

Workshop on Environmental Requirements and Market Access for Developing Countries: How to Turn Challenges into Opportunities? Geneva, 3-4 July 2006

Electrical and Electronic Equipment (EEE) and Energy-using Products (EuP)

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EEE and EuP

EEE-related issues

[Has been focus of DFID and CTF activities]

- Covers several categories of EEE
- EC WEEE and RoHS Directive focus on waste from EEEE
- RoHS legislation in EU, California and China focuses on hazardous substances that may complicate waste management

EuP-related issues

[No CTF activities so far]

- Covers most EEE and other EuP
- EuP Directive focuses on several environmental aspects, based on life-cycle thinking
- Greenhouse gas mitigation through increased energy efficiency considered a priority environmental goal pending the adoption of a working plan.
- Eco-design

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EEE

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UNCTAD ACTIVITIES ON EEE



UNCTAD TRADE AND ENVIRONMENT REVIEW 2006

DFID-funded project:

- Studies as well as national and regional stakeholder consultations) on the experiences of China, the Philippines and Thailand

CTF:

- UNCTAD-UNESCAP workshop on Exchanging National Experiences among the Principal Exporting Developing Countries - Environmental Requirements and Market Access for EEE (Bangkok, 25-27 May 2005)
- Same countries + Malaysia

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The AEDE Project (Asia Eco Design Electronics)

Funded by EU Asia Pro Eco Programme:

- Assess implications of EU Directives (WEEE, RoHS, EuP) on component suppliers in India, China and Thailand
- Provide information and develop capacity building plans
- Develop eco-design tools

- Website: www.cfsd.org.uk/aede

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BACKGROUND [1]

- Concern over environmental and health problems associated with growing volumes of post-consumer waste from EEE has triggered significant environmental policy initiatives.
- Comprehensive new environmental legislation in Europe and Japan and, at sub-national, in the US (e.g. California)
- The EEE industry: production of components and assemblage increasingly outsourced to developing countries.
 - China, Malaysia, the Philippines and Thailand now supply large part of developed countries' imports of EEE
- Legislation and private-sector initiatives have implications throughout the supply chain.

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BACKGROUND [2]

- The EEE sector is of dynamic export interest to several developing countries
- Developing countries need to make adjustments (a) to meet requirements transmitted through the supply chain and (b) address problems associated with growing volumes of domestic post-consumer EEE-waste (and imports of used EEE).
- To achieve this, these countries not only need accurate and timely information, but also assistance in the interpretation of information to make it relevant for adjustment strategies

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LEGISLATION

- **European Union**
 - Waste Electrical and Electronic Equipment (WEEE) Directive
 - Restrictions on the Hazardous Substances (RoHS) Directive
- **Japan**
 - Home Appliances Recycling Law (HARL)
 - Law for the Promotion and Effective Utilisation of Resources (LPEUR)
- **State of California**
 - The Electronic Waste Recycling Act of 2003
- **China**
 - Management Methods for the Prevention and Control of Pollution from Electronics Information Products ("Chinese RoHS")
- **Thailand**
 - Legislation on WEEE and RoHS under preparation
 - Introduction of strict regulation on imports of second-hand EEE

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ELIMINATION OF HAZARDOUS SUBSTANCES

- **The RoHS Directive**
 - Eliminate hazardous materials from waste streams by prescribing that as of 1 July 2006 new EEE put on the market may not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (PBDE), with certain exceptions.
- **California**
 - Same substances as ROHS
- **Chinese ROHS**
 - Substance restrictions affecting a broad range of products, parts and components defined as "electronic information products" ("EIP") as of 1 March 2007

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PRODUCT CATEGORIES COVERED

- Large household appliances (e.g. fridges and washing machines)
- Small household appliances (e.g. vacuum cleaners, irons)
- IT and telecommunication equipment (e.g. PCs, photocopiers, telephones)
- Consumer equipment (TV, videos, hi-fi equipment)
- Lighting equipment (e.g. fluorescent lamps)
- Electrical and electronic tools (e.g. drills, sewing machines)
- Toys (e.g. video games)
- Medical equipment (not covered by RoHS)
- Monitoring equipment
- Automatic dispensers (e.g. drinks machines)

