Results of „ProBaMet“

Partnership for Responsible
Battery and Metal Recycling

Plattform Blei

Plattform Blei

The Plattform Blei bundles, initiates and communicates information, background knowledge and concrete projects for the material lead.

Members:

CLARIOS · ecobat RESOURCES · Eppstein FOILS · JL Goslar · GLENCORE · HOPPECKE POWER FROM INNOVATION · nyrstar · RÖHR + STOLBERG

The Material Lead

is one of the most strictly regulated substances in the world. And rightly so, because it is irreplaceable today and will remain that way in the future.

German Initiative of the non-ferrous metals industry

The German Lead-industry

IN 2023
412.000
TONS OF LEAD PROCESSED

OVER
3.500
EMPLOYEES IN GERMANY

MORE THAN
5.800
GERMAN SUPPLIERS

Recycled Lead and its importance for Europe.

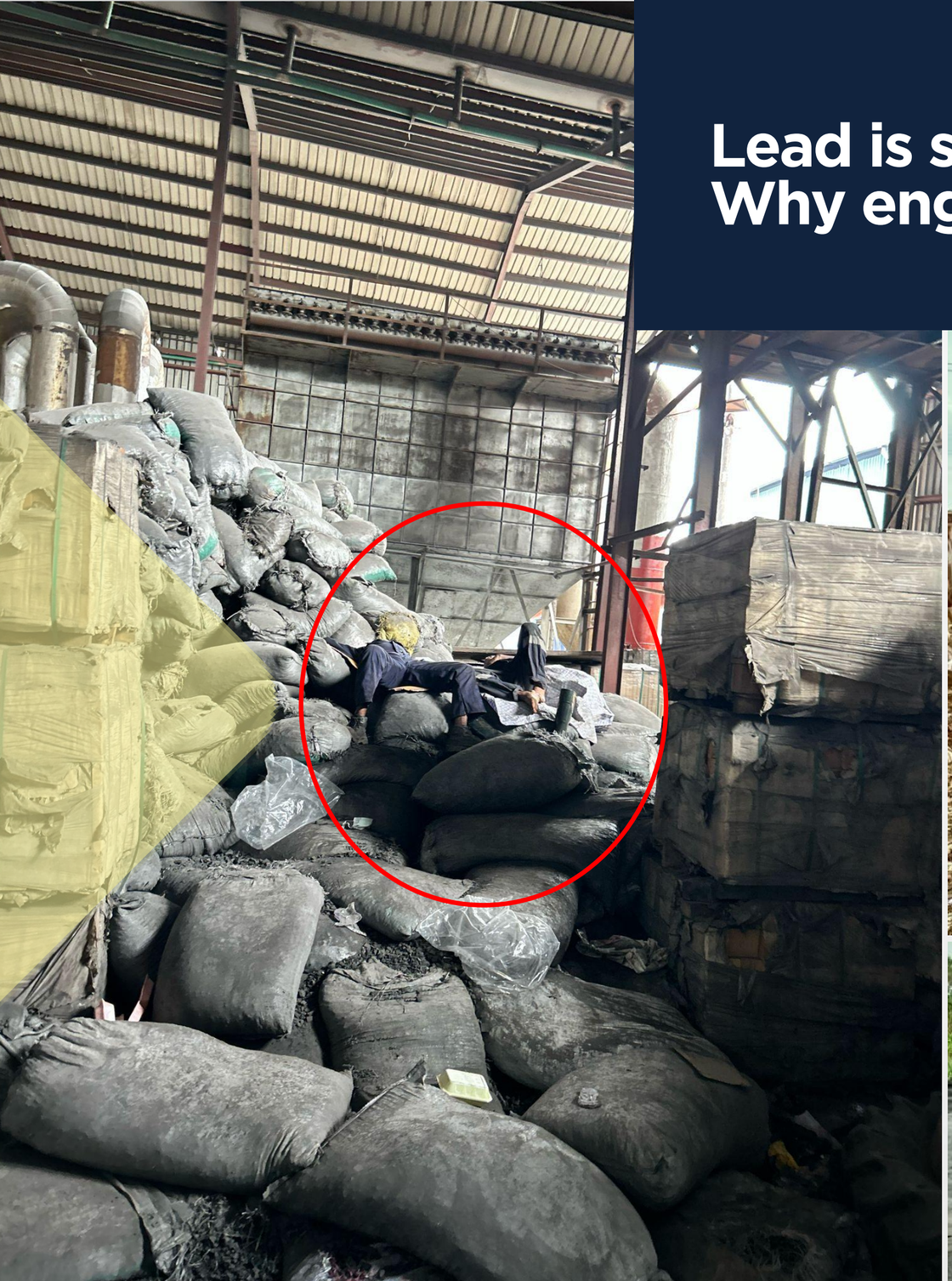
With **technically advanced processes,** the lead industry makes it possible:

