

# Energy Efficiency. Overview

Hans Nilsson

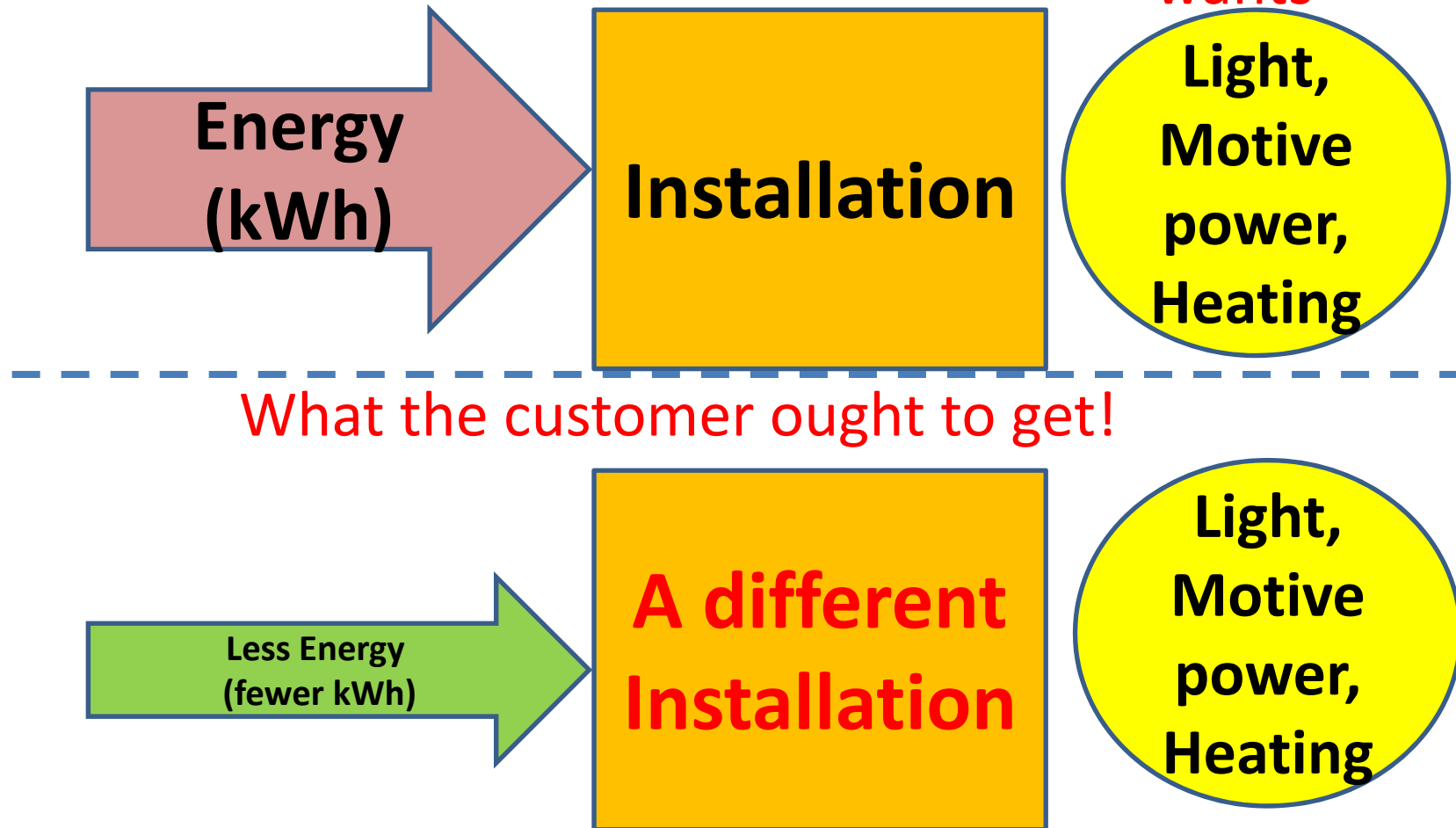
4-Fact



# Efficiency is not difficult!

– **Only complicated**

What the customer  
wants



Insulation, Ventilation, Cooling eq., Boilers, Electric controls, Luminaires, Sanitation, Solar shading Compressed Air, Etc. etc. etc