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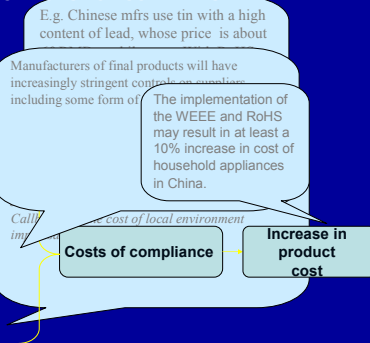
IMPLICATIONS FOR SUPPLIERS

a. Costs of compliance

Technology substitution, R&D

Product certification

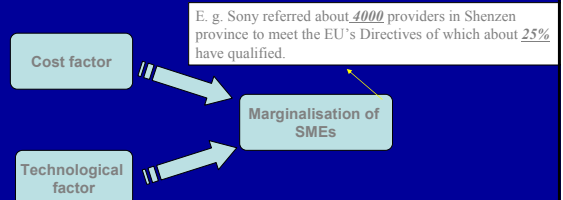
Cost of call-back



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IMPLICATIONS (2)

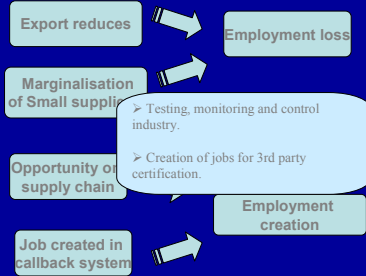
b. Marginalisation of SMEs



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IMPLICATIONS ...

c. Employment impacts



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SUPPLIER MATERIAL DECLARATIONS

- Many customers are demanding information from suppliers to have assurance that products are in compliance with RoHS.
- This may be through supplier material declarations, a document that discloses the part per million (ppm) levels of substances in a product.
- Demands from customers vary in terms of scope, content, type and format of material disclosures.
- Some customers are applying safety margins or are requiring disclosure beyond RoHS-banned substances.

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STANDARDS FOR TESTING PROCEDURES

- There is currently no internationally harmonized conformity assessment test for the complete removal of heavy metals and other problematic substances from EEE, which complicates technically and commercially compliance assurance by producers.
- However, the International Electrotechnical Commission (IEC) TC 111 Working Group 3 is developing a standard on test procedures for the determination of six regulated substances in EEE.

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MISSION AND GOAL OF IEC TC 111 WG 3

- **Mission:**
 - Develop a standard that will define test procedures that will allow the electrotechnical industry to determine the concentration of the regulated substances (EU RoHS, China, United States, Japan) in electrotechnical products on a consistent global basis
- **Goal:**
 - Develop a standard for electrotechnical industry to be used by labs globally for OEMs, suppliers, NGOs, governments, etc.
 - The draft standard will be submitted as proposal for an IEC standard

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RECOMMENDATIONS

To regulatory and standards-setting authorities

- Disseminate, as early as possible, information on new environmental requirements and likely implications for developing countries with a key export interest
- Provide information on implications of new environmental regulations for developing countries and on technical cooperation/capacity building programmes.
- In stakeholder consultations and regulatory impact assessments, address the implications for developing countries, especially SMEs.
- Be proactive in facilitating the participation of developing countries in stakeholder consultations.
- In designing flanking policies, pay attention to addressing the constraints of and offering opportunities for developing countries.

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RECOMMENDATIONS

To governments and the business sector in key developing countries

- Design proactive adjustment policies
- Identify the implications for SMEs and promote SME alliances to better cope with new requirements
- Explore early-warning mechanisms, including an assessment of likely impacts and adjustments to be made.
- Implement cost-effective eco-design programmes.
- Strengthen environmental management systems, paying more attention to product-related aspects (e.g. in the context of ISO 14001).
- Participate in further consultations with developed countries.
- Analyze beneficial and catalytic effects of meeting new environmental requirements.

