

Meeting WEEE Obligations and Designing for the Future

Electrical and Electronic Waste 2006

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Introducing our case: Sony Computer Entertainment Europe Ltd. (SCEE)

- Headquartered in London
- Responsible for the distribution, marketing and sales of PlayStation®2 and PSP® (PlayStation®Portable) software and hardware in 102 territories across Europe, the Middle East, Africa and Oceania
- Over 42 million PlayStation 2 consoles have been shipped across the SCEE territories*
- Over 8 million PSP systems have been shipped across the SCEE territories*
- Sales of gaming products accounted for 12.3% of Sony Group's global sales revenues, up 31.4% on 2005

* Figures are for the period up to the end of September 2006



PLAYSTATION 3

PlayStation®2



Presentation structure and objectives

- 1. IMPLEMENTATION IN EUROPE**
Provide an overview of producer responsibility in Europe
- 2. AN IMPLEMENTATION CASE STUDY**
Outline a producer's response to WEEE implementation
- 3. LINKS TO DESIGN**
Review issues for design incentives from WEEE

The views and interpretations presented here are my own, and not necessarily those of Sony Computer Entertainment Europe

Presentation structure and objectives

1. **IMPLEMENTATION IN EUROPE**

- Producer responsibility Directives
- Producer Recycling Organisations (PROs)
- Trends for WEEE

2. **AN IMPLEMENTATION CASE STUDY**

Outline a producer's response to WEEE implementation

3. **LINKS TO DESIGN**

Review issues for design incentives from WEEE

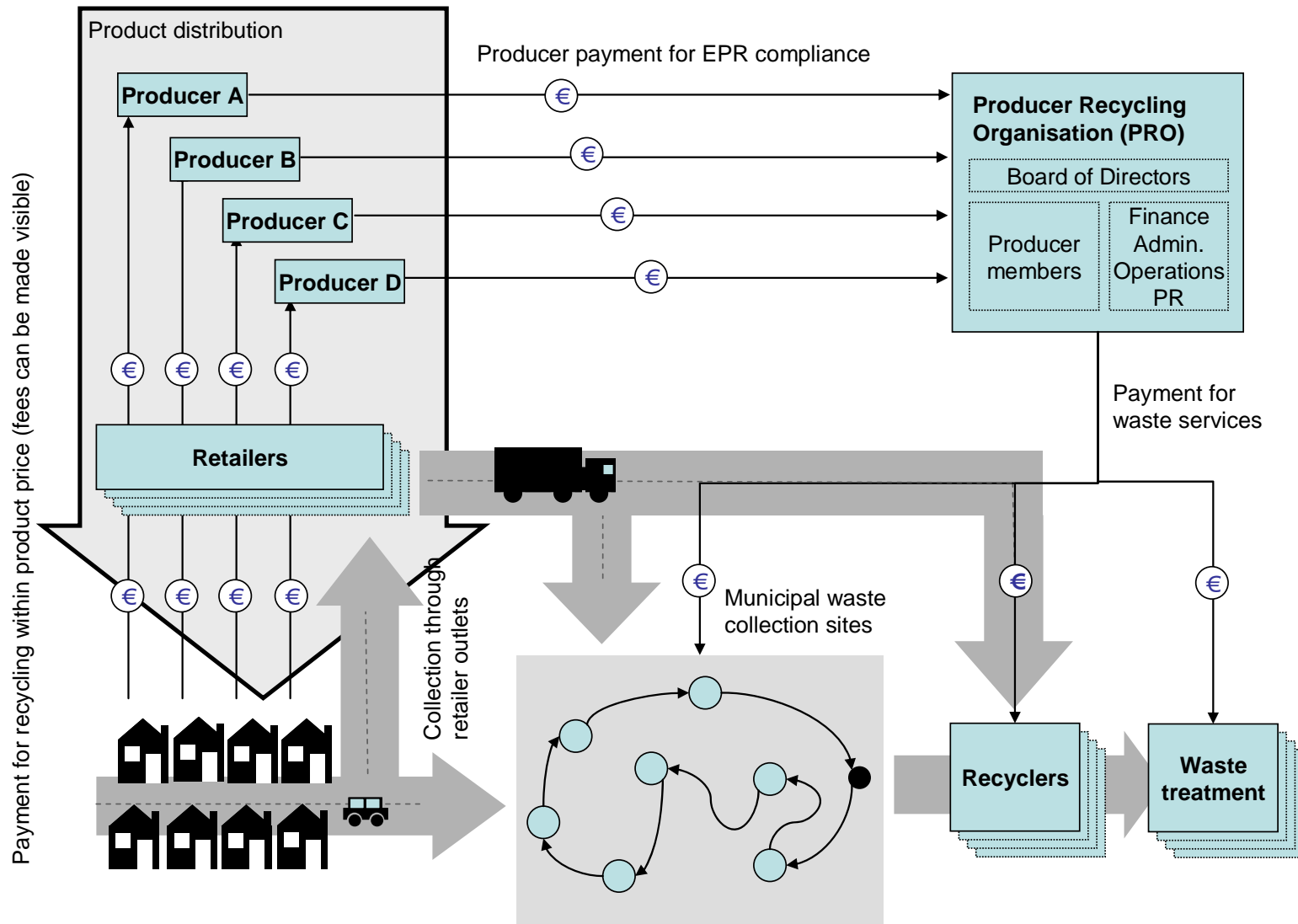
All EU Extended Producer Responsibility Directives can impact EEE producers