# EU 20% target

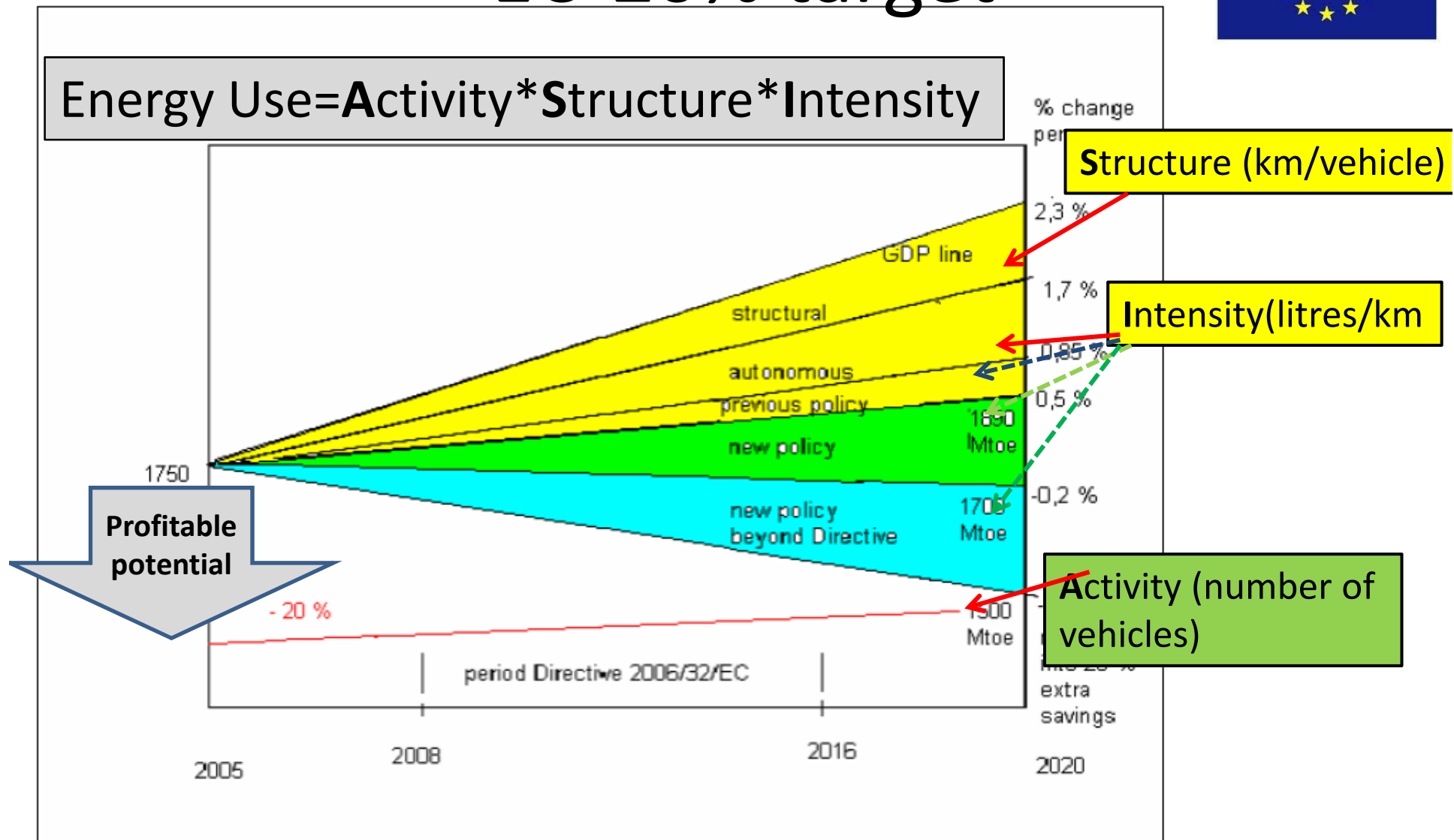