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RECOMMENDATIONS to CTF

- Continue to promote the exchange of national experiences on pro-active adjustment policies.
- Facilitate studies on implications of developments in supply chain management for SMEs and the feasibility of the creation of alliances of SMEs.
- Help facilitate early interaction between developing and developed countries on standards and legislation.
- Support the planning and implementation of capacity-building activities.

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EuP

- In Europe it has been estimated that over 80 per cent of all product-related environmental impacts are determined during the product design phase
- Integrating environmental considerations as early as possible into the product development process is therefore considered to be the most effective way of introducing changes and improvements to products

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EuP DIRECTIVE

- Framework for setting eco-design requirements for EuP before they can be placed on the market.
- Does not contain immediate obligations for manufacturers, but it enables detailed implementing measures that the Commission, assisted by a Regulatory Committee, is to bring forward for specific products over time.
- Published in May 2005. Within two years the Commission, in consultation with stakeholders via a Consultation Forum (to be established in 2006) is required to publish a work programme for the following 3 years.
- National transposition before 11 August 2007.
- First implementing measures creating eco-design obligations for some EuPs may be adopted in 2007.

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EuP DIRECTIVE

- Implications for developing countries depending on the implementing measures that are adopted in the future
- Some key issues:
 - Which products will be selected for implementing measures?
 - Will suppliers of components and subassemblies be affected by implementing measures?
 - How will manufacturers in developing countries have to demonstrate compliance?
 - Will implications for developing countries be considered in impact assessments and cost-benefit analyses?
 - How can developing countries comment?

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PRODUCT COVERAGE

- No list of EuP that may be covered by implementing measures
- Selection criteria: products that
 - Represent significant volume of sales (indicatively more than 200,000 units a year within the Community);
 - Have a significant environmental impact
 - Present significant potential for improvement in terms of its environmental impact without entailing excessive costs.
- Work plan is to set out an indicative list of product groups which will be considered as priorities
- The EC has commissioned assessment studies.

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ASSESSMENT STUDIES

- Boilers and combi-boilers (gas/oil/electric)
- Water heaters (gas/oil/electric)
- Personal computers (desktops and laptops), computer monitors
- Imaging equipment: copiers, faxes, printers, scanners, multifunctional devices, consumer electronics, televisions
- Battery chargers and external power supplies
- Office lighting
- (Public) street lighting
- Residential room conditioning appliances (airco and ventilation)
- Electric motors (1-150 kW) and water pumps (in commercial buildings, drinking water pumping, food industry, agriculture)
- Fans for ventilation (non residential buildings)
- Commercial refrigerators and freezers
- Domestic refrigerators and freezers
- Domestic dishwashers and washing machines

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PRO-ACTIVE ADJUSTMENT STRATEGIES

- Pro-active adjustment strategies to new environmental requirements, including the promotion of eco-design, may assist developing countries in meeting new requirements and turning challenges into opportunities.
- This involves taking into account the benefits of, for example, greater energy efficiency and improved post-consumer management of products in both developed and developing countries.
- Such strategies may also contribute to the security of energy supply, an important policy objective for countries such as China and India.
- CTF applied for membership of EuP Consultation Forum to represent Developing Countries' perspective

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POSSIBLE ISSUES FOR DISCUSSION

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POSSIBLE ISSUES FOR DISCUSSION

- How should CTF follow up on its work in the area of EEE?
- Key issues to be addressed in further exchanges of national experiences in pro-active adjustment policies in the area of management of waste from EEE in the light of external and domestic environmental requirements?
- How can cost-effective eco-design strategies assist developing countries in coping with environmental requirements and achieving national objectives in the areas of energy efficiency (including security of energy supply) and waste management?
- What can developing countries do to prepare for EuP Directive?
- What should be the role of CTF in the area of EuP?
- What co-operative arrangements with other initiatives could be forged?

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