Producer Responsibility applied to WEEE, packaging, batteries, and automobiles in EU:

- 1991** Batteries and Accumulators Directive (91/157/EEC)
- 1994** Packaging and Packaging Waste Directive (94/62/EC)
- 2000** End-of-Life Vehicles or 'ELV' Directive (2000/53/EC)
- 2002** Waste Electrical and Electronic Equipment or 'WEEE' (2002/96/EC)
- 2004** Packaging Directive amendments (2004/12/EC)
- 2006** Batteries Directive amendments (2006/66/EC)
- 2008** Review of WEEE implementation

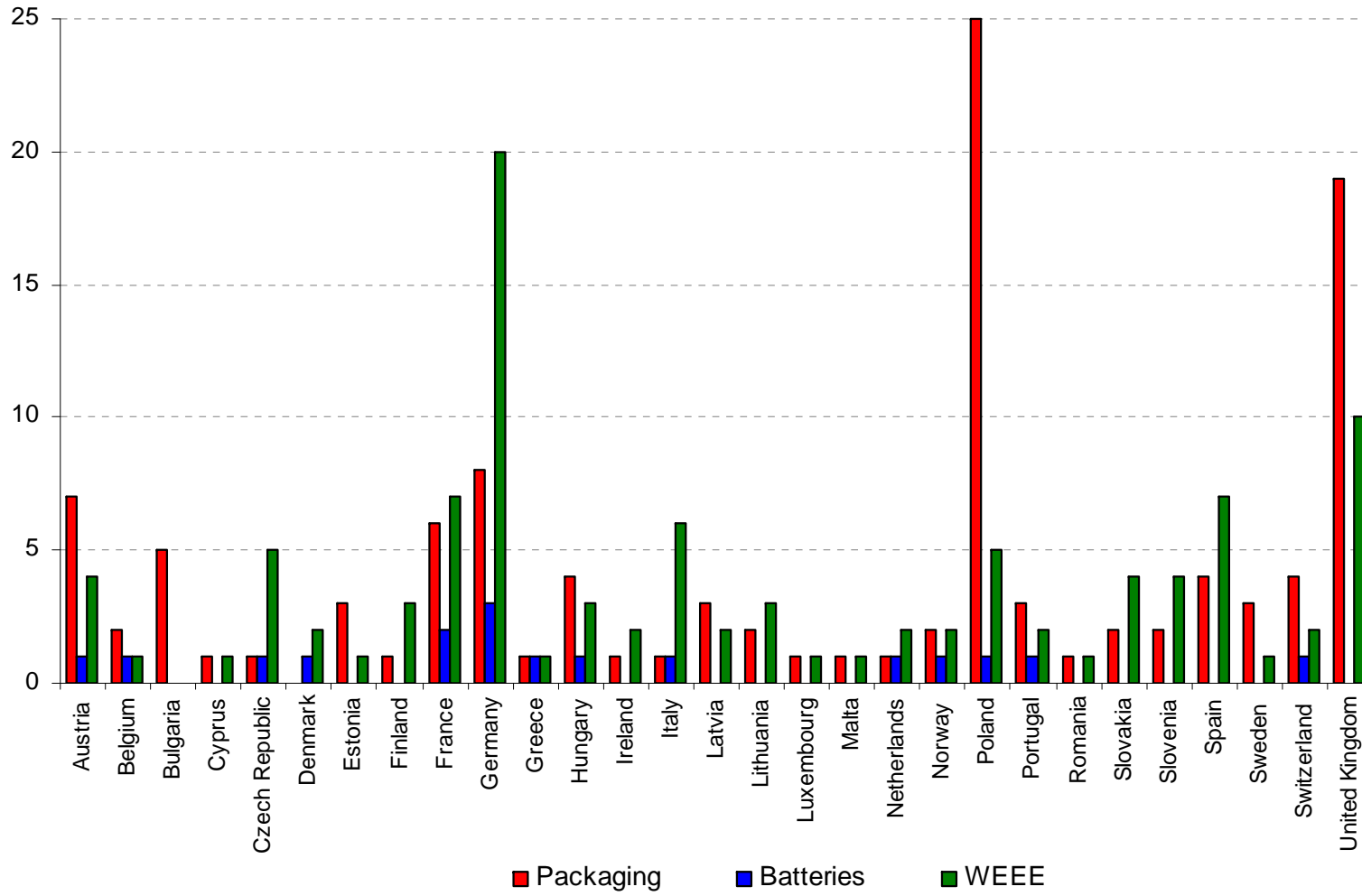
PROs organise recycling between 10,000 ICT & CE producers and 80,000 municipalities in Europe

