



NEWSLETTER #5

ABOUT

ReSoCart-ED means Recycling Solutions for Non-Reusable Printer Cartridges in Emerging and Developing Countries. The project is funded by the German Federal Ministry for Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUV), started in May 2022 and runs until February 2024. ECOLOGICON GmbH and Umweltcluster Bayern e. V. form the ReSoCart-ED consortium to examine whether the recycling of printer cartridges could be an economically sustainable business model in Ghana.

WE ARE AT WACEE IN ACCRA (18TH/19TH OCTOBER 2023)!

Welcome to WACEE (West African Clean Energy & Environment)-Fair in Accra in October! For the third time during the project, team-representatives will visit Ghana in October 2023. The main reason is the participation of André Rückert as a speaker on the WACEE-Conference organized by the AHK-Ghana (www.wacee.net). The topic of the presentation will be the current results of the ReSoCart-ED project. To all of you who will be participating in the WACEE: We are looking forward to meeting you there. In case you are interested in meeting up during the WACEE or before/after the fair, feel free to contact us!

PROJECT MEETING AND VISIT TO CR-SOLUTIONS GMBH

The second in person project meeting in 2023 was held in Röthlein near Schweinfurt in Germany on 31st of August. The project team from Umweltcluster Bayern e. V. (Dr. Stefan Riegg) and ECOLOGICON GmbH (Florian Werthmann, André Rückert and Ralf Tischendorf) met on the grounds of CR-Solutions GmbH that runs the printer cartridge collection scheme "Die rote Tonne" (engl. "The red bin") in Germany whose bins can be found on roundabout 70 % of the German municipal recycling centers. The bins of CRS are managed in a bin exchange system in which the full bin is collected by CRS and a new bin is provided to the recycling center. All bins are picked up by the own fleet of the company and consolidated in Röthlein, where a sorting and repacking process of the collected cartridges takes place. The repacked cartridges are picked up for refilling and recycling regularly by partner companies of CRS.



Figure 1: Visit to CR-Solutions GmbH. The picture shows red bins in delivery. Insert picture: View into a bin showing cartridges and dust.

THANKS TO THE LOCAL EXPERTS FOR THEIR WORK!

A part of the ReSoCart-ED project was the contracting of local experts to support in questions of market situation (Mountain Research Institute), legal framework (AHK Ghana) and the role of the informal sector (University of Cape Coast) in Ghana for the toner cartridge recycling overview. We thank the contractors a lot for their great and important work on which we will consider further steps of recycling chance evaluation.

SNEAK PEAK RESEARCH RESULTS

As a sneak peak into the research results conducted by our Ghanaian partners, ECOLOGICON GmbH will publish interesting insights into the research results in German and English on their company "Blog" in the next four weeks, that you can find [here](#). They will be announced on LinkedIn on a weekly basis.



WE REACHED A NEW MILESTONE!

The Project reached a new milestone on the project timeline. We submitted a report for MS3 including a technical description of the cartridges, the comprehensive results from the market studies as well as an outline design for several recycling routes. This report is a short outline of the final white paper to be produced at the end of the project in 2024.

CARTRIDGE COLLECTION SCHEME AS TEST FOR DATA IMPROVEMENT

We are still working on the collection scheme together with EPA to establish a safe and robust collection of waste toner cartridges. This sample collection is planned to last for a few months only in late 2023 and early 2024. According to other collection trials in the e-waste sector we expect to collect a threshold-amount of cartridges to hopefully gain data for a solid estimation of possible waste flow for a recycling system. Depending on these data also the continuation into a pilot line will be considered and the collected volume as well as quality of the cartridges will determine size and technology used for the pilot line. Be prepared for a call for tenders.



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