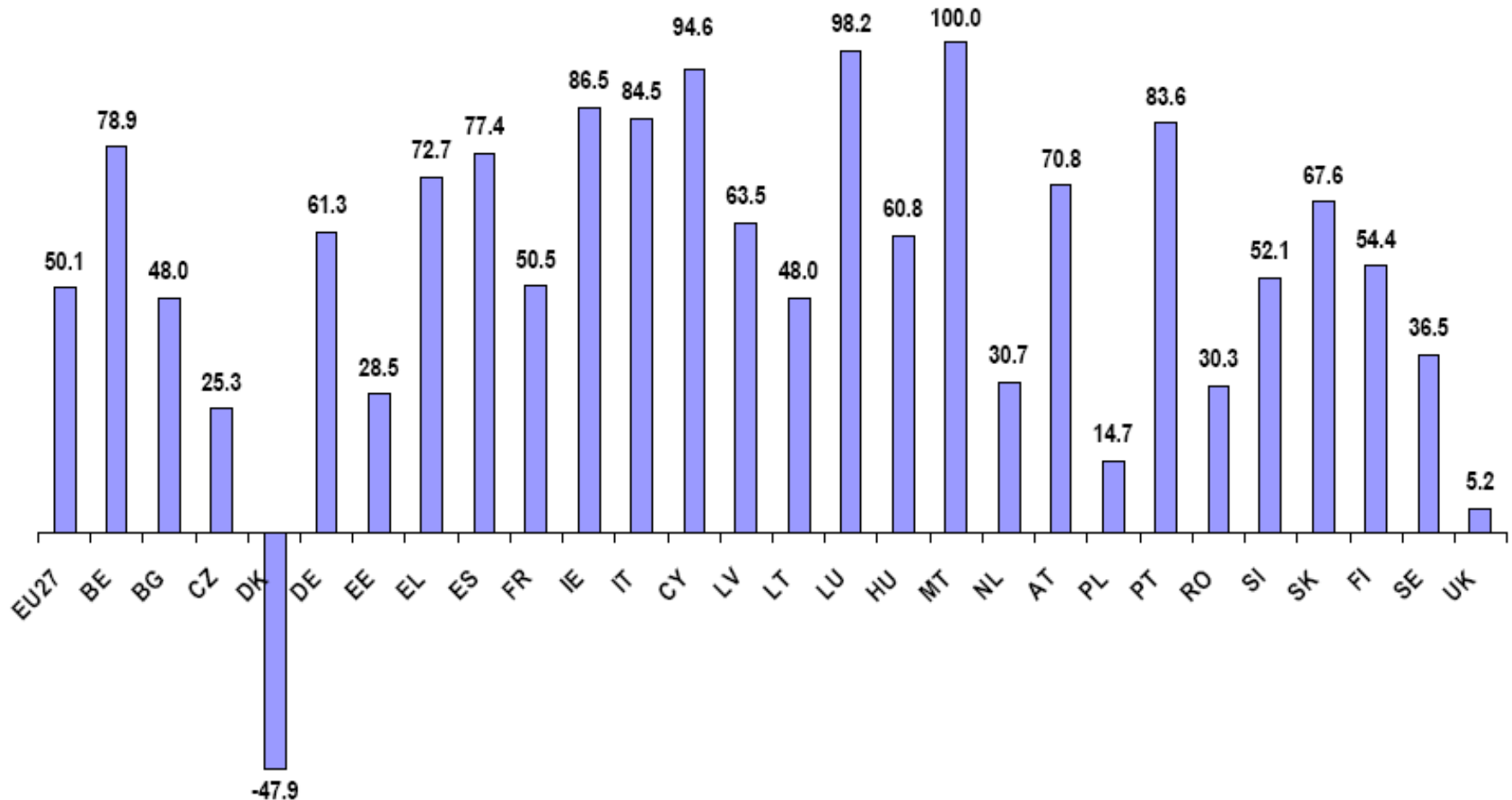


Energy-Security & Global Warming – Conflicting Requirements

- **Global warming may cause:**
 - *lives lost,*
 - *floods and droughts,*
 - *disintegrating polar ice,*
 - *loss of bio-diversity,*
 - *fatal heat waves,*
 - *rising sea levels.*