IMPLEMENTATION:
PR Organisations



Over 230 PROs have been established in Europe for packaging, batteries, and WEEE

IMPLEMENTATION:
PR Organisations



Competition amongst PROs is increasing

- 12 out of 24 European countries have competing as opposed to single national or sector-based PROs for WEEE.
- Some PROs manage more than one type of waste and operate in more than one country e.g. SWICO in Switzerland and the European Recycling Platform
- Where competing PROs exist they must operate under common framework to allocate waste responsibilities equitably e.g. national register or clearing house

Presentation structure and objectives

1. **IMPLEMENTATION IN EUROPE**

PROs, particularly for WEEE, are exploring opportunities to provide competing compliance solutions for different product categories and on a pan-European basis.

2. **AN IMPLEMENTATION CASE STUDY**

- Company strategy
- Costs of compliance
- Accounting requirements

3. **LINKS TO DESIGN**

Review issues for design incentives from WEEE

SCEE management agreed basic approach to prepare for WEEE compliance in May 2003



Ensure timely compliance with environmental requirements



Ensure take-back solutions are cost effective



Support development of competition between PROs



Ensure correct accounting of recycling costs

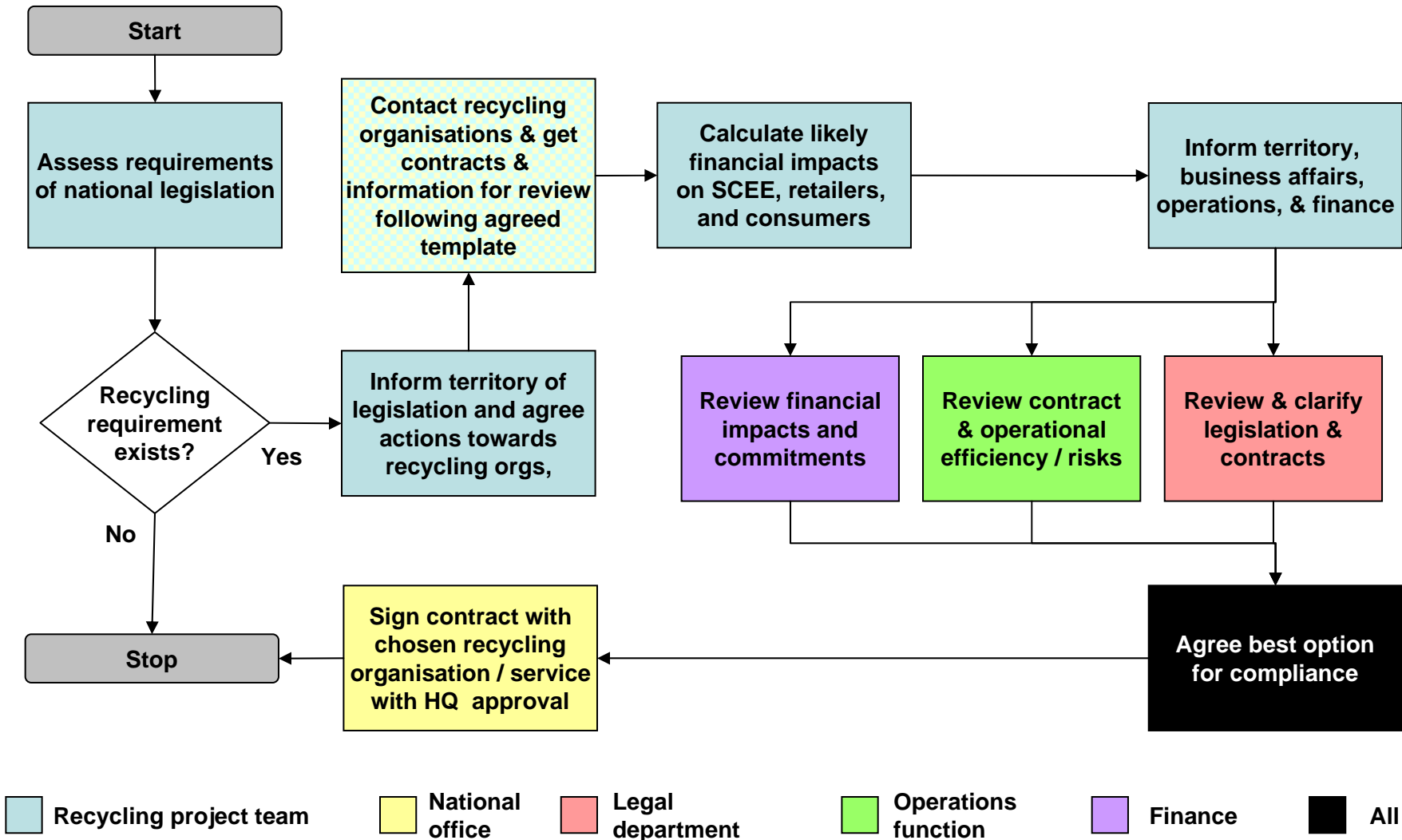


Classify of SCEE products as IT and telecommunications



Allocate of responsibility by quantity sold and not financial value

Review and selection of suitable PROs involves a cross-functional approach



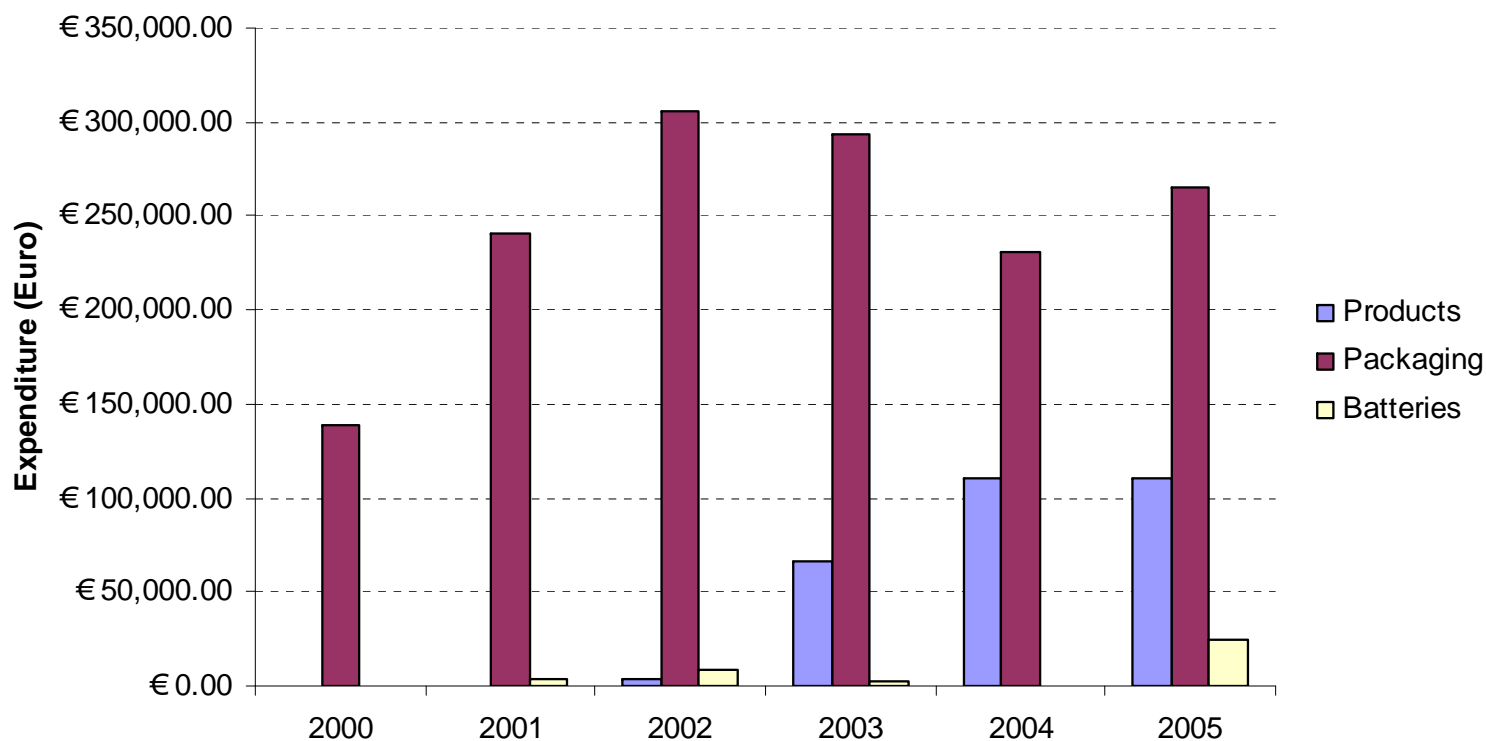
Since 2003 SCEE selected 15 PROs (from 33) using criteria agreed by project team

