



	Environmental Tradeoffs of the Energy-using Products (EuP) Directive and Product Policy				
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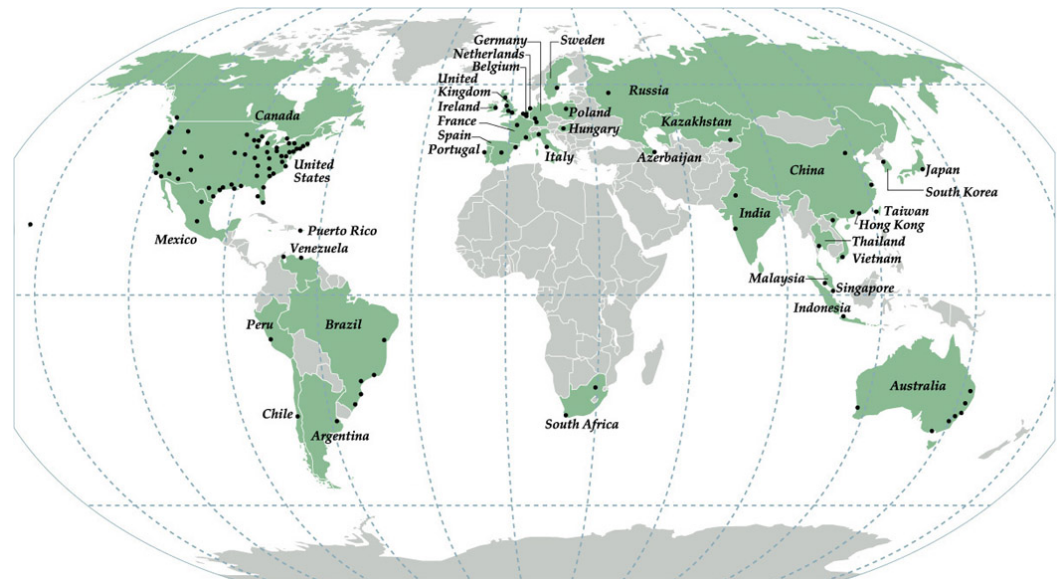
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ERM: Global Outlook - Local Implementation

- ERM is one of the world's leading providers of environmental consulting services
- 3 000 professional staff in 40 countries
- ERM works closely with over 55% of the Global Fortune 500 companies in the past 4 years
- Annual turnover of US\$425.4m (FY05)
- Over 30 years of experience
- Large LCM and LCA expertise



Study Aim

- **UK Department for Environment, Food and Rural Affairs (Defra) commissioned ERM to conduct the study**
- **Sustainable Consumption and Production Programme**
- **Aim was to develop an ‘evidence base’ to:**
 - assess how actions brought about by the EuP Directive interact with other product policies eg WEEE, RoHS and Eco-labelling.
 - identify synergies and conflicts from an economic, environmental and policy perspective.
- **Support UK policy development: (1) creation of regulatory impact assessments (RIAs) and (2) to identify issues relevant for the UK when negotiating implementation measures**



Background: EuP Directive



- **The EuP Directive is a framework for setting future eco-design requirements for EuPs**
- **Prevents products being placed on European market**
- **Directive will set standards for eco-design or introduce voluntary agreements**
- **The purpose of the EuP Directive is to:**
 - ensure free movement;
 - improve the overall environmental performance of these products; and
 - contribute to the security of energy supply and EU competitiveness.

Background: EuP Directive



- **Directive covers all energy-using products, except for transportation**
 - using electricity, solid, liquid and gaseous fuels
- **Environmental performance throughout the life-cycle**
- **Aims to improve energy efficiency, reduce resource use and reduce emission of greenhouse gases**
- **Directive will define criteria for environmentally relevant product characteristics eg water consumption, energy consumption, waste generation or product life.**
 - requirements should be established on the basis of technical, economic and environmental analysis

Background: EuP Directive



- **14 candidate products initially identified for potential requirements**

- 1. Boilers**
- 2. Water heaters**
- 3. PCs and monitors**
- 4. Copiers, faxes, printers, scanners, multi-functional devices**
- 5. TVs**
- 6. Standby- and off-mode losses**
- 7. Battery chargers and external power supplies**
- 8. Office lighting**
- 9. Street lighting**
- 10. Residential air-conditioning**
- 11. Electric motors of 1-150 kW**
- 12. Commercial fridges and freezers**
- 13. Domestic fridges and freezers**
- 14. Domestic dishwashers and washing machines.**

Background: EuP Directive



- **5 further candidate products identified**
 - 15. Solid fuel boilers**
 - 16. Laundry driers**
 - 17. Industrial air compressors**
 - 18. Electric heating appliances (including heat pumps)**
 - 19. Domestic or industrial lighting**