Energy-Security & Global Warming – Conflicting Requirements

■ EU-27 Import Dependency 2004 (%)



Energy-Security & Global Warming – Conflicting Requirements

Energy Agenda Items

- **Supply security,**
- **Demand security,**
- **Interdependence,**
- **Conflicts, wars, trade barriers...**
- **Less dependency /self-sufficiency**

Energy-Security & Global Warming – Conflicting Requirements

- **Less dependence, how?**
- ***Demand side management:***
 - ***Can we live better on less? New values,***
 - ***Conservation of energy,***
 - ***Energy efficiency / energy intensity,***
 - ***Innovative technologies,***

Energy-Security & Global Warming – Conflicting Requirements

- **Less dependence, how?**
- ***Supply side management:***
 - ***Renewable energy,***
 - ***Indigenous resources,***
 - ***Innovative technologies,***

Energy-Security & Global Warming – Conflicting Requirements

- **A New World Energy Order is coming:**
 - **Limits to Growth** (*Donella & Dennis Meadows, William Behrens and Jorgen Randers- 1972*),
 - **An Inconvenient Truth** (*Nobel Laureate, Al Gore*)
 - **Cool It** (*Bjorn Lomborg*)

Energy-Security & Global Warming – Conflicting Requirements

- All ***crises-uncertainties-risks*** are potential **OPPORTUNITIES...**
- New avenues of *entrepreneurship*,
- Exploiting *globalization*,
- Benefitting from *liberalization / privatization*

Energy-Security & Global Warming – Conflicting Requirements

■ Zorlu Energy

- Domestic investments;

