



**The Energy Future in
an Interdependent World**

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Energy efficiency policies: the need of standards

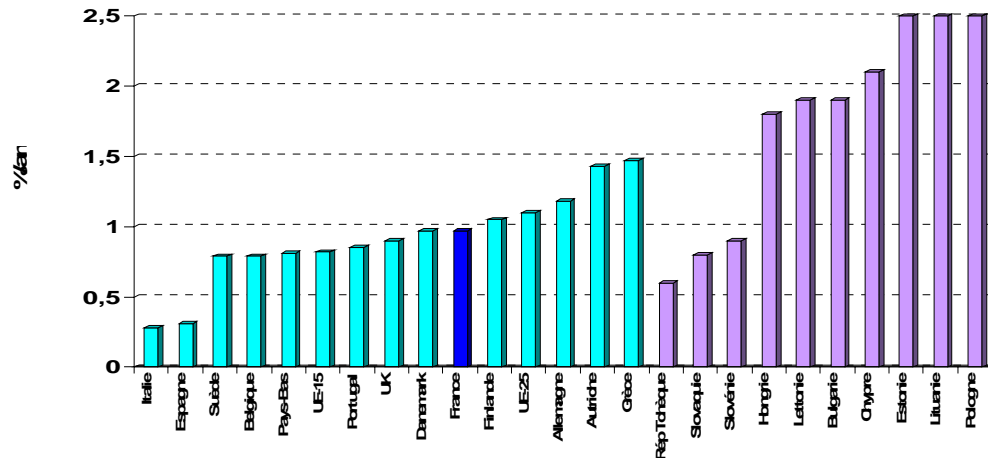
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A strong need of norms for energy efficiency policies implementation

- **Some examples :**
 - **Common methodologies to assess energy efficiency performances in countries/states/regions**
 - **Need to differentiate the best technologies among existing ones**
 - **Tools to measure energy efficiency actions in quotas or white certificates schemes**
 - **Methodologies for audits to ensure neutrality**

How to compare energy efficiency achievements in countries ?

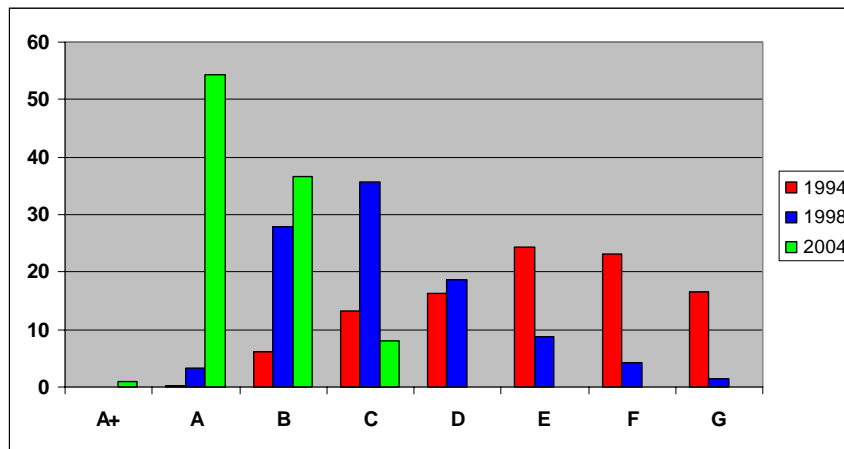
- Energy efficiency targets or objectives are identified at political levels (EU Directives, G8, national targets...)
- Energy intensity is not the best indicator for energy efficiency evolution (structural effects, industries delocalisation...)
- Several indicators exist already (top down indicators with structural effect adjustments such as ODEX, bottom up methodologies...)
- Governments and international organizations need common methodologies recognized at international level



**Energy efficiency progress
In EU since 1990.
(ODEX indicator)**

The need to differentiate best technologies

- Economic actors are generally not aware of marketed technologies performances (boilers, appliances, insulation materials, equipment, cars...)
- Introduction of labels or regulations need establishment of norms. WTO or EU internal market rules may impose international norms on technologies energy performances in order to avoid international competition distortion
- Differentiation may allow to introduce incentives such as
 - Tax credit, subsidies
 - Technical specifications in public procurements
- Norms should be regularly updated in a dynamic process taking into account technological progress (ex A+++++...)



Distribution of refrigerators market Shares (%) within EU labels categories : evolution between 1994 and 2004

Tools to measure energy efficiency actions

- Energy efficiency obligations, quotas and white certificates are often relying on ex-ante evaluation methodologies (ex : EEC in UK, white certificate schemes in Italy and France)
- Growing interest for these policies at international level and interaction with carbon market instruments (CDM, ETS...) will push for common methodologies
- CO₂ compensation schemes development raises the need for common methodologies agreed at international level

Methodologies for energy audits

- Energy audits are more and more part of energy efficiency actions undertaken by Esco's, energy suppliers, equipment manufacturers
- Energy audits include recommendations for energy efficiency investments and services (Energy Performance Contracting...)
- If audits are included within obligations set up by governments or subsidies schemes it is necessary to ensure neutrality of recommendations regarding energy vector, equipment, services... normalization is essential to comply with neutrality of recommendations