



---

# Making energy efficiency work for household appliances

**Luigi Meli**  
**Ceced Director General**

**Energy Charter Conference**  
**Geneva 28 May 2008**



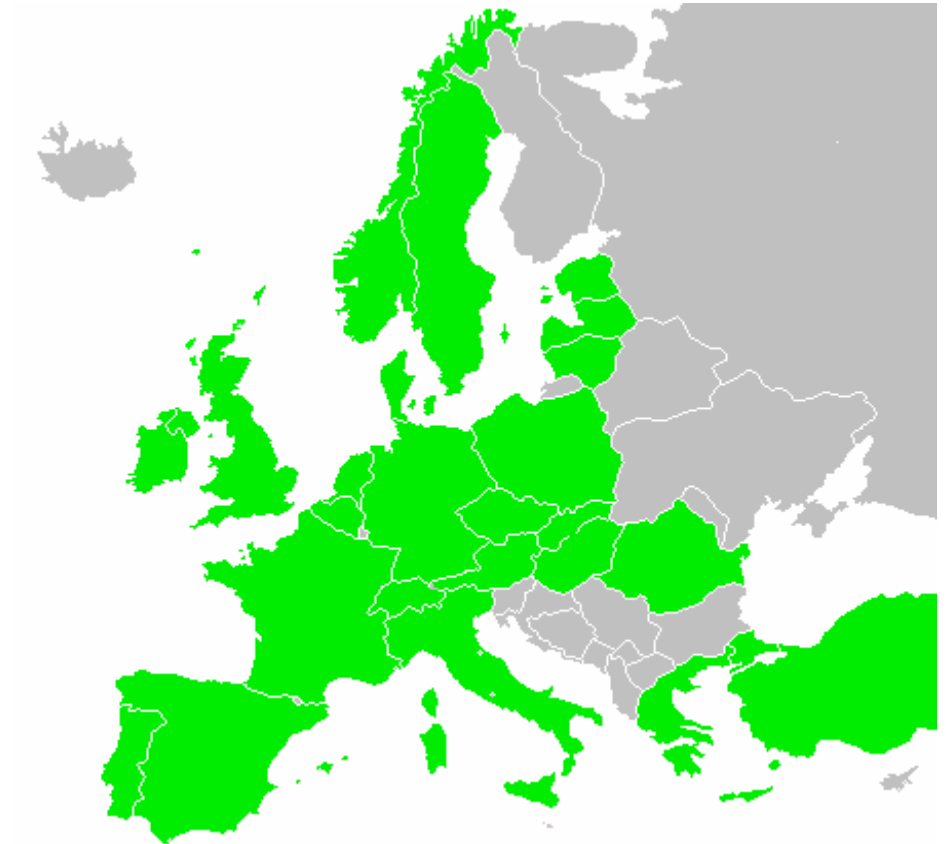
# CECED Members

---

## 15 company members

Arçelik  
Bosch und Siemens Hausgeräte  
Candy  
De'Longhi  
Electrolux  
Fagor/FagorBrandt  
Gorenje  
Indesit Company  
Liebherr  
Miele  
Merloni Termosanitari  
Philips  
Saeco  
SEB  
Whirlpool

## 26 national associations



# Investments have given impressive result

---

- ❑ €10 billion invested over the last 10 years mostly in energy efficiency.
- ❑ Refrigerators: 75% savings on energy consumption vs. 1990.
- ❑ Washing machines:
  - 40% savings on energy consumption vs. 1985
  - 60% savings on water consumption vs. 1985
  - improved washing performance.

# Appliance manufacturers' focus is twofold

---

- Diffusion of super-efficient energy using products as a key factor in any Energy Strategy.
  
- Overcoming the current divergence of international policies in terms of measurement standards and efficiency references .

# Three pillars for energy efficiency policies

---

- ❑ Performance requirements for new products.
- ❑ Increase of consumers' awareness.
- ❑ Diffusion of state of the art technology, in first installations and in replacement of old inefficient appliances.

# Obsolete stocks at work = huge energy waste

---

- ❑ In EU 27 Member states about 30/40% of the installed stock is energy-wise obsolete.
- ❑ 44 TWh/year demand could be avoided by replacing 188 million energy obsolete appliances in European households.
- ❑ This is equivalent to 22 MTons of CO<sub>2</sub> = 6% of original Kyoto targets for the EU.