Background: Other Product Policy



- **Other product policy and regulations include:**
 - WEEE Directive (2002/96/EC)
 - Buildings Directive (2002/91/EC)
 - RoHS Directive (2002/95/EC)
 - European Energy Star (2422/2001/EC)
 - Eco-labelling
 - Energy Labelling (92/75/EEC)
 - Packaging Directive (94/62/EC)
 - Hot-Water Boilers (92/42/EEC)
 - Batteries Directive (91/157/EEC)
 - Domestic Refrigeration (96/57/EC)
 - Landfill Directive (99/31/EC)
 - Fluorescent Lighting (2000/55/EC)

Project Scope



- **Primarily desk research, including a review of:**
 - official EU Directive texts
 - public documentation across 11 EU countries
 - academic sources
- **Stakeholder consultation**
- **Review across 11 EU countries:**
 - » Italy;
 - » France;
 - » UK;
 - » Germany;
 - » Poland;
 - » Spain;
 - » Denmark;
 - » Sweden;
 - » Austria;
 - » Belgium; and
 - » Finland.

Project Scope



- **Reviewed evidence to identify issues in conflict or synergy with the EuP Directive**
- **Generally limited information available due to early stage of implementation of EuP Directive across EU**
- **10 issues identified**
- **Where possible, assessed each issue identified on several criteria:**
 1. Evidence of environmental concern
 2. Economic evidence
 3. Political evidence
 4. Potential transferability of learning
 5. Potential for informing policy in the UK
 6. What priority is the issue
 7. How robust is the evidence

Results and Findings

1	WEEE Directive	Synergy	<i>Eco-design:</i> Producers will be encouraged to design and to manufacture products to facilitate reuse and recycling	Low
2	WEEE Directive	Conflict	<i>Reuse/recovery:</i> Under the WEEE Directive reuse and material recovery are considered the best environmental options.	Med
3	WEEE Directive	Conflict	<i>Product categories:</i> The WEEE Directive defines ten different categories of electrical and electronic equipment. There is potential for differing requirements across categories.	Low
4	RoHS Directive	Synergy	<i>Restriction experience:</i> The RoHS Directive regulates the use of certain hazardous substances in electrical end electronic products. EuP Directive may encourage avoidance of additional substances in all phases of the products life cycle.	Low

Results and Findings

5	RoHS Directive	Synergy	<i>Data management:</i> Under the EuP Directive manufacturers need to provide an ecological profile of product over life cycle. RoHS is good preparation for practice of supply chain management.	Med
6	RoHS Directive	Conflict	<i>Burden shifting:</i> Substituting certain substances under the RoHS Directive has potential to lead to conflicting requirements with EuP across life cycle eg from shifting of burdens	Med
7	Eco-labels	Synergy	<i>Eco-design:</i> Eco-design requirements will be complementary and provide supporting information of environmental aspects and compliance.	High
8	Packaging Directive	Synergy	<i>Distribution:</i> Packaging is not an energy using product. However, the environmental impact of a product over its life-cycle should include the impact of distribution, where packaging can be a vital part.	Very Low

Results and Findings

9	EMAS scheme	Synergy	<i>Scheme dissemination:</i> The EuP Directive may increase the dissemination and visibility of the EMAS scheme where enterprises cover product design to support EuP Directive conformity.	Med
10	Energy Star	Synergy	Energy Star will support evaluation of energy aspects of product conformity.	Med

Results and Findings

- **Industry generally favoured use of voluntary agreements eg Energy Star**
 - **Voluntary agreements:**
 - Perceived advantages: quicker implementation; quicker reaction to market changes; and easier acceptance.
 - Perceived disadvantages: low level of coverage; involvement of SMEs low; and negotiation effort to set eco-design targets.
 - **Energy Star as a Policy model:**
 - Focuses on use phase and energy consumption
 - Target set to remove low performers rather than increase high performers
 - Non-energy related eco-design parameters imply greater supply chain management
 - **Implementing measures:**
 - Perceived advantages: directly cut-off low performers from market; eco-design parameters apply equally across the market.
 - Perceived disadvantages: slower to implement; loss of industry control; and reduce innovation.

Conclusions

- **The following overall conclusion may be drawn from the research:**
 - The EuP Directive is expected to realise environmental benefits.
 - There exist several significant positive connections (synergies) between the EuP Directive and other product policy and regulation.
 - » Energy labelling – use of existing systems
 - » RoHS – data provision
 - » RoHS – experience of substance restriction
 - The conflicts identified relate to the overlap between the product policies/regulation and on points of clarity, rather than identifying any direct opposition.
 - » WEEE – reuse/recycling priority
 - » RoHS – burden shifting
 - Larger industry generally in favour of voluntary initiatives

Questions

Thank you for your attention.