European Commission

CIRCULAR ECONOMY

saving resources, creating jobs

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Producer responsibility's role in closing the material loop for EEE

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Motivations for introducing or revising e-waste legislation

1990 | 1995 | 2000 | 2005 | 2010 | 2015

Pioneers:

Germany 1991: Packaging Ordinace

Environmental protection

Taiwan 1988: Producers' responsible Waste Disposal Act (covering come WEEE)

Resource recovery

South Korea 1992: Act on the Promotion of Saving and Recycling of Resources (covering WEEE)

Improving Eco-design

Modernizing waste sector
Breaking up historical (uncompetitive or informal) structures, enabling 'adaptation to technical progress'

Removing red tape, legal certainty

Reducing pressure on local authority budgets

International 'pressure' (obligations, trends, 'policy envy')

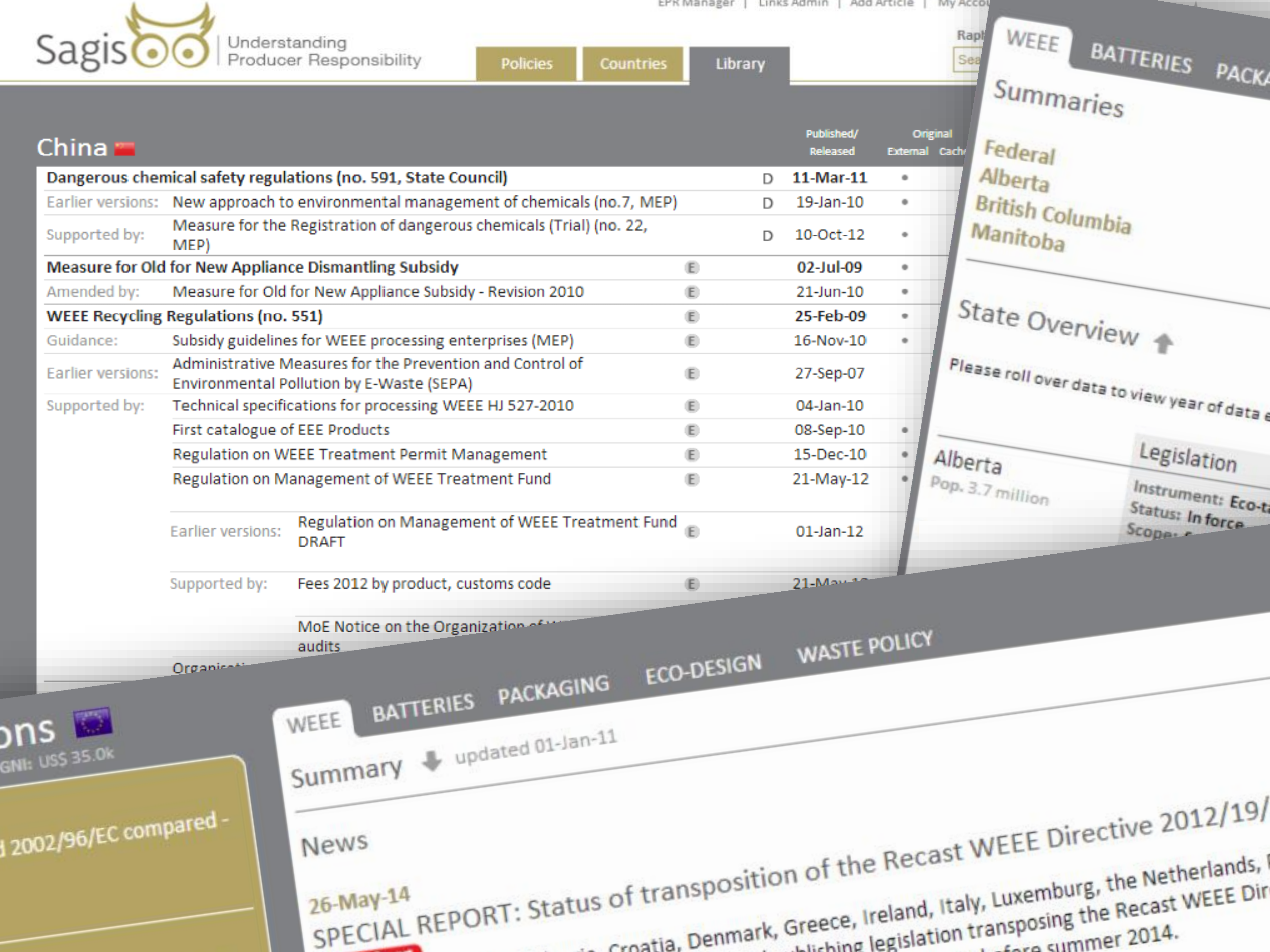
Social fairness (beneficiary of product pays, not society at large)

