



# ***Energy Indicators: An instrument to better inform the policy decision process***

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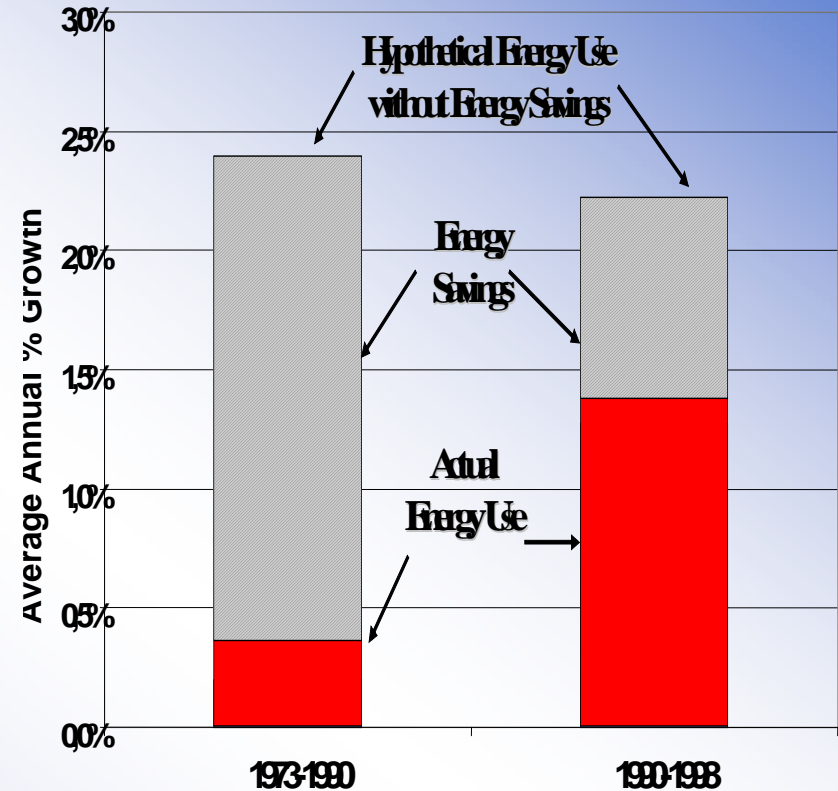
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## Monitoring System Performance:

# The Political Advantages

- Energy efficiency policy development slows when energy prices fall.
- A way to communicate to the broader policy community.



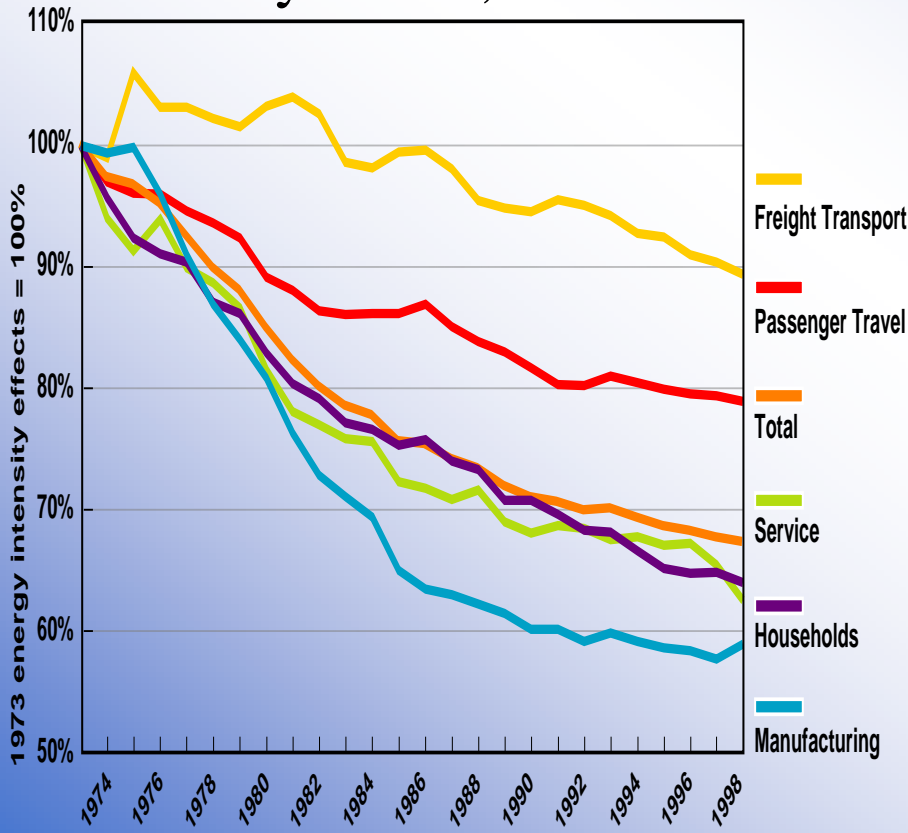
*Rates of energy savings have slowed significantly after 1990, leading to rapid demand growth*

