



Study on the calculation of recycling efficiencies and implementation of export article (Art. 15) of the Batteries Directive 2006/66/EC

Background and objectives

Workshop Brussels, 20 January 2009

Consortium **ESWI**
Expert Team to **S**upport **W**aste **I**mplementation



Draft Agenda

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|-------|-------|---|
| 10:00 | TOP 1 | Welcome (Commission) |
| 10:15 | TOP 2 | Background and objectives (BiPRO) |
| 10:30 | TOP 3 | Methodology and data collection, specifications and definitions (BiPRO) |
| 12:00 | TOP 4 | Method for calculation of recycling efficiencies (UBA) |
| 13:00 | | Lunch |
| 14:00 | TOP 5 | Reporting on recycling efficiencies (UBA) |
| 14:45 | TOP 6 | Best available techniques and treatment requirements (BiPRO) |
| 15:30 | TOP 7 | Criteria for equivalency of recycling operations outside the European Union (BiPRO) |
| 16:00 | | Coffee break |
| 16:15 | TOP 8 | Conclusions and final discussion |
| 17:00 | | End of the workshop |



Project time frame

- Project start: 01.10.2008
- Project duration 5 months
- Interim report 01.12.2008
- Expert workshop 20 January 2009
- Draft final report 01.02.2009
- Final report 01.03.2009



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BiPRO

Beratungsgesellschaft für integrierte Problemlösungen

umweltbundesamt^U

 **ENVIROPLAN**
Consultants & Engineers



Project team

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Background of the project (1) The Batteries Directive

Batteries have an important role in everyday life.

Batteries include hazardous substances such as lead and nickel.


Batteries Directive 2006/66/EC

Entered into force: 26 September 2006

Must be implemented by: 26 September 2008

Sets up provisions and requirements for:

- Waste collection
- Treatment and recycling



Background of the project (2) Environmental objectives

Environmental objective of the Batteries Directive

Creation of a closed-loop recycling and recovery system for all batteries and accumulators that secures the objectives of the revised Waste Framework Directive and avoids their incineration or disposal in a landfill site, hence minimizing their negative environmental impact.

In particular the related objectives are

- Limit content of dangerous substances (Art 4)
- Increase environmental performance and withdraw non-compliant batteries (Article 5, 6)
- Maximise separate collection (Article 7, 8, 10),
- Ensure that batteries are removable (Article 11)
- **Requirements for treatment and recycling (Article 12)**
- Ban on landfilling / incineration of automotive and industrial batteries and accumulators (Article 14)



Background of the project (3) Market objectives

Internal and International market objectives of the Batteries Directive

Establishment of minimum required rules for the proper functioning of the national collection and recycling schemes in the Member States and regulate international trade

In particular the related objectives are

- Harmonization of product requirements (Article 4), as well as labelling (Article 21 and Annex II)
- Free placing on market if compliant (Article 6)
- Minimum rules for producer responsibility (Article 16 and 17)
- Applicability of requirements also for import batteries (Article 19)
- **Possibility to treat in third countries if compliant with EU rules (Article 15)**



Background of the project (4) Article 12

Article 12 of the Batteries Directive 2006/66/EC

1. Schemes have to be set up no later than 26 September 2009. (12.1.)
2. **Treatment and recycling of waste batteries and accumulators shall follow BAT.** (12.1.a)
3. Possibility for landfilling or underground storage of batteries or accumulators containing cadmium, mercury or lead if no viable end market or as part of phase out strategy for heavy metals if better option than recycling. (12.1.)
4. Batteries or accumulators shall be removed if collected with WEEE(12.3.)
5. **Recycling processes need to meet minimum requirements (12.2.) and shall meet specific recycling efficiencies set in Annex III by 26 September 2011.** (12.4.)
6. **Annual MS reports on the levels of recycling achieved.** (12.5.)
7. **Detailed rules regarding the calculation of recycling efficiencies shall be added to Annex II no later than 26 March 2010.** (12.6.a)



Background of the project (5) Annex III

Part A: Treatment

Minimum requirements: (1) Removal of all fluids and acids and (2) storage on impermeable surface and suitable weatherproof covering or in suitable containers

Part B: Recycling

Minimum recycling efficiencies:

- Recycling of 65% by average weight of lead-acid batteries and accumulators, including recycling of the lead content to the highest degree that is technically feasible while avoiding excessive costs
- Recycling of 75% by average weight of nickel-cadmium batteries and accumulators, including recycling of the cadmium content to the highest degree that is technically feasible while avoiding excessive costs
- Recycling of 50% by average weight of other waste batteries and accumulators



Background of the project (6) Article 15

Article 15 of the Batteries Directive 2006/66/EC

- 1. Treatment and recycling may be undertaken outside a Member State or outside the Community in compliance with Council Regulation on shipments of waste (15.1.)**
- 2. Waste batteries and accumulators exported out of the Community shall count towards the fulfilment of the obligations and efficiencies laid down in Annex III to this Directive only if there is sound evidence that the recycling operation took place under conditions equivalent to the requirements of this directive (15.2)**
3. The detailed rules on the implementation of this specific Article shall be laid down through comitology. (15.3.)



Background to the project (7) Overall project objectives

- Development of a method for the calculation of minimum recycling efficiencies
- Assessment of the applicable BATs and detailed description of treatment requirements
- Establishment of criteria to assess conditions equivalent the requirements of the batteries directive recycling processes taking place outside of the Community
- Involvement and consultation of stakeholders via project homepage (www.bipro.de/batteries-directive) and workshop