Spread of producer responsibility legislation

- E-waste legislation in force in 93 jurisdictions, planned in 20+
- 300+ producer compliance organisations
- 2,000+ pieces of legislation affecting WEEE management

The lighter the color, the more product groups **(EEE, batteries, packaging)** subject to take back legislation.

For details, see sagisepr.com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Understanding Producer Responsibility
EPR Manager | Links Admin | Add Article | My Accou
Policies
Countries
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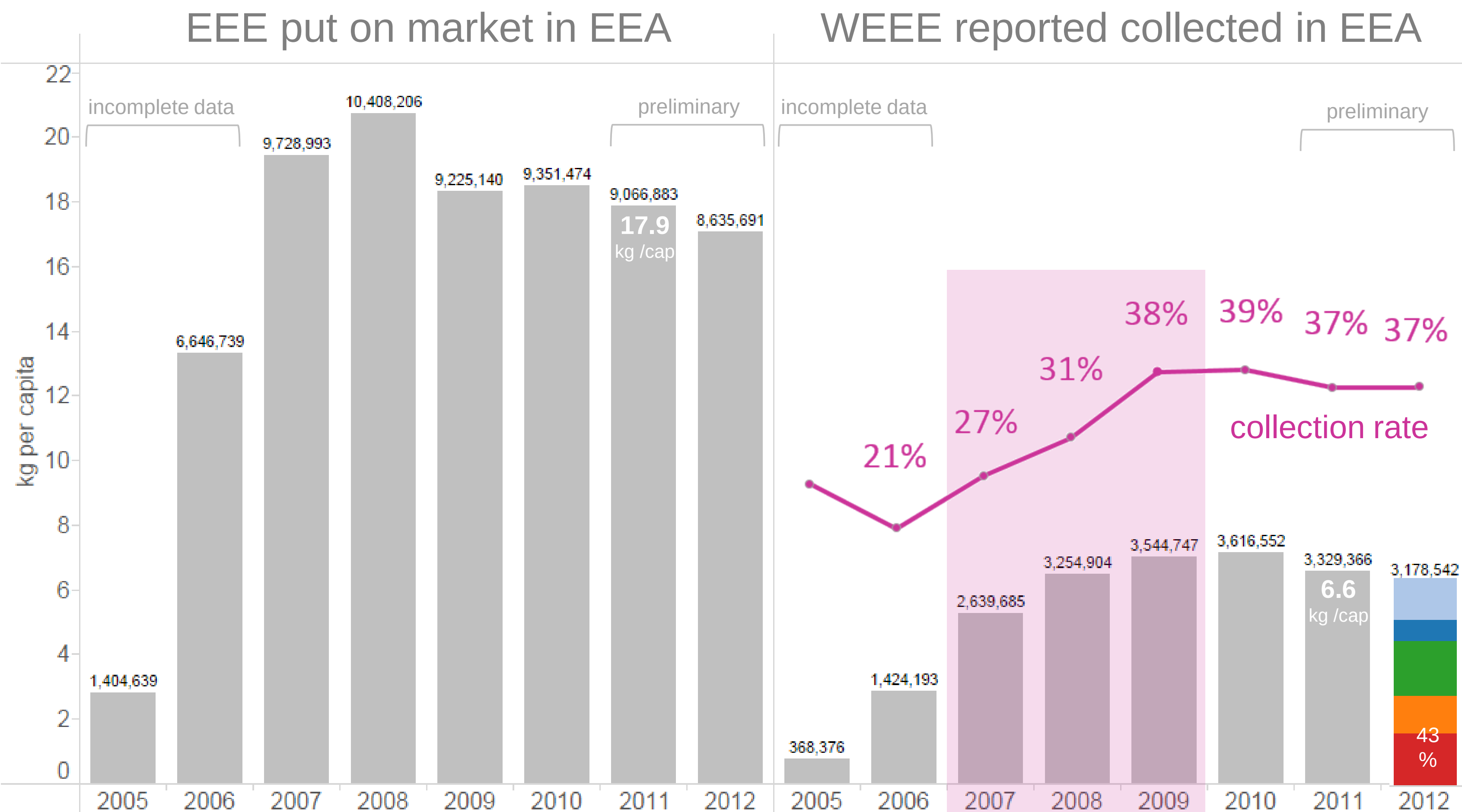
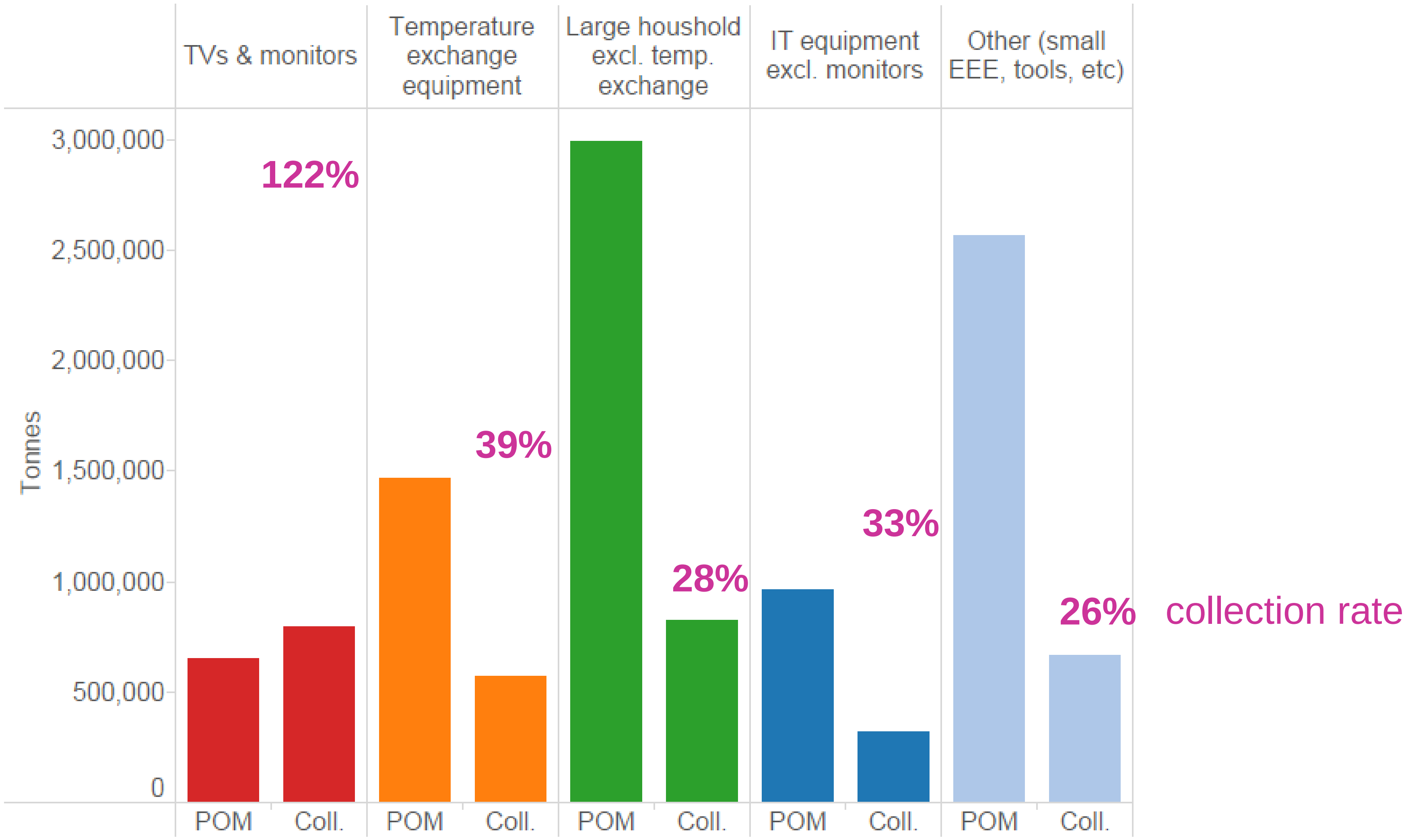
China
Published/ Released
Original External Cache
Dangerous chemical safety regulations (no. 591, State Council) D 11-Mar-11
Earlier versions: New approach to environmental management of chemicals (no.7, MEP) D 19-Jan-10
Supported by: Measure for the Registration of dangerous chemicals (Trial) (no. 22, MEP) D 10-Oct-12
Measure for Old for New Appliance Dismantling Subsidy E 02-Jul-09