- *Oil & gas exploration,*

- *Gas distribution,*

- *Power generation (Natural gas, Hydro, Wind, Geothermal...)*

- Investments abroad

- *Russia, Israel, Pakistan...*

Energy-Security & Global Warming – Conflicting Requirements

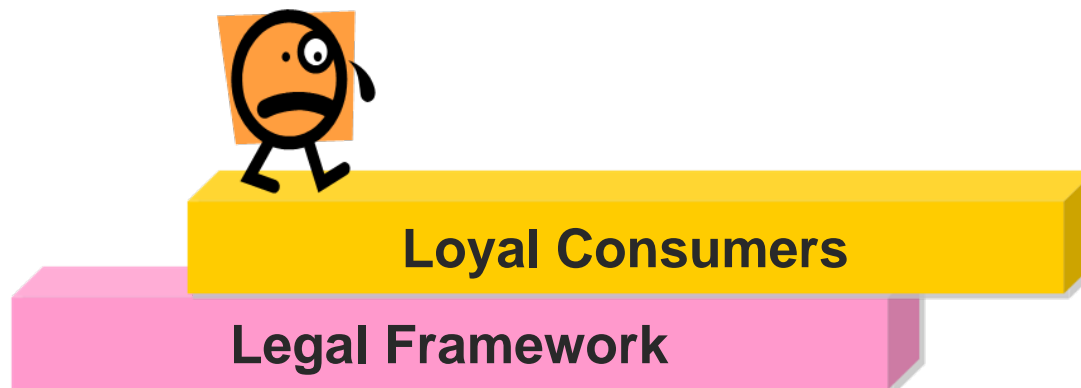
- **Investors Ladder...**
- *Step(1)*



Legal Framework

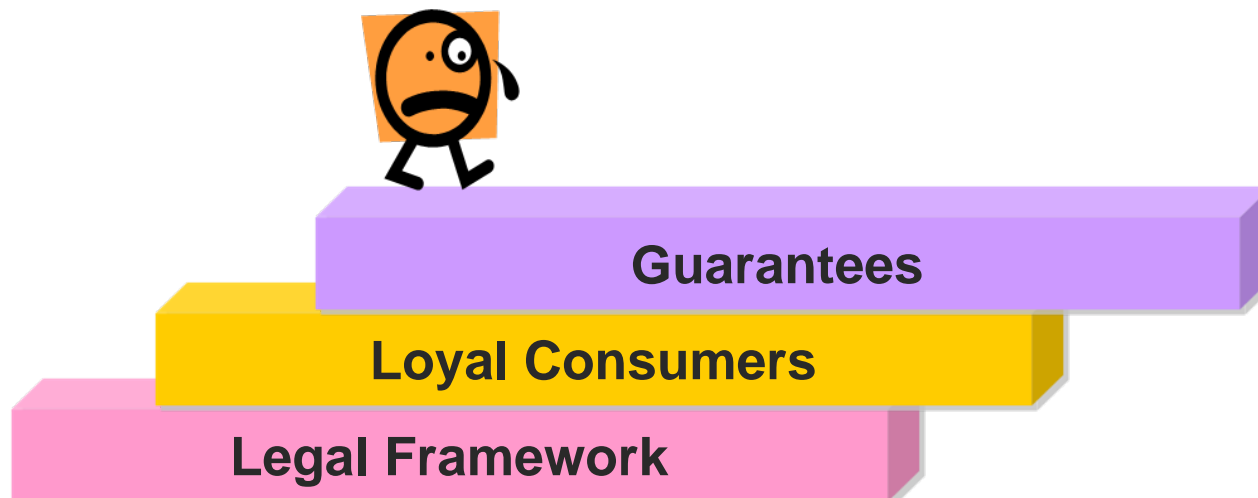
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- **Investors Ladder...**
- *Step(2)*



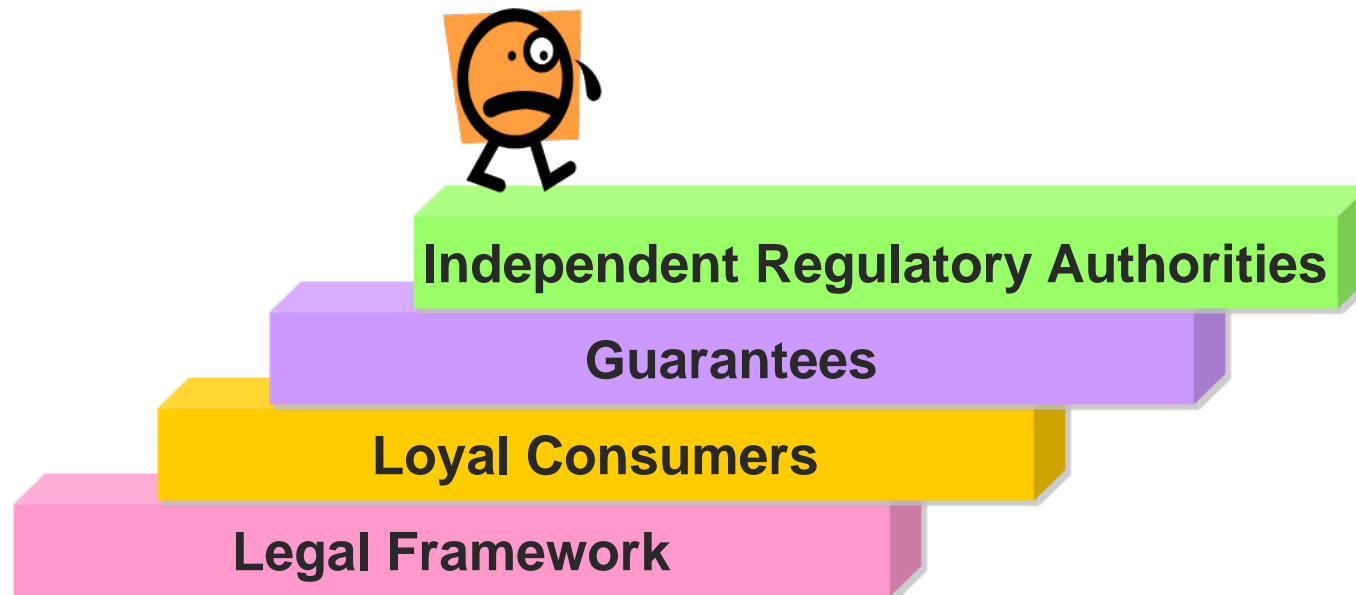
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- **Investors Ladder...**
- *Step(3)*