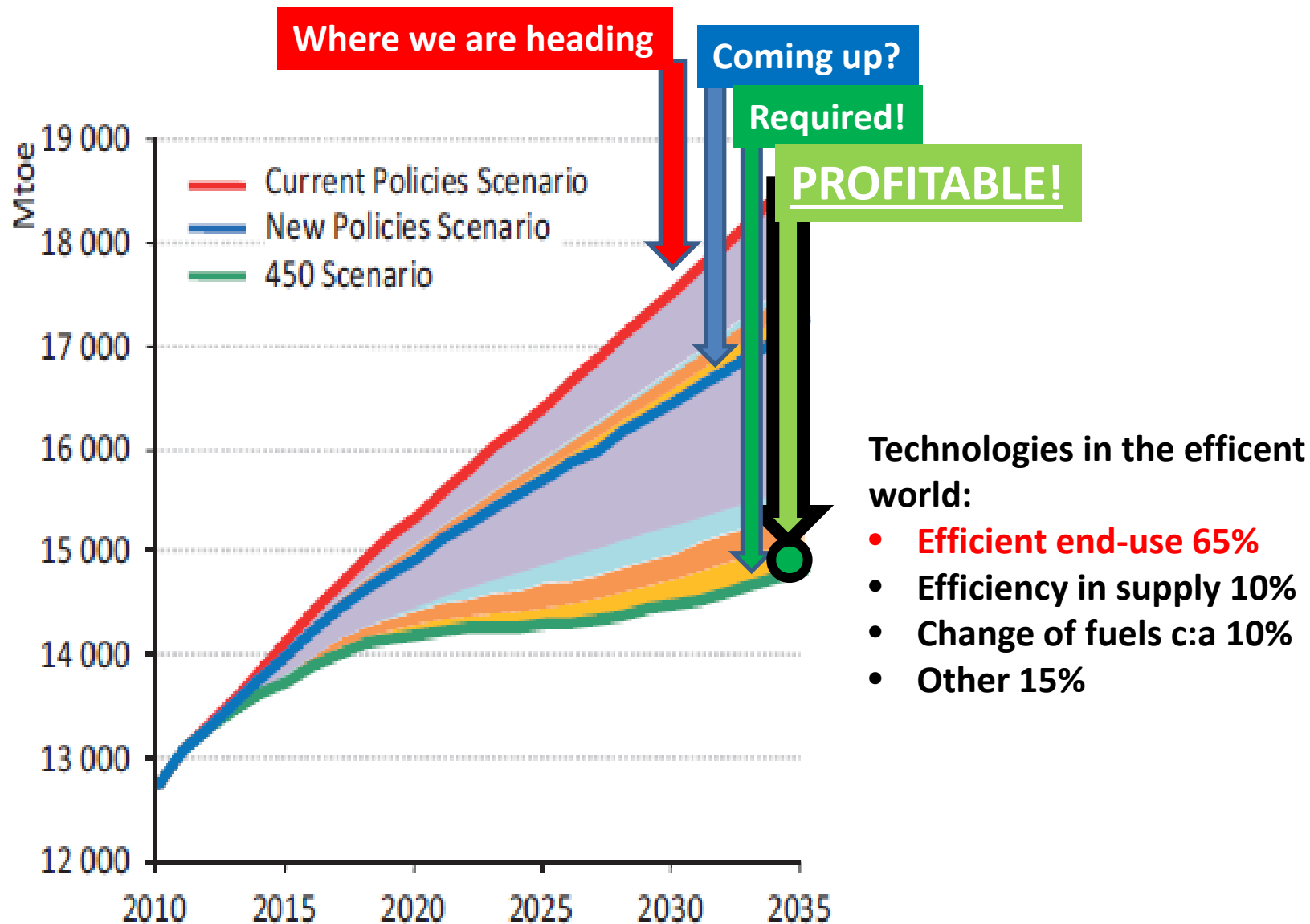