Amended by: Measure for Old for New Appliance Subsidy - Revision 2010 E 21-Jun-10
WEEE Recycling Regulations (no. 551) E 25-Feb-09
Guidance: Subsidy guidelines for WEEE processing enterprises (MEP) E 16-Nov-10
Earlier versions: Administrative Measures for the Prevention and Control of Environmental Pollution by E-Waste (SEPA) E 27-Sep-07
Supported by: Technical specifications for processing WEEE HJ 527-2010 E 04-Jan-10
First catalogue of EEE Products E 08-Sep-10
Regulation on WEEE Treatment Permit Management E 15-Dec-10
Regulation on Management of WEEE Treatment Fund E 21-May-12
Earlier versions: Regulation on Management of WEEE Treatment Fund DRAFT E 01-Jan-12
Supported by: Fees 2012 by product, customs code E
WEEE
BATTERIES
Summaries
Federal
Alberta
British Columbia
Manitoba
State Overview
Please roll over data to view year of data
Alberta
Pop. 3.7 million
Legislation
Instrument:
Status: In force
WEEE
BATTERIES
PACKAGING
ECO-DESIGN
WASTE POLICY
GNI: US$ 35.0k
2002/96/EC compared -
Summary
updated 01-Jan-11
News
26-May-14
SPECIAL REPORT: Status of transposition of the Recast WEEE Directive 2012/19/