# Monitoring System Performance:

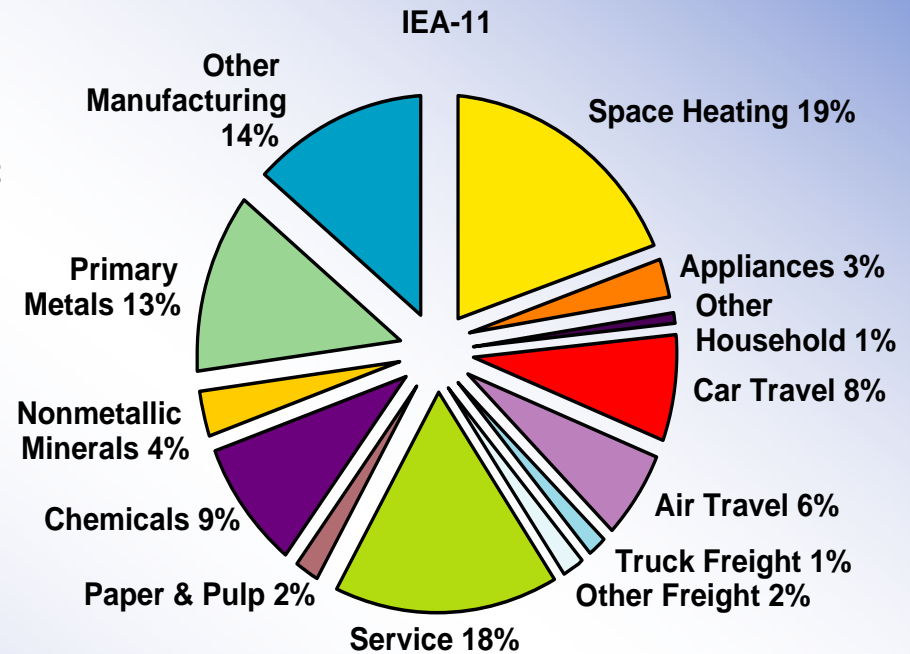


## Identification of Policy Progress

### Sector Intensities and Total Economy Effect, IEA-11