Figure 3: Annual improvements in energy intensity<sup>13</sup>

Källa: Action Plan for Energy Efficiency: Realising the Potential. COM (2006) 545 Final.

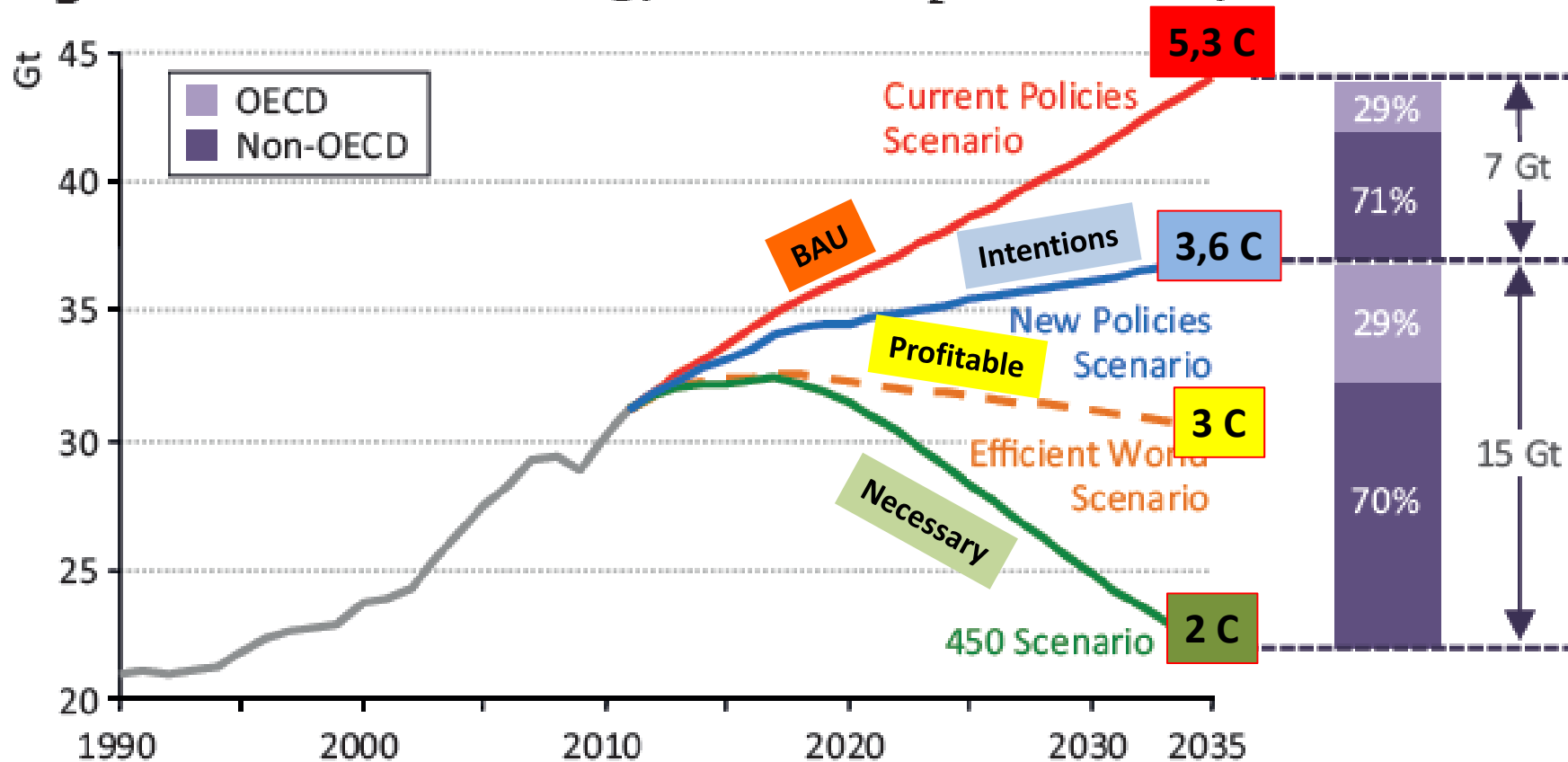
[http://ec.europa.eu/energy/action\\_plan\\_energy\\_efficiency/doc/com\\_2006\\_0545\\_en.pdf](http://ec.europa.eu/energy/action_plan_energy_efficiency/doc/com_2006_0545_en.pdf)