Growth of reported collection has levelled off



Data sources: 2005-10 Eurostat; 2011-12 Sagis, WEEE Forum; Category distribution 2012: WEEE Forum

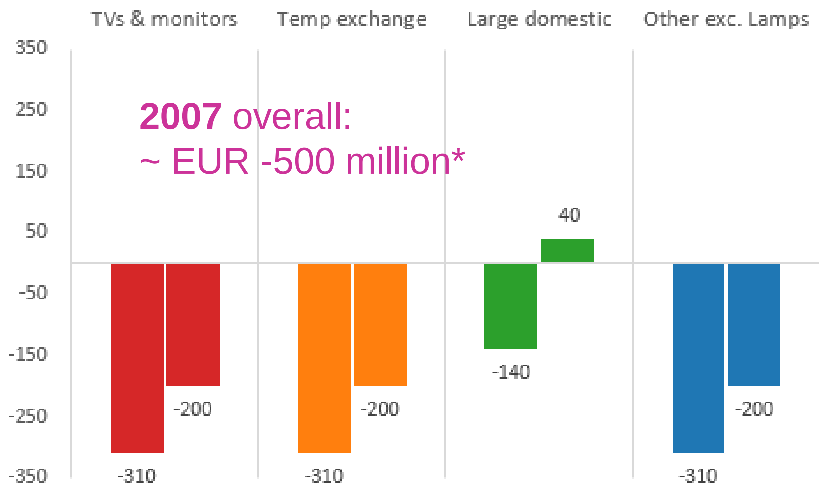
Collection rates vary between collection groups



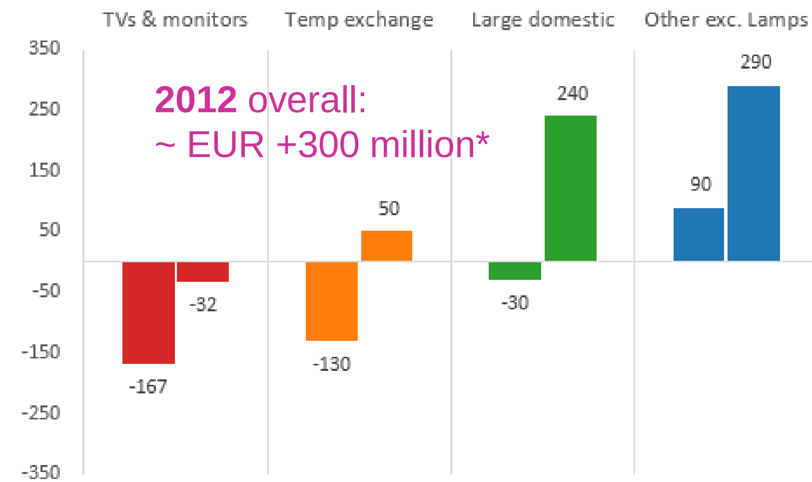
Data sources: WEEE Forum Category distribution 2012