<i>Criteria</i>	SCEE preference	From 28 packaging, battery, and WEEE PROs reviewed*	
		No. fulfilling criteria	No. not fulfilling criteria
Cost	Benchmarked between competing systems if possible	29	4
Financing	Visible fee arrangements should be optional	25	8
Financial surpluses	Should not exceed more than required as basic operating capital	19	14
Compliance	Must be authorised (& meet applicable environmental standards)	30	3
Contract term	Should not be more than 1 year	28	5
Governance	PROs should not have rights to vary fees unilaterally	25	8
Flexibility	Reasonable adjustments to standard contract possible	14	12
Administration	Yearly or quarterly reporting to reduce administrative burdens	21	12
Additional services	Desirable if PRO provides services for other waste	13	20

* PROs reviewed between 2003-2006 in Austria, France, Ireland, Germany, Luxembourg, Poland, Portugal, Spain, Switzerland

SCEE net take-back costs in 2005 = €401k;
€274k avoided by selecting competing PROs

SCEE yearly take-back compliance expenditure



Packaging compliance cost: €139 per ton packaging distributed (between €2 and €260 per ton by country)
WEEE compliance cost: €142 per ton EEE distributed (between €61 and €191 per ton by country)

Total SCEE take-back cost in 2007-2008 likely to exceed €2 million / yr
Cost in graph excludes additional expenditure of €292k from visible fees

Financial responsibility for 'historic waste' is 'collective' under accounting rules

Under the WEEE Directive Producers are responsible for WEEE for EEE products sold before 13.08.05 'proportionately':

“Participation in the market during the measurement period is the obligating event...As a consequence, a liability for waste management costs for historic waste management costs for historical household equipment does not arise as the products are manufactured or sold.”

(IFRIC, 2005:7).

Financial responsibility for 'future waste' is also 'collective' under national implementation

Producers individually responsible for WEEE from EEE products they themselves sold after 13.08.05 and must provide 'financial guarantees' to ensure future costs do not fall on other producers or society:

- *PRO's provide 'reciprocal collective guarantees' for future waste*
- *Producers collectively guarantee to finance waste from WEEE in the future; accepting costs of products from producers no longer operating according to the market share of members at the time the waste arises.*
- *All Member States accept this as 'appropriate financing scheme' for future WEEE under the terms of the WEEE Directive*
- *Accounting firms' interpretations also allow for producers to use such collective financial guarantees*