# WEO 2012



# GHG and temperatures

**Figure 8.3** ▶ Global energy-related CO<sub>2</sub> emissions by scenario



# A possible (and profitable) Europe by 2050



Federal Ministry for the  
Environment, Nature Conservation  
and Nuclear Safety



**Fraunhofer**

ISI

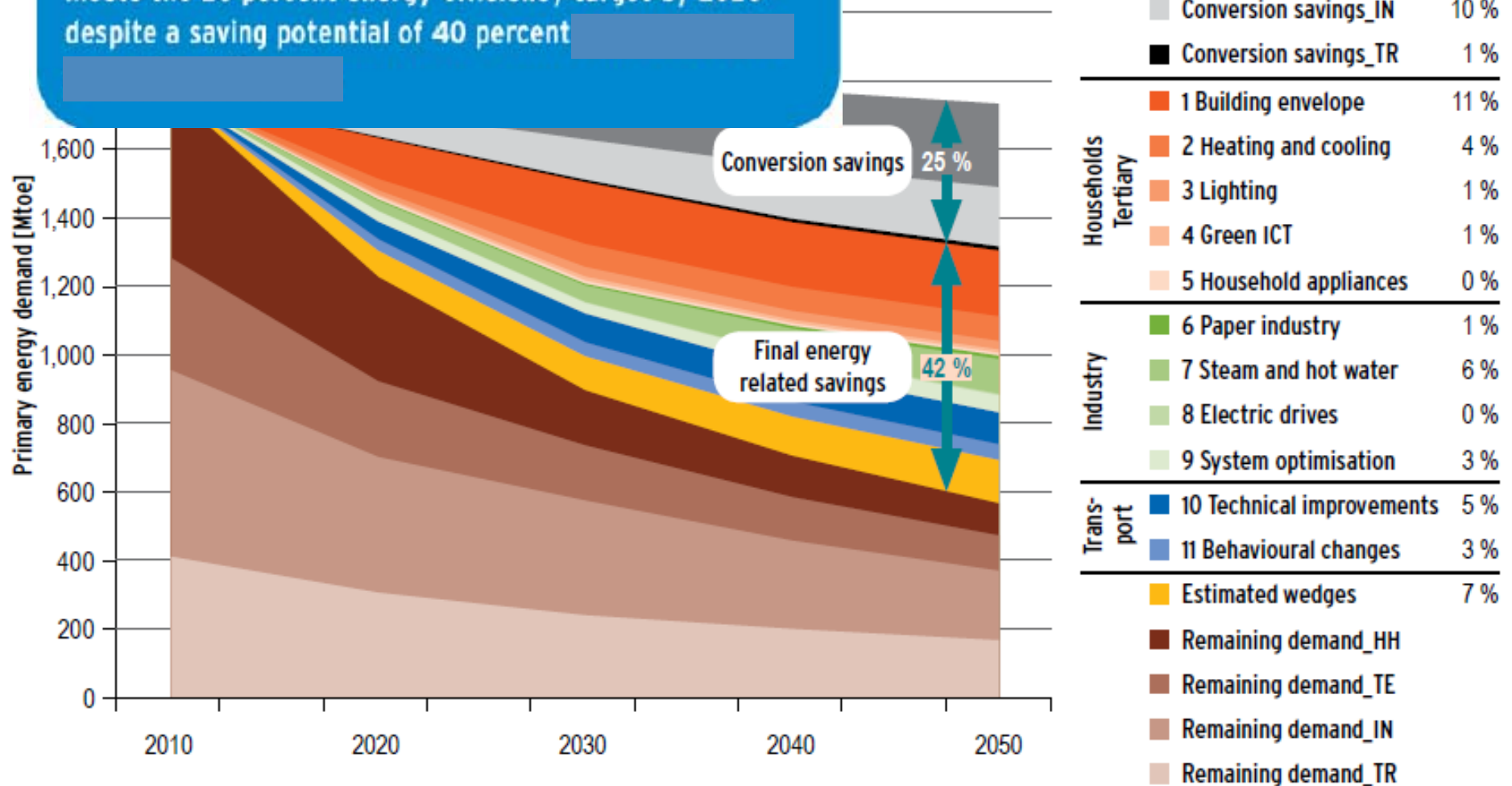
## Policy Report

**Contribution of Energy Efficiency Measures to Climate  
Protection within the European Union until 2050**

# Big and growing potentials within



**None** of the EU Energy Roadmap 2050 scenarios meets the 20 percent energy efficiency target by 2020 despite a saving potential of 40 percent



Potentials are there.  
Acceptans is not

**Efficient end-use**

=

**Potential**

\*

**Acceptans**



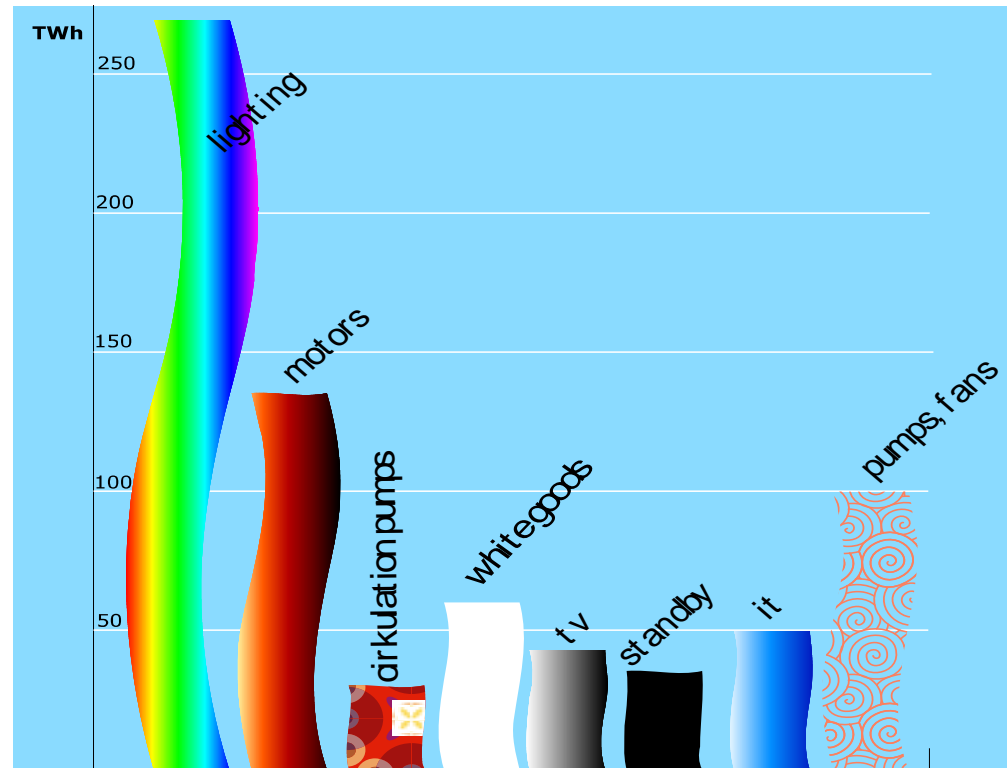
# EU power efficiency

Ecodesign directive saves:

**540** TWh  
= **100** nuclear reactors

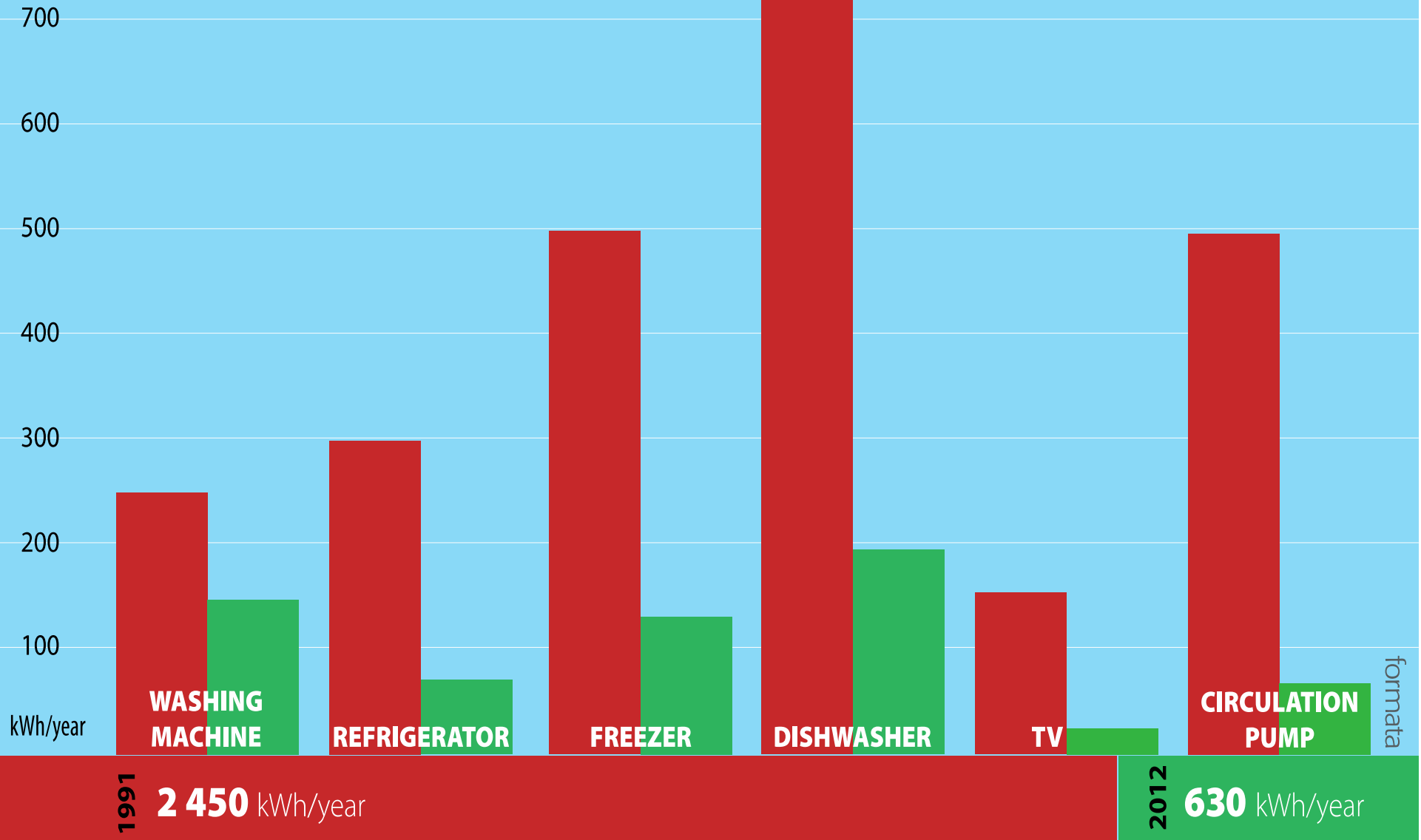
according to ECOS –  
European Environmental Citizens  
Organisation for Standardisation