### Contribution to Energy Savings from Sectors and End Uses

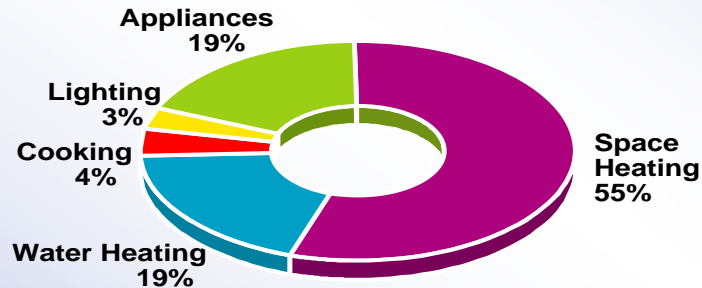
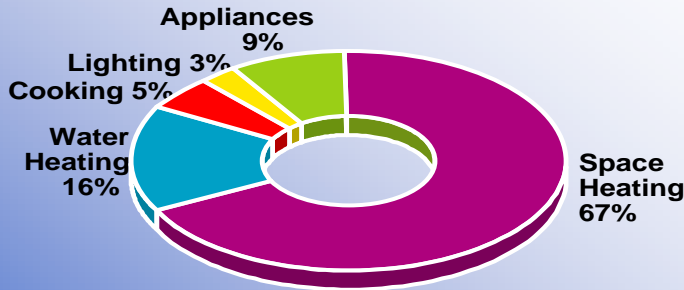
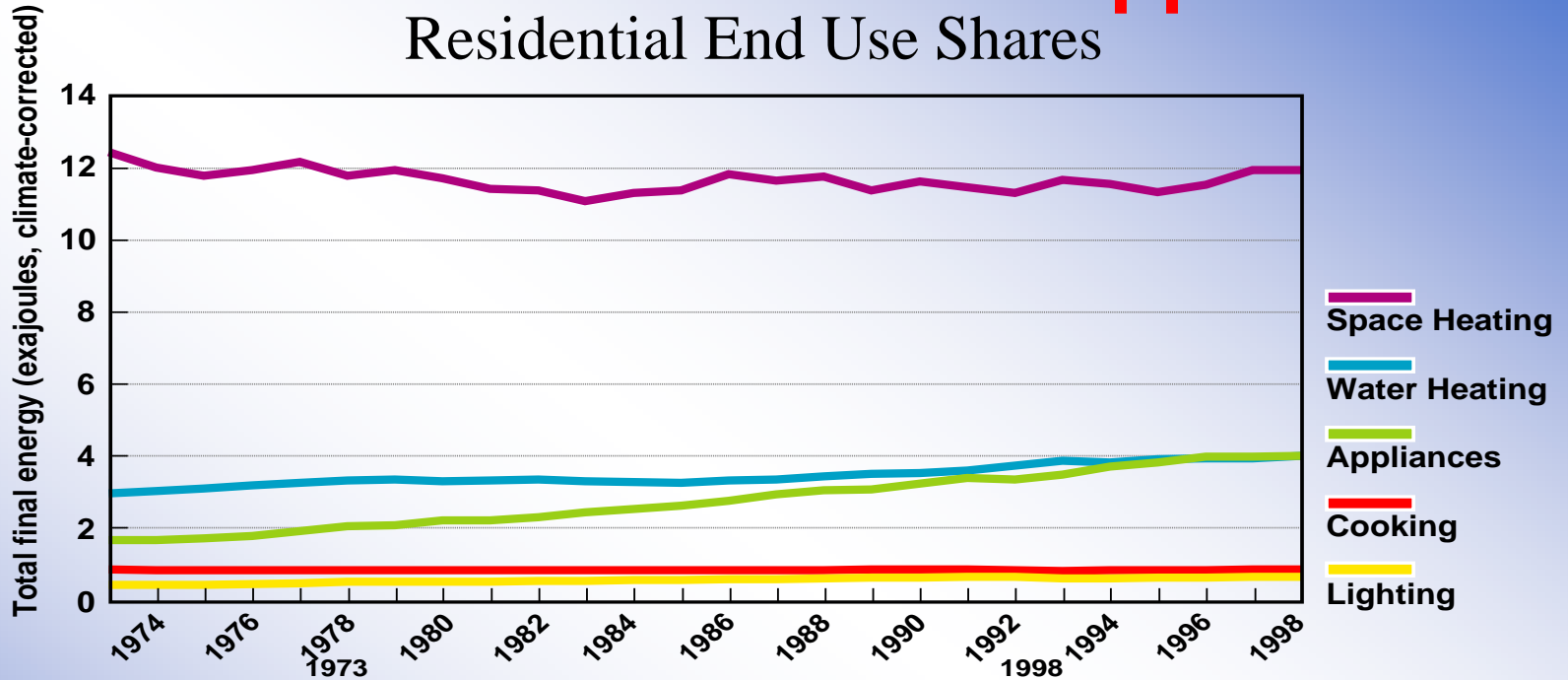


