Joint press release by Oeko-Institut, Alliance for Rural Electrification, SRADev Nigeria und Platform Lead

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Battery recycling: cooperation between Nigeria and Germany launched

Improving battery recycling in Nigeria, raising labour and environmental standards, and establishing sustainable trade flows for raw materials – these are the declared aims of the new project Partnership for Responsible Battery and Metal Recycling. In this new project, partners from Nigerian civil society, the metal processing industry and the solar industry are working together with the Oeko-Institut to develop a cooperative approach to the responsible recycling of lead-acid batteries. To this end, the project is liaising closely with the Nigerian Federal Ministry of Environment and the environmental enforcement agency, Nigeria Standards and Regulations Enforcement Agency (NESREA).

"As the largest economy and most populous country in Africa, Nigeria is also central to battery recycling. Nowhere else on the African continent is the volume of used batteries as high," emphasizes Frederick Adjei, researcher on Circular Economy and Recycling at the Oeko-Institut. "At the same time, the expansion of decentralised solar power solutions is leading to an increase in demand for batteries, all of which will have to be recycled properly at some point".

In view of the serious health and environmental risks posed by unsound recycling practices, the project supports industrial companies and regulatory authorities in Nigeria in introducing environmental, health and safety standards. The project is funded by the Federal Ministry for Economic Cooperation and Development (BMZ) and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Modernising Nigeria's recycling industry

Nigeria is home to one of the largest lead-acid battery recycling industries in Sub-Saharan Africa. At least ten facilities recycle batteries on an industrial scale, recovering raw materials such as lead, tin and antimony. These are mostly redeployed in battery production – either in Nigeria or abroad.

The aim of the joint project is to share experiences for the modernisation of the recycling sector in Nigeria. The partners are using a three-pronged approach: the Oeko-Institut and the industrial partners are providing knowledge on environmental protection and occupational safety for recycling plants and training plant managers to improve environmental performance and plant safety. In addition, the partners are developing concepts for how Nigerian regulatory authorities might introduce and monitor binding standards for environmental protection and occupational health and safety and implement



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them together with local companies. Last but not least, cooperation with other sectors is to be initiated, for example with the Nigerian solar industry, which requires environmentally sound solutions for used batteries. The German and international metals industry is as well highly interested in responsible supply chains for secondary raw materials.

"We have been monitoring the recycling of used batteries with great concern for many years and have already worked with the Nigerian government on a battery policy. We see this project as an important continuation and practical implementation of that work," says Dr Leslie Adogame of the Nigerian organisation Sustainable Research and Action for Environmental Development (SRADev).

David Lecoque, CEO of the Alliance for Rural Electrification (ARE) adds a practical perspective: "Our member companies are actively involved in the expansion of decentralised renewable energy in Africa. They are aware of the challenges associated with battery disposal and are keen to scale up high quality local recycling solutions".

Franziska Weber Plattform from Blei. an initiative of the WirtschaftsVereinigung Metalle, emphasises the benefits for the industry: "Our member companies and partners are dependent on the import of raw materials and recycling streams are playing an increasingly important role in this context. But of course, we have to pay particular attention to environmental and labour standards with all our suppliers. Without the implementation of appropriate standards, the German economy cannot enter into supply relationships with players in Nigeria."

Lead-acid battery recycling – risks and opportunities for the circular economy

Lead-acid batteries are used in cars, off-grid solar applications and backup power systems. Environmentally sound and safe recycling is possible and can effectively recover up to 97 percent of all contained raw materials. However, in many regions of the world, recycling takes place in substandard, highly dangerous and unsafe conditions, exposing workers and neighbouring communities to toxic lead dust.

This lead exposure can have serious health effects, including irreversible nerve and brain damage particularly in children. According to UNICEF, up to 800 million children, especially in low- and middle-income countries, have elevated blood lead levels. In addition to the dramatic impact on the lives of those affected, there is also long-term economic damage, which is estimated at four percent of the gross domestic product in Sub-Saharan Africa.

Further information on the "Partnership for Responsible Battery and Metal Recycling (ProBaMet)" project



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About Oeko-Institut

Oeko-Institut is a leading independent European research and consultancy institute working for a sustainable future. Founded in 1977, the institute develops principles and strategies for ways in which the vision of sustainable development can be realised globally, nationally and locally. It has offices in three cities in Germany: Freiburg, Darmstadt and Berlin.

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About Alliance for Rural Electrification (ARE)

The Alliance for Rural Electrification (ARE) is an international business association that promotes a sustainable decentralised renewable energy industry for the 21st century.

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About Sustainable Research and Action for Environmental Development (SRADev)

SRADeV Nigeria was formed on 7th November 2003 with its headquarters in Lagos but was formally incorporated with the Corporate Affairs Commission in Nigeria in 2009. SRADeV Nigeria is a professional, research



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and advocacy-based non-profit organisation. It acts as a catalyst, advocate, educator and facilitator to promote the wise use of natural resource conservation, with a mission to ensure that the local people are put on the drivers' seat in the sustainable management of the environment. The main areas of focus are Policy Research, Sound Chemical Management and Natural Resources Conservation through advocacy/advisory, research/case studies, capacity building and training and awareness programmes.



sradev.org

About Platform Lead/Plattform Blei (an initiative of WV Metalle)

The Platform Lead (Plattform Blei) bundles, initiates, and communicates information, background knowledge and specific projects on the material lead. It is the materials initiative of lead manufacturers, processors, and users in Germany. Together with civil society, the Platform Lead strives for concrete projects and engages in an open exchange on this highly regulated and diverse metal.

plattform-blei.de

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