**BAT saves**  
**> 725**



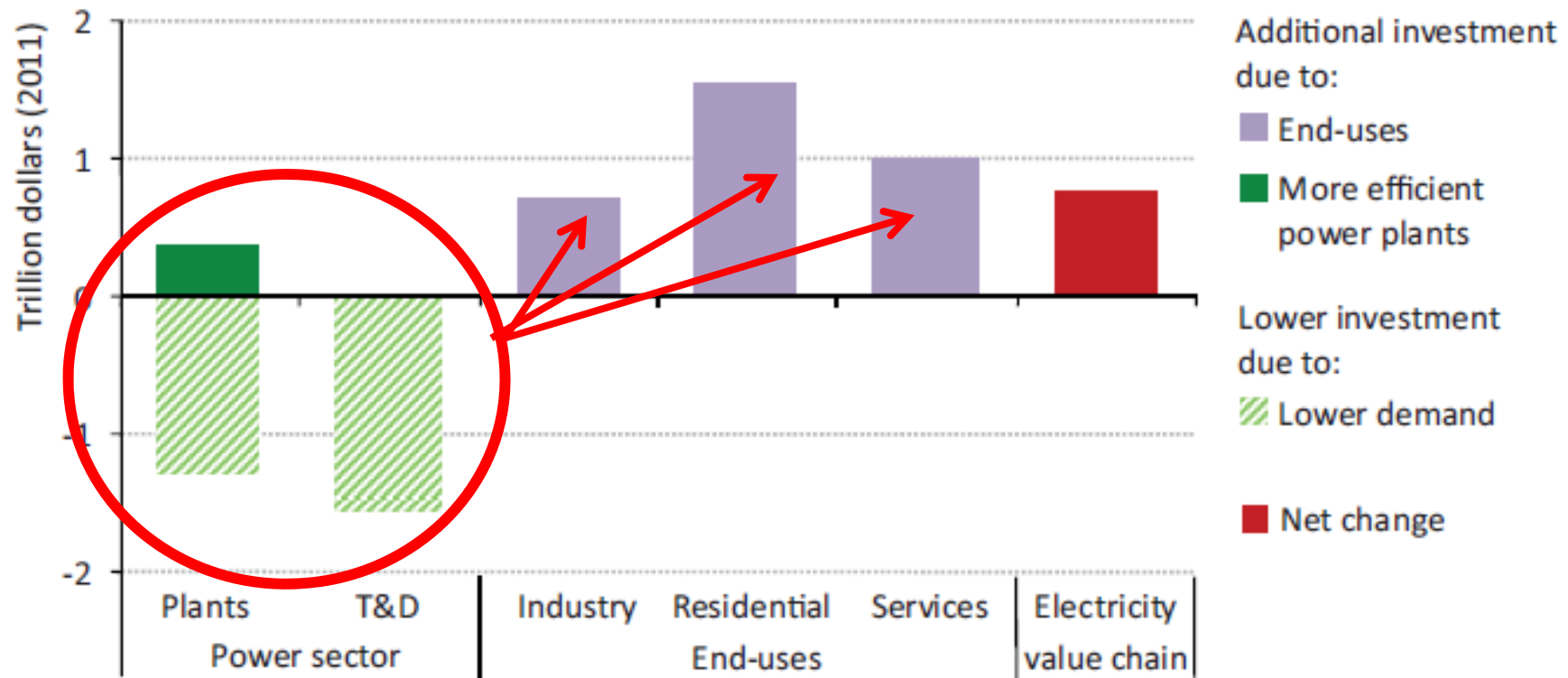
formata

# Shop Smart – Save 75%



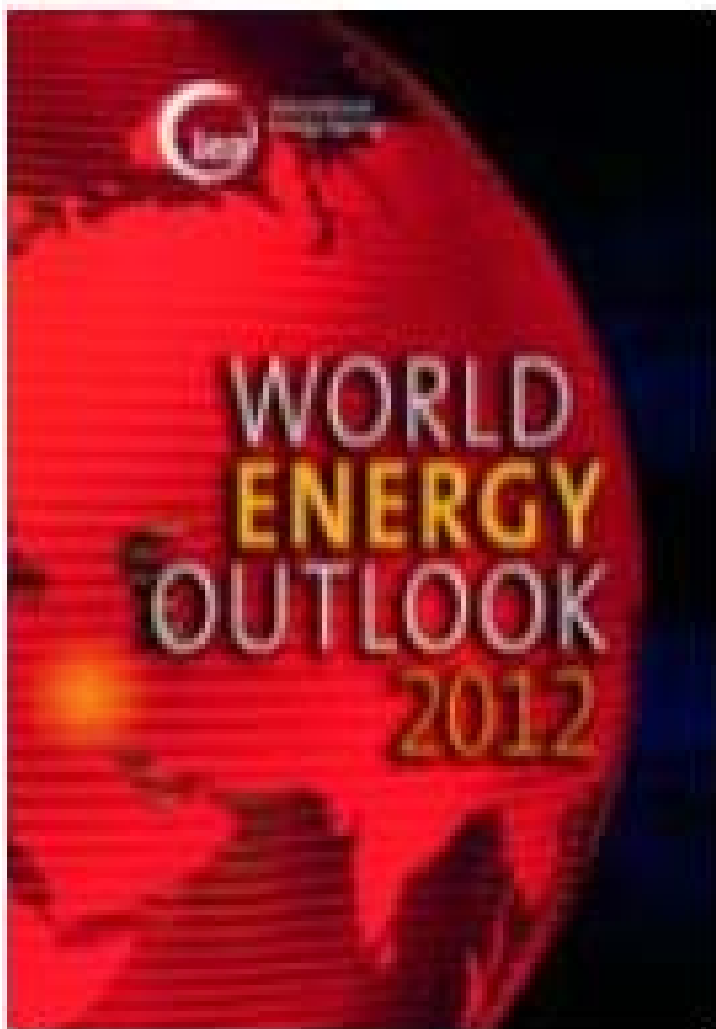
# Shift focus and investments from the supply side

**Figure 10.10** ▶ Change in investment across the electricity value chain in the Efficient World Scenario, compared with the New Policies Scenario, 2012-2035