- The **carbon footprint** of recycling lead is approximately 50% of that needed to extract primary lead from ore

- **In the EU,** domestic production of refined lead meets **>90% of demand** with **87% from recycled products**

- Increasingly demanding **sustainability laws and regulations** can be met**.**

Lead is sourced globally.
Why engagement for improvement matters.



Stakeholders:
Together for one aim.

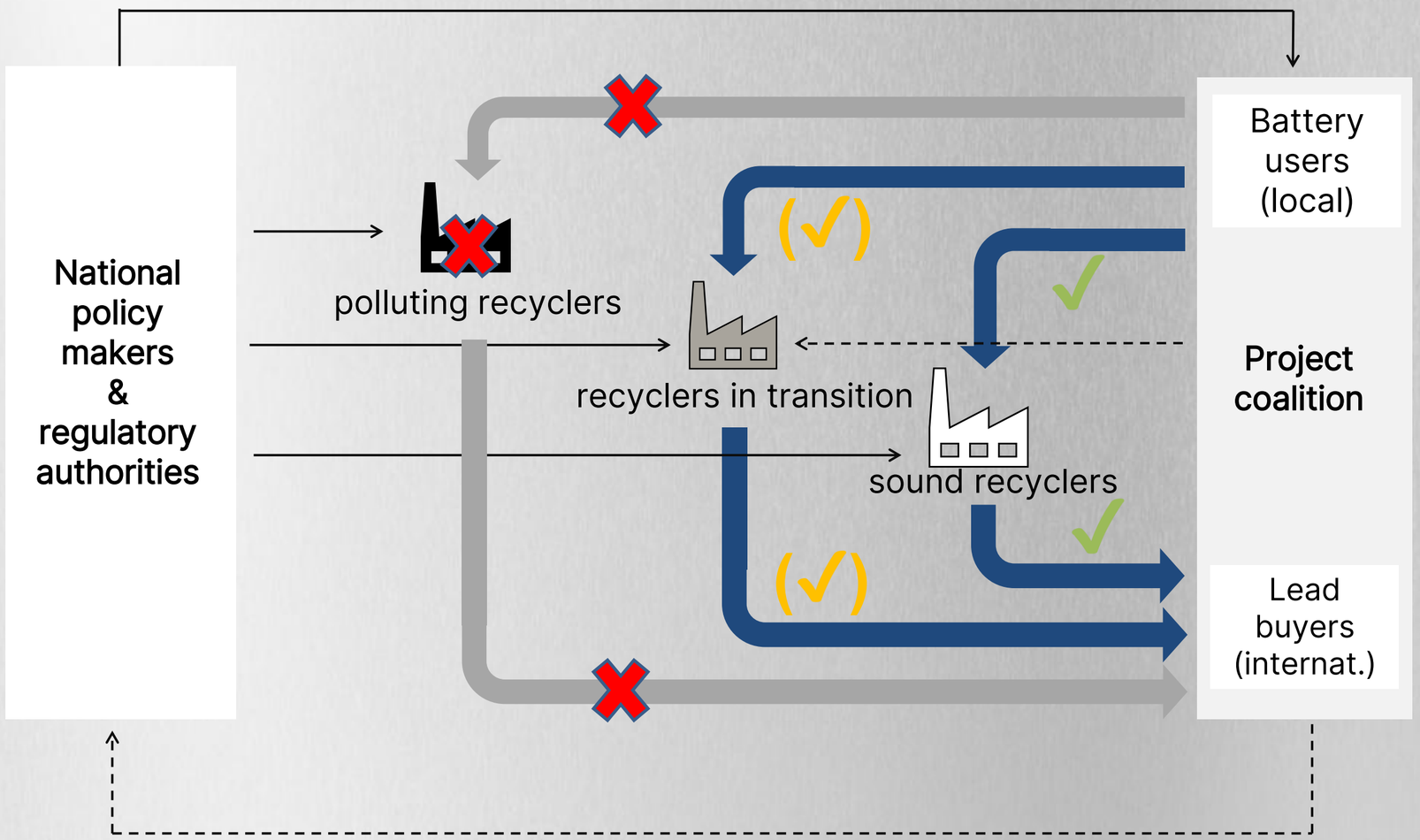
PROJECT MEMBERS:

- **Öko-Institut** (German NGO)
- **Plattform Blei** (Platform Lead, Initiative of German Non-Ferrous Metals Industry)
- **SRADev Nigeria** (Nigerian NGO)
- **Alliance for Rural Electrification - Solar industry**
- **Nigerian Ministry of Environment**
- **NESREA** (National Environmental Standards and Regulations Enforcement Agency)
- **OGEPA** (Nigeria, Ogun State EPA)
- **LASEPA** (Nigeria, Lagos State EPA)
- **Nigerian Civil Society incl. regional leaders**
- Supported by: **ILA, EUROBAT, BCI**
- Financed by: **German Ministry of Cooperation and Development**

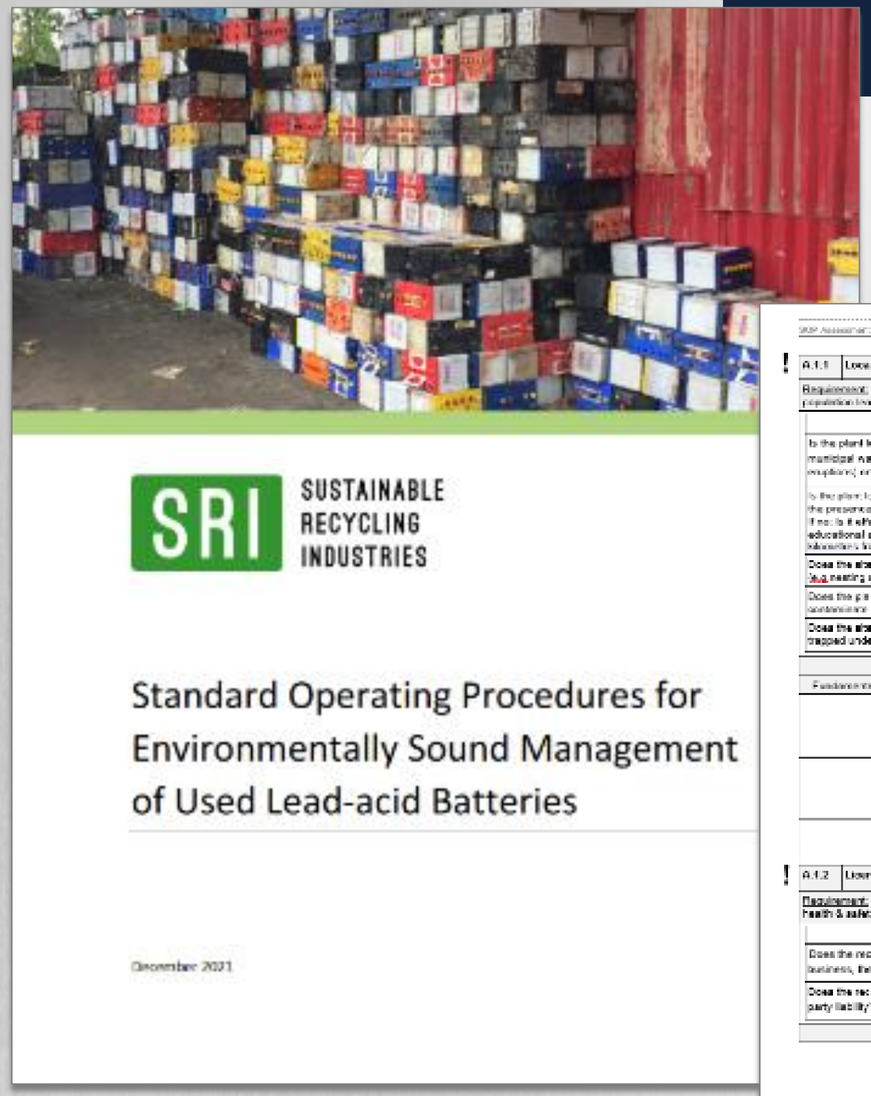
Financed by:

The idea behind the project and its theoretical approach.

© Photo: ProBaMet Project



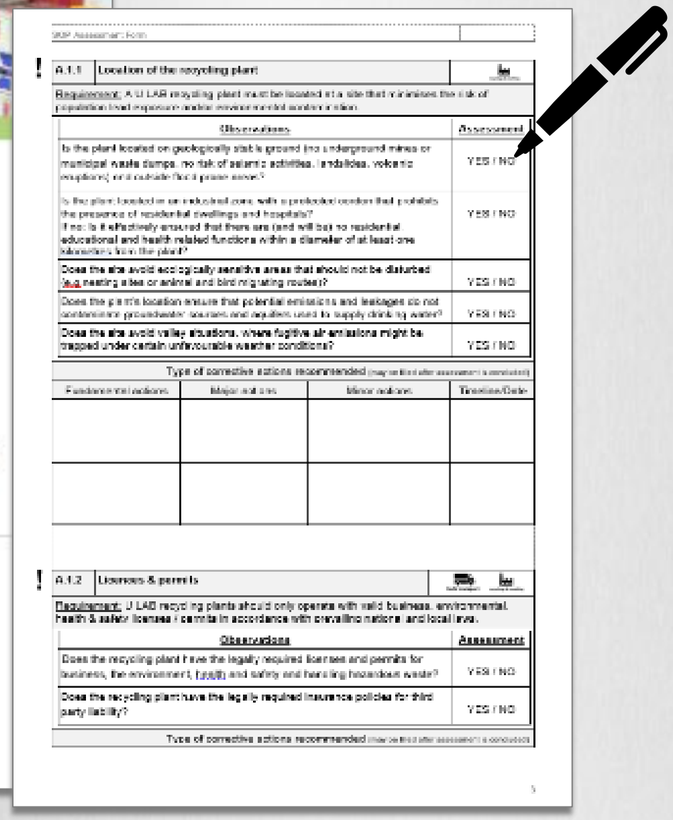
Practical Implementation:
1. SOPs for a basic audit in LMICs



SUSTAINABLE RECYCLING INDUSTRIES

Standard Operating Procedures for Environmentally Sound Management of Used Lead-acid Batteries

December 2021



SRP Assessment Form

A.1.1	Location of the recycling plant	

Requirement: A Li LAB recycling plant must be located in a site that minimises the risk of population level exposure under environmental and climatic conditions

Observations	Assessment
Is the plant located on geologically stable ground (no underground mines or municipal waste dumps, no risk of seismic activities, landslides, volcanic eruptions) and outside flood prone areas?	YES / NO
Is the plant located on an industrial zone, with a protected section that prohibits the presence of residential dwellings and hospitals? If not, is it effectively ensured that there are (and will be) no residential, educational and health related functions within a diameter of at least one kilometer from the plant?	YES / NO
Does the site avoid ecologically sensitive areas that should not be disturbed (e.g. nesting sites or animal and bird migrating routes)?	YES / NO
Does the plant's location ensure that potential emissions and leakages do not contaminate groundwater sources and aquifers used to supply drinking water?	YES / NO
Does the site avoid valley situations, where fugitive air emissions might be trapped under certain unfavourable weather conditions?	YES / NO

Type of corrective actions recommended (may be filled after assessment is concluded)

Fundamental nonconform.	Major nonconform.	Minor nonconform.	Timeline/Date

A.1.2	Licenses & permits	

Requirement: Li LAB recycling plants should only operate with valid business, environmental, Health & safety licenses / permits in accordance with prevailing national and local laws.