# Monitoring System Performance:



## Identification of Possible Opportunities

### Residential End Use Shares

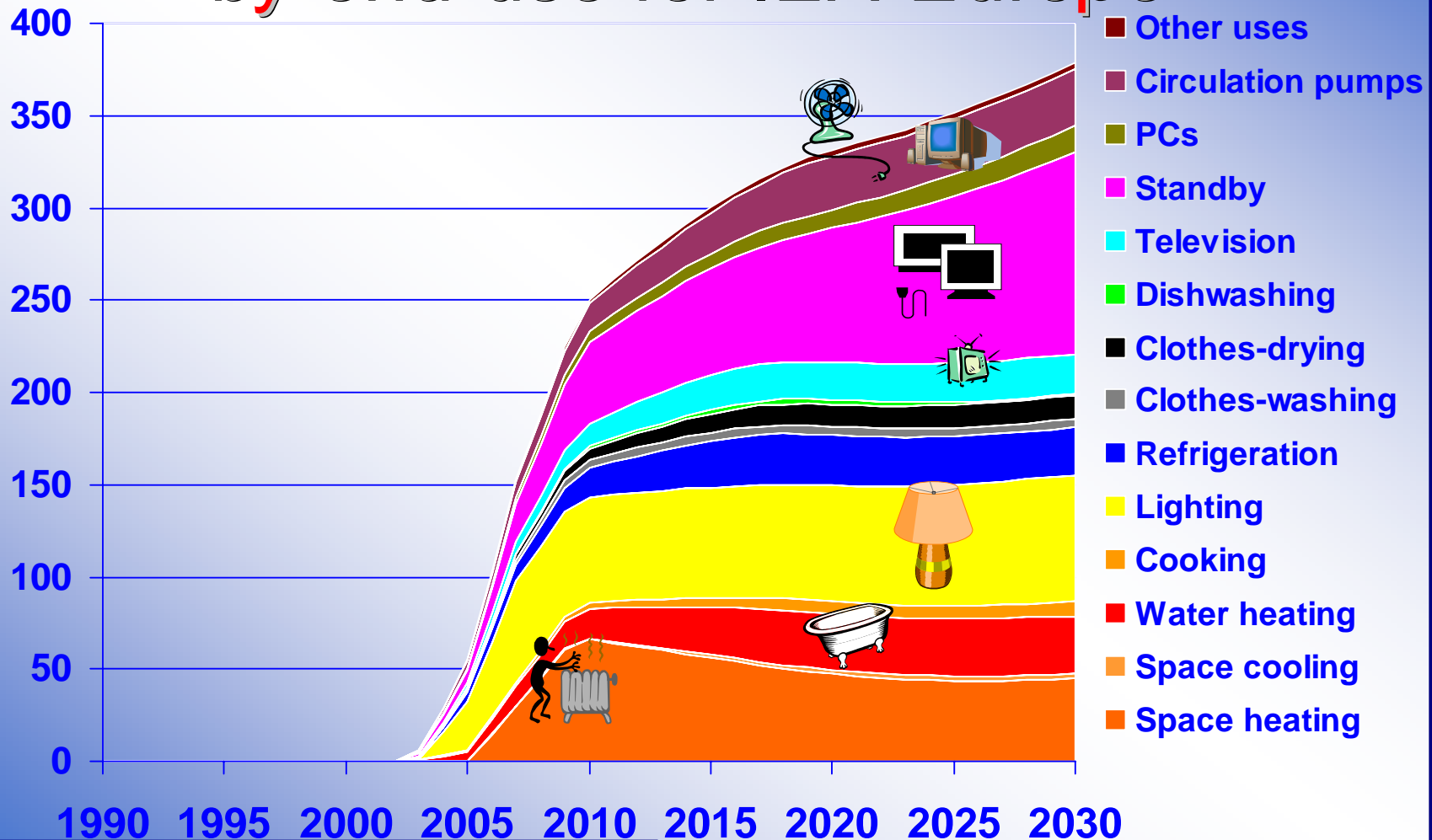


*Space heating still dominates but appliances are driving growth*

Links to Projections and Estimates of Policy Measures:



# Projected additional potential savings by end-use for IEA-Europe





# Systemic Stability

- Indicators of approaching fundamental change.
- Different in character
  - ◆ System structure
  - ◆ System boundaries
  - ◆ System direction and momentum.





Gleneagles Plan of Action:

## Why a Gleneagles Plan of Action?

- Energy and GHG emissions trends not favourable – Aggregate indicators seem alarming.
- Different perspectives on the best approach to move forward.
- A process to aid the “search for consensus” – the identification of areas of common agreement.



## The G8 Request: Transforming the Way We Use Energy

- Codes, Standards, Policies and Measures in Appliances, Buildings, Industry and Surface Transport
- Identification of Best Practice
- Energy Performance in Industry
  - ◆ Other sectors?
- Energy Indicators
- **BUT ALSO:** G8 leaders and IEA Ministers asked the IEA to “advise on alternative energy scenarios and strategies aimed at a clean, clever and competitive energy future”.



# Indicators and Best Practice

- **Policy Measure performance indicators – a tool in evaluation and assessment.**
  - ◆ **Common set of evaluation criteria**
- **Effective policy implementation will involve several aspects that would benefit from measures of performance:**
  - ◆ **Analysis and development of the policy**
    - **Stakeholder involvement**
    - **Duration of development process**
  - ◆ **Energy savings (effectiveness)**
  - ◆ **Cost**
  - ◆ **Enforcement**
  - ◆ **Review and adjustment**



# Indicators and Benchmarks

- **Benchmark – comparing the comparable**
  - ◆ A performance assessment (e.g. CO<sub>2</sub>/product; CO<sub>2</sub>/kWh) – use of a common emission factor
  - ◆ A baseline for evaluation of investment projects and/or emission reduction targets
  
- **Issues to be considered**
  - ◆ Setting the system boundaries of sectors/baseline
  - ◆ Geographic specificities: national/regional/local?



## Indicators and Strategy Development

- **Similar information to “best practice”**
  - ◆ **Energy sector effects**
    - Efficiency of energy use
    - Fuel choice implications
  - ◆ **Cost**
    - Capital and operating
    - Non-monetized “costs”
  - ◆ **Distributive effects (equity)**
- **Time dimension more important – trends**
- **Differing national circumstances**