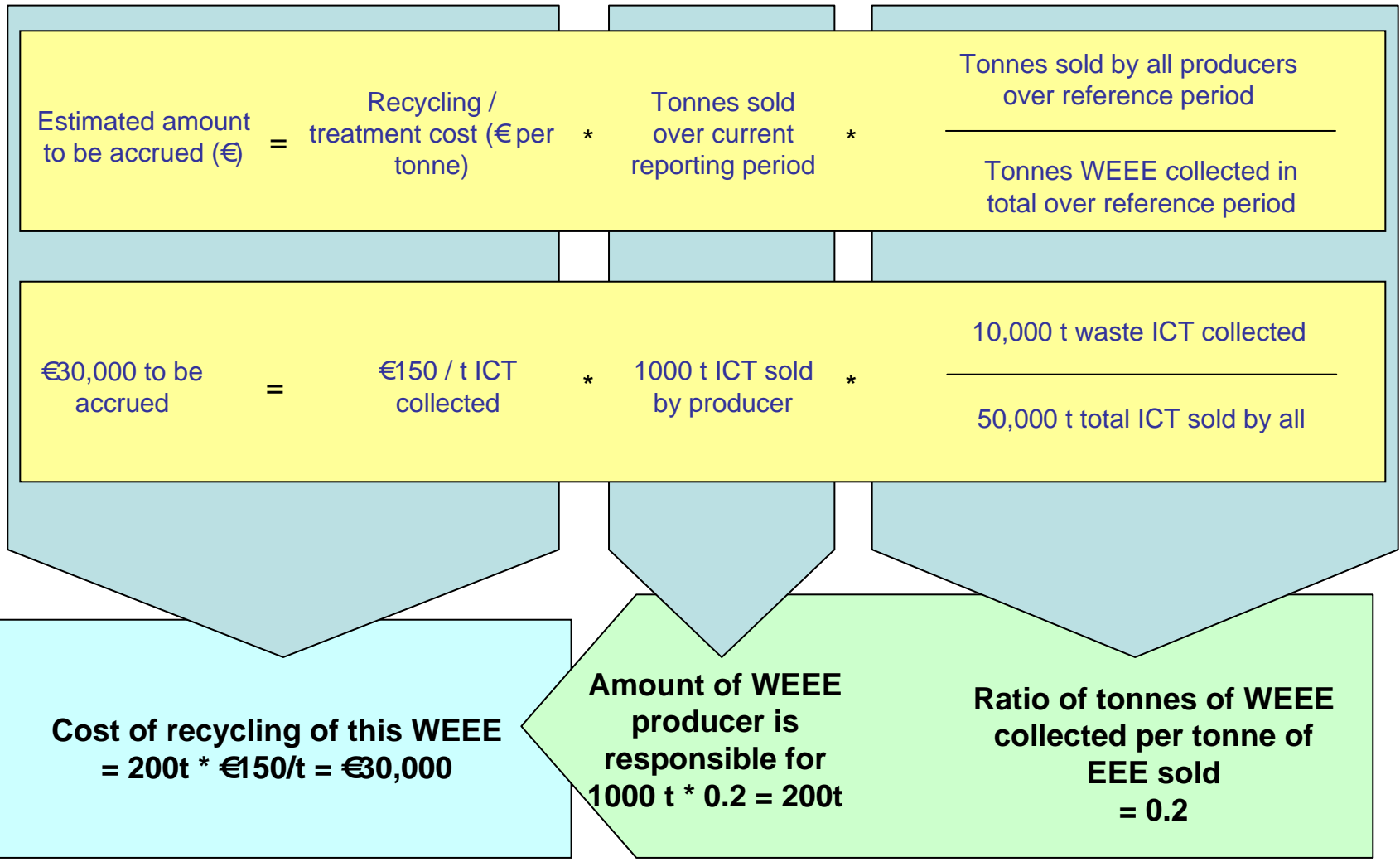
This summary is intended to provide insight into accounting issues that can affect producers. It is not intended to provide precise specialist advice on correct accounting methods.

