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Study Update

**WEEE Recycling Economics –
The shortcomings of the current business model?**

EERA meeting – June 29, 2017

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Contents

- Approach
- Status
- Survey approach:
 - The economics of WEEE treatment
 - Influence of scavenging products and components
- Costs and benefits of certification
- Practical arrangements and Q&A

Approach

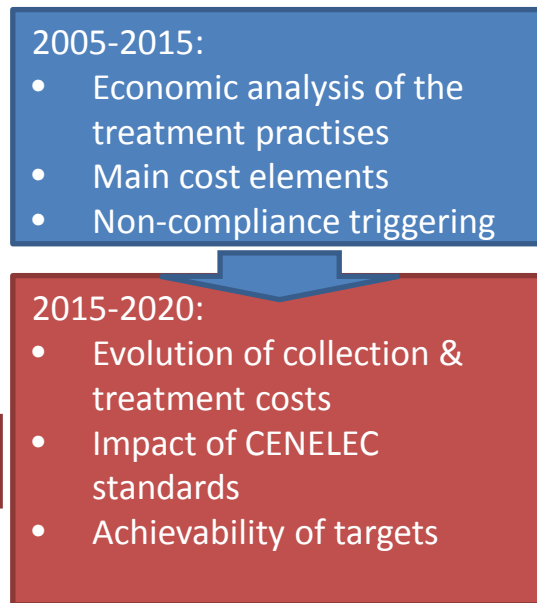
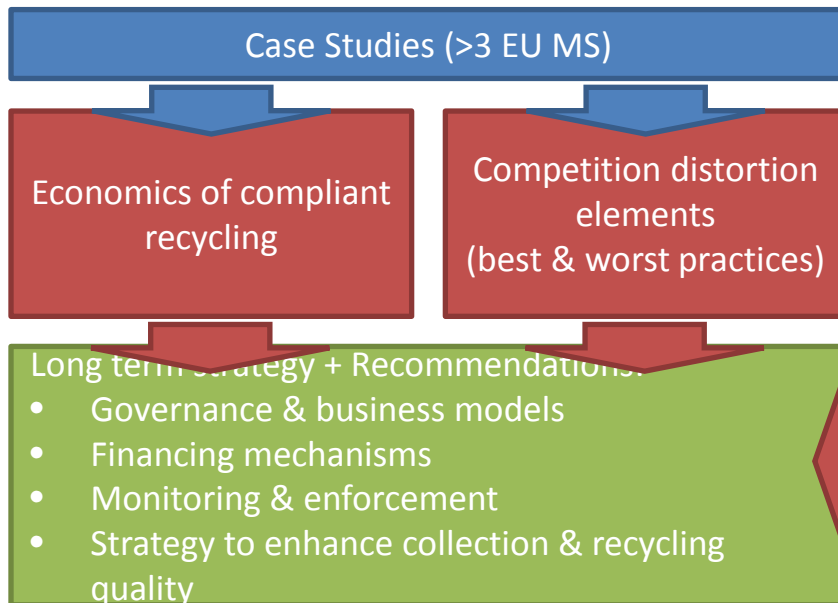


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- Task 1:**
Baseline + Survey
(Feb. – Apr.)
- Task 2:**
Economic Analysis
(May- June)
- Task 3:**
Recommendations
(Sep.-Dec.)



Phase 1 Baseline and survey economic data



- NDA: Signed for Stena and Indumetal, not yet for NOEX and other German recyclers
- Data exchange: Indumetal next week, Stena from tomorrow, no exchange with German recyclers yet

Phase 2 survey (scavenging)

- A few additional NDA's for phase 2 as well
- Survey response now 9+1 from 31 = **30%**
- Also translated into:
 - ENG original: <https://goo.gl/forms/NEiL1tqOWUZ5ziVk1>
 - FRA: <https://goo.gl/forms/pgBGgB5omqGqSbNG2>
 - ESP: <https://goo.gl/forms/MnlZYHziPoiOHTfx2>
 - DEU: (almost finished): not yet final, one more check
- **New deadline: July 14**

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Timing and Gantt - 2017



2017	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Meetings		30-Mar			07-Jun			28-Sep		30-Nov	
PHASE 1: Baseline											
Data Gap Analysis, review existing studies											
Preparation of Survey											
Survey, analysis of (past) treatment costs		survey response									
PHASE 2: Analysis of economics and scenarios											
Definition and analysis of minimal technical costs											
Drivers for and analysis of non-compliant treatment											
Scenario analysis for 2015-2020											
PHASE 3: Recommendations and long term strategy											
Conclusions											
Recommendations re:											
Report Finalisation, Executive Summary, Presentation											

3 physical meetings planned: March 30, June 29 and November 30

10 regular telcons planned. **Shall we report also in the September 29 meeting?**

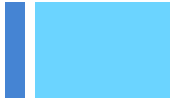


In comparison to the **significant negative economic impact** of WEEE illegal trade, **reducing** the current **financial pressure** for law enforcement should be considered, the cost/ benefit ratio may be **very attractive**.

Is there a similar attractive ratio between:

The cost of WEEELABEX certification and the environmental and economic advantages?

From a macro-economic point of view:



due to **bad disposal behaviour consumers**



Of **scavenging** of valuable components, only considering compressors from temperature exchange equipment, hard disks, memory and other small IT components



represents the **intrinsic material value** not available for compliant processing in Europe

+ 150 to 600 M € in avoided compliance costs

Certification costs are about 10% of avoided compliance costs and 3% of total missed opportunity costs



From a micro-economic point of view (small recyclers)



Technical costs (€/ton)					
Category (Annex III of WEEE Directive)	Collection	Logistics	Treatment	Estimated certification costs for a small recycler*	% of absolute turnover
C&F	45	95	105	3	1%
SHA	50	65	-10	9	7%

*1 Recurring costs at € 15,000 for 5,000 tons/yr for C&F, initial certification costs may be higher

*2 Recurring costs at € 9,000 for 1,000 tons/yr for SHA, initial certification costs may be higher, worst case scenario

Source: Countering WEEE Illegal Trade – Deliverable 4.3 Dynamics of the WEEE Stream (restricted to law enforcement agencies, EERA)

Recurring certification costs are typically 1% - 3% of turnover

Q&A, practical next steps

- Phase 1 Exchange of data should start a.s.a.p.
- Phase 2 Quality of collection survey **deadline July 14**
- Report again at the September EERA meeting?