‘Net costs’ turn into overall net profit

Estimate collection + treatment cost or profit



EUR / tonne



* EEA-wide collection volumes 2007:
Estimate ranges from EUR -700 to EUR -360 million

** EEA-wide collection volumes 2012:
Estimate ranges from EUR -150 to EUR +490 million

Source: Sagis

Supported by high secondary material prices, largely producer financed WEEE implementation leads to scale effects and innovation in collection and recycling.

- ‘Net costs’ become overall ‘net profit’
- New entrants in collection and recycling, increased competition for WEEE

Regulator required to prevent distortion of competition while ensuring all WEEE collected

- Who controls the funds from producers to cover the net costs?
- Who must / may / is prohibited from collecting WEEE?
- Who may treat WEEE on own account?

funding

collection

treatment

Producers' funding

Compliance Organisations
(producer controlled, waste sector controlled?)

State Recycling Funds

Municipal collection points ~80% by weight

Retail collection ~15%

Compl. orgs own ~5%

Informal collection 40%?

Revenue recovered materials

Producers - municipalities - waste management firms - retailers - state funds - **who controls W€€€ flows?**

"The story of WEEE is a story of vested interests"

Approaches for incentivicing municipalities' to increase collection (two examples)

European ‘best practice EPR regime’

Competing compliance organisations + coordination center
Mandatory framework contract with municipalities

Municipalities no direct legal obligation to collect

> Implies right to charge producers

Mandatory framework contract compensates municiplaities for collection;

> Performance bonus incentivizes high/ efficient collection (FR, IT);

FR 2006 agreement: ~EUR 150 per tonne collected

- **Fixed amount p.a. per collection point:** EUR 1,560; Min. per capita collection to qualify for financial support (e.g. 1.5kg)
- **Variable amount per tonne:** EUR 20 to EUR 80 per tonne, progressive with collection volume
- **Communications Support:** EUR 0.2 to 0.075 p.a. per capita

German ‘no-compliance organisation’ model

Responsibility allocated to each producer by central clearing house, no compliance organisation

Municiplaities have legal obligation to collect

> implies waiving the right to compensation from producers;

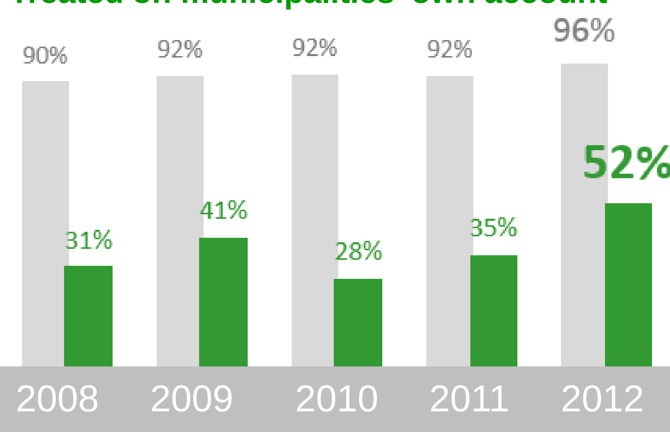
Mun. allowed to treat WEEE on own account

> Incentive to increase collection depends on recovery price

DE:

Share of B2C WEEE collected by municipalities

Treated on municipalities' own account



Brief update on Recast transposition

- 10 member states have completed or nearly completed publishing legislation transposing the Recast WEEE Directive

  (Bulgaria, Croatia, Denmark, Greece, Ireland, Italy, Luxemburg, the Netherlands, Portugal and the UK)

- Another 9 EEA member states can be expected to finalize transposition before summer 2014.