Under accounting rules producers must accrue sufficient funds to cover liabilities under WEEE

$$\begin{array}{rcccl} \text{Estimated} & & \text{Recycling /} & & \text{Number of products} \\ \text{amount to be} & = & \text{fee (€ per} & * & \text{sold over reporting} \\ \text{accrued (€)} & & \text{product sold)} & & \text{period} \\ \\ \text{€40,000 to be} & = & \text{€0.40 / unit} & * & \text{10,000 units} \\ \text{accrued} & & \text{sold} & & \text{sold} \end{array}$$

This summary is intended to provide insight into accounting issues that can affect producers. It is not intended to provide precise specialist advice on correct accounting methods.

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Producers must also ensure diligent legal tracking, reporting and information provision

Legal tracking

National legislation varies considerably: e.g. timescales; financing; collection; categorisation; registration and reporting; and rules for PROs:

SCEE invests around 40 working days / year on tracking and understanding legal requirements

Reporting

Reporting quantities of packaging, products, and batteries sold per country necessary for calculating charges and allocating responsibility between producers:

Management of accurate central database involves at least 18 working days per year at SCEE.

Product information

Producers are required to provide consumers with disposal information:

The Environmental Programmes Manager involved in formal approval process for new products

Presentation structure and objectives

1. IMPLEMENTATION IN EUROPE

PROs, particularly for WEEE, are exploring opportunities to provide competing compliance solutions for different product categories and on a pan-European basis

2. AN IMPLEMENTATION CASE STUDY

Companies adopting a proactive approach to preparing for EPR are well placed to ensure compliance with differing national requirements, while ensuring solutions used are cost-effective

3. LINKS TO DESIGN

- Background
- Obstacles
- Criteria for potential future solutions

Producer Responsibility is intended provide incentives for better design;...

The basis for EPR was argued almost 15 years ago in the academic literature:

“There is little doubt that extended producer responsibility generates both economic and political incentives for waste recovery and, more broadly, green design.”

Lifset, R.J, “Take it back: extended producer responsibility as a form of incentive-based environmental policy”, Journal of Resource Management and Technology, Vol. 21, No. 4, December 1993. p 171.

Producer Responsibility is intended provide incentives for better design;...

Margaret Wallström, EU Environment Commissioner at the time the WEEE Directive was implemented, announced:

“I am particularly pleased we could convince Member States to strengthen the individual responsibility of producers for the waste from their products. This will be an important incentive for producers to take environmental consequences into account already when they stand around the design table.”

(European Commission Press Release IP/02/1463).

...however, the extent to which EPR supports improved product design is still in question

“It is too early to say whether more complex forms of DfE for highly designed and engineered products such as electronics and motor vehicles can be encouraged with EPR policy, but it seems unlikely that large changes will result from the types of policies we currently see in place. In particular, PROs, as they currently operate, provide very little incentive for members to engage in DfE.”*

*Design for Environment

Walls, M. 2006. *Extended Producer Responsibility and Product Design Economic Theory and Selected Case Studies*. Washington: Organisation of Economic Co-operation and Development (OECD). p 41.

There are 5 key obstacles to achieving design incentives from WEEE

- New measurement, accounting, & even sorting processes will disrupt current arrangements and add cost; *unlikely to gain support*
- Directive does not specify which materials must be recycled or treatment methods used; *what is the environmental problem?*
- Enforcement bodies can't ensure producers provide sufficient guarantees for future costs; *Member States can't implement IPR*
- Use of collective guarantees means producers must finance recycling mixed brands; *how can each producer pay only for their products?*
- Future waste costs cannot be predicted with sufficient accuracy; *financial guarantees may result in future cash surpluses or shortfalls*

There are 5 key obstacles to achieving design incentives from WEEE

- Development of appropriate infrastructure and processes
Cost-effective approach needed using current infrastructure with support of stakeholders
- Specification of targets and treatment requirements
Recycling and treatment requirements need to address specific environmental problems
- Transposition & enforcement of future waste requirements
Approach must be practical enough to be easily enforceable
- Establishing design incentives through collective financing
Basis of cost allocation could be changed
- Reducing risk arising from uncertainty of future costs
Collective guarantees still necessary

Conclusions

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3. **LINKS TO DESIGN**

It remains in the long-term economic interests of producers developing products with potentially lower end-of-life treatment and recycling costs to develop and implement new approaches resolving current obstacles to EPR

Conclusions

The question producers should ask themselves in developing their approach to EPR is perhaps not “*how do we implement individual responsibility for our branded products*”, but “*how do we secure financial advantage from our improved designs*”