# Worldwide picture is more concerning

---

**High penetration  
countries**

**Huge stock of obsolete appliances**

**Countries with  
more limited  
installed stock**

**Limited problem for the past  
Huge challenge for the future**

# Refrigerator example

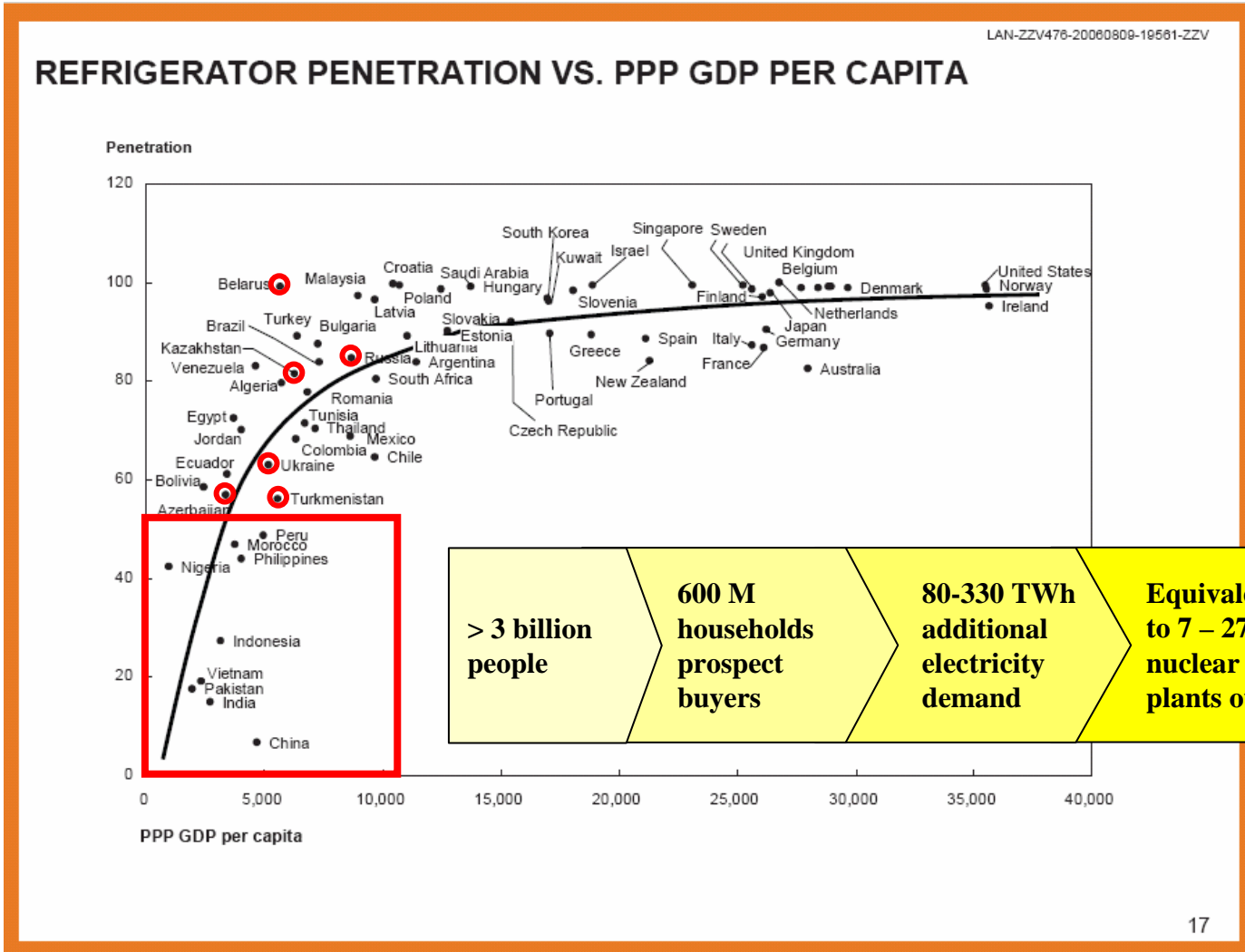


Chart source:  
McKinsey Institute

17



# Are refrigerators important for the future?

---

**More than 600 million households will demand for refrigerators in the countries with lowest penetration in the coming years.**

This may happen on the basis of

**available  
consumers  
income**

**best  
available  
technology**

**The  
annual gap  
is worth  
260 TWh.**

# Income dependence is the worst scenario

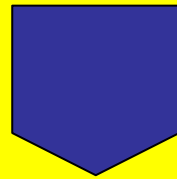
---

- ❑ Likely high share of inefficient products within the 600 millions future installations.
- ❑ Mix of second hand and low efficiency new products.
- ❑ Life expectation of some 13 years and more.
- ❑ Annual demand of some 330 TWh, for the next 15/20 years.
- ❑ 80% will be energy wasted to feed obsolete energy using products and not delivering any benefit to the consumer.

# Better to invest to avoid energy waste

---

**Potential electricity waste 260 TWh.**



**20 1GW Nuclear power plants (40 -80 B€)**

**or**

**144 Sleipner CO<sub>2</sub> sequestration plants (50 B€).**

**Cost evaluations are based on internet information and refer only to construction.**

**Transport /distribution infrastructure costs are not considered.**

Equivalences on the basis of IEA evaluations( P.Waide presentation to IEA workshop 28/2/2008).

# It is time to act

---

- ❑ 50 B€ would be enough to invest up to 75 € for each super efficient refrigerator placed on the new markets.
- ❑ It is worth that international financial institutions and organisations pay attention to the demand side of durable consumer goods.
- ❑ The investment would be not to produce better power plants but to avoid having to build them.

# Eight priorities

---

- International measurement standards.
- Dynamic label systems that foster innovation and international comparison.
- Investment in replacement of appliances in parallel to investment in energy supply.
- Custom duties brought to zero for energy efficient appliances.
- Prevention of international trade or refurbishment of obsolete inefficient second hand products.
- State aid only for factories producing efficient appliances.
- Enforcement of legislation.
- Involvement of stakeholders in international work.

# Thank you for your attention

CECED

European Committee of Household Appliance Manufacturers  
Boulevard Auguste Reyers 80, 1030 Brussels, Belgium

[www.ceced.eu](http://www.ceced.eu)

secretariat@ceced.eu, +32 2 706 82 90