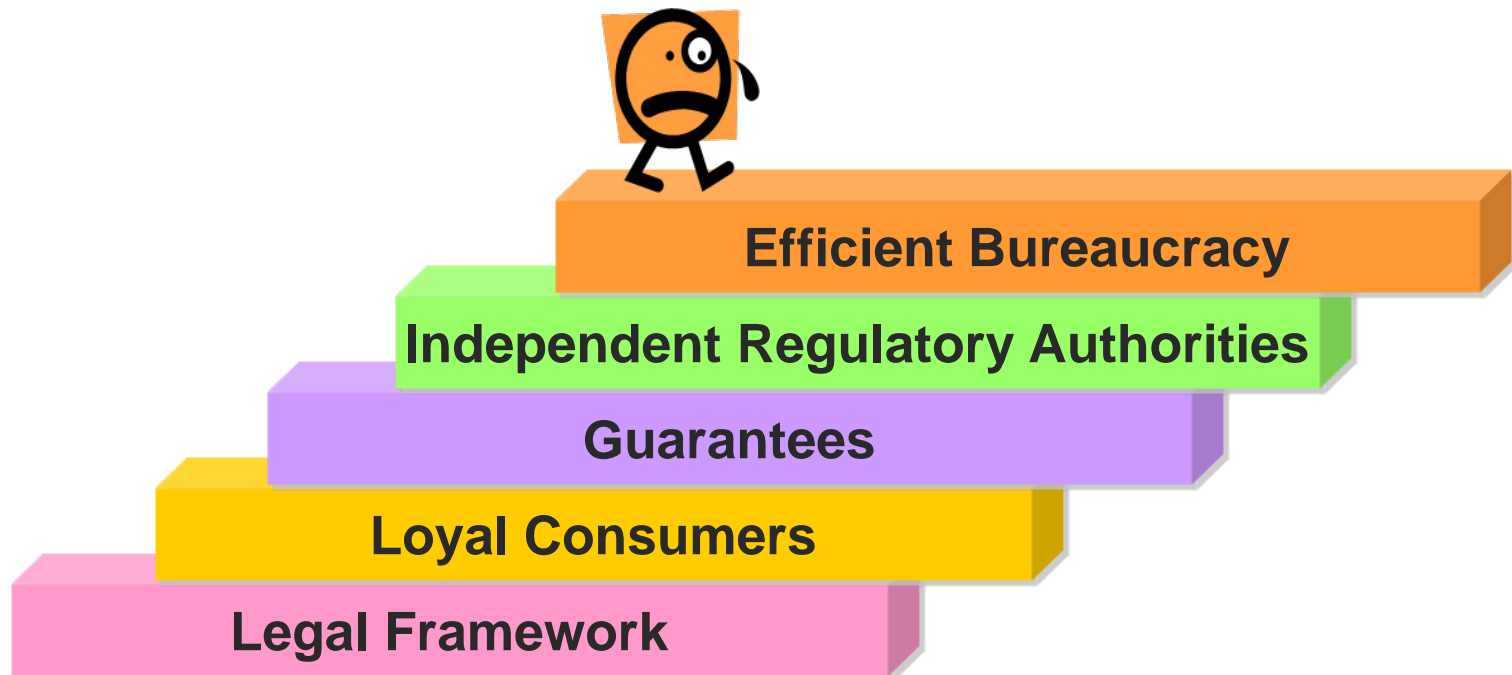
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- **Investors Ladder...**
- *Step(4)*