Observations	Assessment
Does the recycling plant have the legally required licenses and permits for business, the environment, health and safety and handling hazardous waste?	YES / NO
Does the recycling plant have the legally required insurance policies for third party liability?	YES / NO

Type of corrective actions recommended (may be filled after assessment is concluded)

Revision of SRI Standard Operating Procedures for Low- and Middle-Income Countries:

- Including learning from former audits
- More focussed on realistic situation on the ground
- Easy to use – no need to be a specialist
- Including pictures with examples: unacceptable / in transition / standard
- Recommendation for improvement plan included

(Updated SOPs available upon request)

Standard Operating Procedures for Environmentally Sound Management of Used Lead-acid Batteries - Sustainable Recycling Industries

Practical implementation:
2. Assessment Training – Theory

Classroom Training covering:

- General technical background of ULAB recycling
- Use of SOPs
- Methods of plant assessment
- Documentation of results

Participants:

- Regulators
- ULAB recycling industry
- Local Associations

Practical implementation:
2. Assessment Training – Hands on

Assessment Results:

9 ULAB recycling facilities visited:

7 facilities = substandard
1 facility = in transition
1 facility = high standard, but closing, due to no access to ULABs

Preparation and detailed report including recommendations prepared together with stakeholders and handed over to the authorities.

Positive Listing:

Start of a list for LMIC recycling facilities in transition incl. minimum standard which is needed to be listed.

https://www.oeko.de/fileadmin/oekodoc/Resp_ULAB-recyclers_Nigeria.pdf

Where is the ULAB recycling sector in Nigeria standing now?

High awareness from stakeholders, incl. civil society

Compliance monitoring & corrective action plans

Alliance for Responsible Battery Recycling - ARBR

National Environmental (Battery Control) Regulations

National Policy on Waste Battery Management

No court case against polluters so far

Low standard operations can sell their outputs to the (world) market without barriers

Low standard recyclers get enough battery volumes

Low standard recycling still possible without risking business threatening sanctions

Circularity Guidelines on end-of-life battery management

Recommendations to the stakeholders.

RECYCLING INDUSTRY:

- **Take environment, health and safety seriously:** Civil society and regulators will continuously focus on the topic of unsound lead recycling.
- **Cooperate with stakeholders:** Transparency helps.

BUYING AND TRADING INDUSTRY:

- **Conduct environmental, health & safety risk assessments:** when sourcing from low- and middle-income countries.
- **Actively engage:** with lead supplying industries from low- and middle-income countries.

LARGE USERS of BATTERIES:

- **Acknowledge the responsibility for sound end-of-life management:** Partner with best-in-class recyclers.

Recommendations to the stakeholders.

POLICY MAKERS:

- **Prioritization of the ULAB recycling sector:** Enforcement is key.
- **Establish a nationwide radar for ULAB companies:** Know the market.
- **Strategic focus:** Limited number of high-quality / high-standard recycling plants.
- **Repeat:** Regular plant assessments and plans for ambitious and continuous improvements.
- **Systematic blood lead monitoring:** Global level playing field.
- **Promotion of best recyclers:** No tolerance policy for polluting recyclers.

https://www.giz.de/en/downloads/giz2025-en-ProBaMet.pdf

The industry and its changes due to continuous improvement and enforcement of regulation.

Keep going - The Pan-African approach: Ghana, Tanzania, Kenya, Cameroon, Nigeria

https://www.oeko.de/fileadmin/oekodoc/Feasibility_ProBaMet_2025.pdf

THANK YOU

Feel free to contact:
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