Changes to retail collection

Countries currently *without* retailer take-back obligation:

- AT, DK: Not transposing 1:1 (and 0:1) take-back obligation, maintaining municipal driven collection
- DE, SE: likely to newly introduce 1:1 (and 0:1) obligation

Countries currently *with* retailer take-back obligation:

- CZ: special register of all WEEE collection points, including those at retailers
- NO: B2C compliance organisations to set up at least 500 collection points nationwide, or at least one in each municipality, pick-up WEEE collected by retailers

Counting all flows or prohibiting a market?

► Prohibiting the ‘unobligated’ sector (eliminate ‘complementarily flows’)

- FI - Waste Act 2011: Producers have the ‘primary responsibility for the right’ to organise waste management.
- DE - Draft WEEE Act Feb-14: Only municipalities, distributors and producers (or their agents) may collect B2C WEEE
- CZ - Draft Waste Act Dec-13: Prohibit any entity from setting up B2C collection unless specified to do so by producers

► Regulating the ‘unobligated’ sector, resp. ‘count all WEEE flows’

- NL - especially those collected by municipalities and treated on their own account (new in NL) collected by scrap dealers and re-use charities (which make up to 40% of all WEEE collected)

► [Outbuying the ‘unobligated’ (or informal) sector]

- Order producer to pay for buy back (to deprive the unobligated sector of WEEE)
- Return incentives for end-users (e.g. vouchers, discounts; implemented in CN, discussed in HU, DK)

Can producers' take-back obligation encourage eco design of EEE?

Yes if,

- there is significant EEE manufacturing in the country
- Individual or group producer responsibility is not only a theoretical possibility and producers are involved in actual recycling

Both is generally not the case in EU
(in some MS producer compliance orgs are prohibited from involvement in physical recycling)

Producers' compliance option:	Eco-design feature:		
	Material (weight) reduction	**Substitution of materials**	**Improved disassembly**
Collective compliance De facto only option for 95% of EEE POM, in some MS 100%	Yes, but (1)	No, though (2)	No
Individual compliance	No	Yes	Yes

(1) **Yes,** as compliance organsiations (mostly) charge producers by weight. **But,** fee typically below 1% of product cost > Economic carrot no incentive

(2) **No,** though France mandates compliance organsiations to charge differentiated fees for certain eco-design criteria

Differentiated compliance fees effective?

France differentiated fee percentages (usually +20%) **applied to Ecologic/ERP fees:**	
▪ TV with mercury in backlight:	EUR 2.4, instead of EUR 2
▪ Notebook with mercury in backlight:	EUR 0.66 instead of 0.55
▪ Smart phone without universal charger:	EUR 0.08 instead of EUR 0.04
▪ Vacuum cleaner (8kg) > 25 mg brom. flame retardants:	EUR 0.66 instead of 0.55

Even if differentiated more widespread, effects on eco-design likely to be insignificant as economic incentive too small, technological progress to fast to make differentiation meaningful (DK study 2014).

- Plugging Eco-design requirements into the ‘take back’ WEEE Directive leads to 29 national variations. This equals bureaucratic complexity and is a rather ineffective feedback channel to the actual designer and manufacturer.

- EU-wide criteria for eco-design, such as those set by the RoHS and Ecodesign Directives - would likely be much more effective

Conclusion:

EPR's role in closing the material loop

Resource recovery

- **EPR** has been a **catalyst** for scaling up and modernizing the WEEE collection and recovery sector.
- As sector matures and material prices constant, **collection objectives may be achievable without producers' involvement.** However, **producers' involvement remains desirable** for further closing the material loop (e.g. development and application of treatment standards, recovery of strategic materials).
- **Circular material flows requires more than producer responsibility**: All parties involved in collection and treatment need be carefully taken into account (and where necessary regulated) in view of closing the loop without leading to market distortions.

Eco design

- IPR 'lost in transposition' because never fit for (EU) reality. Unlike the RoHS and Eco design Directives, **WEEE Directive's effect on eco-design negligible**. Recast Directive even less supportive of individual compliance than original (extended definition of household EEE, tighter B2B compliance requirements, 6 category scope).
- As individual producers' role becomes less relevant, the **link between take-back obligation and eco-design severed**.

Thank you

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