# WEO 2012

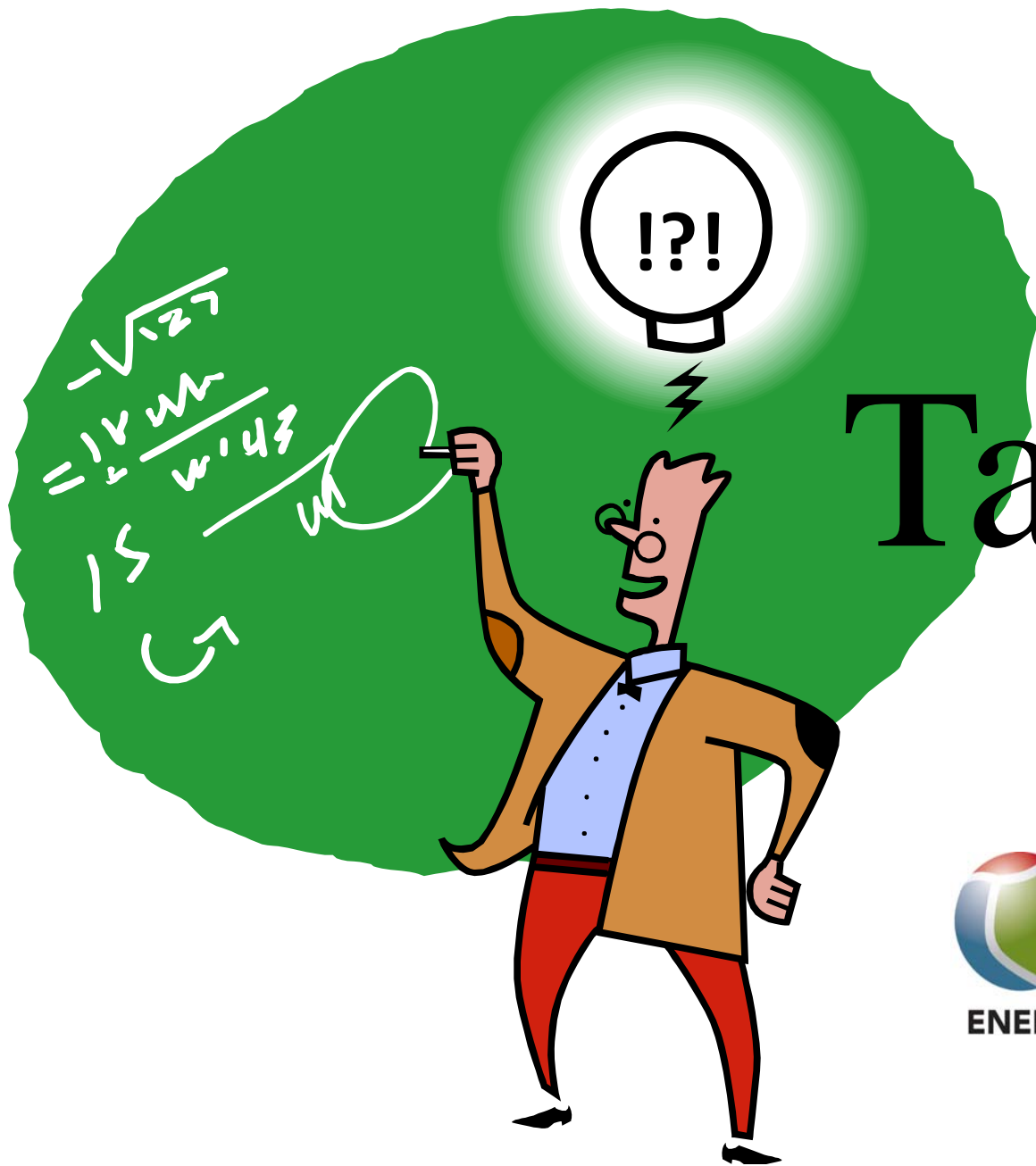
## (six steps to energy efficiency)



- **Visible** *(The energy performance of each energy end-use and service needs to be made visible to the market.)*
- **Priority** *(The profile and importance of energy efficiency needs to be raised.)*
- **Affordability** *(Create and support **business models, financing vehicles and incentives** to ensure investors in energy efficiency reap an appropriate share of the rewards)*
- **Normal** *(Energy efficiency needs to be normalised if it is to endure. Resulting **benefits from learning and economies of scale** help make the most energy-efficient option the normal solution.)*
- **Real** *(Monitoring, verification and enforcement activities are needed to verify claimed energy efficiency)*
- **Realisable** *(Achieving the supply and widespread adoption of energy efficient goods and services depends on an adequate body **of skilled practitioners** in government and industry.)*

Deployment is key and must move  
beyond the rhetoric!





# Tack!



**4-Fact**  
[www.fourfact.com](http://www.fourfact.com)