Energy-Security & Global Warming – Conflicting Requirements

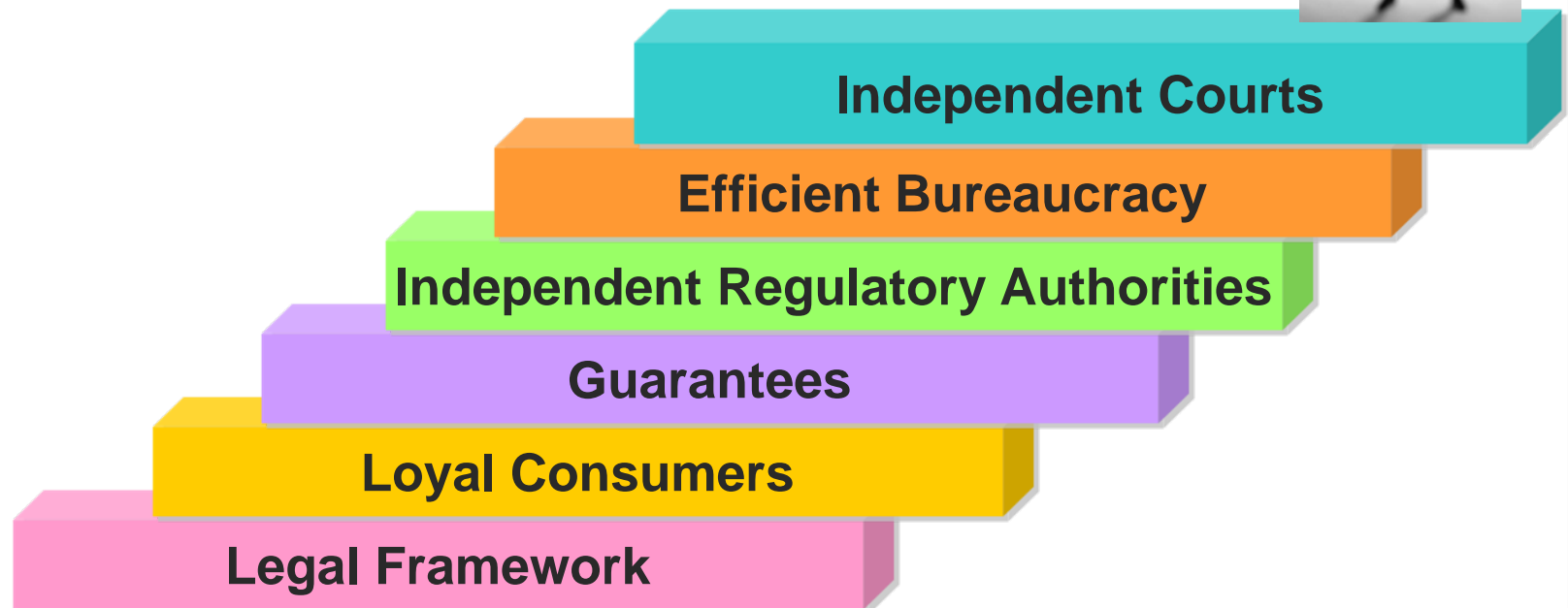
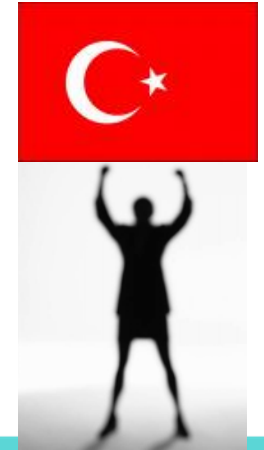
- **Investors Ladder...**
- *Step(5)*



Energy-Security & Global Warming – Conflicting Requirements

■ Investors Ladder...

- *Step(6) and a happy end...*



Energy-Security & Global Warming – Conflicting Requirements

**Thank you very much for your kind
attention...**