

Frequently asked Questions. (FAQS)

Q. What is Resource efficiency and Waste Management for off grid solar products (REWMOS) about)?

REWMOS (<http://www.repic.ch/repic-en/projects/ongoing-projects/resource-efficiency/myclimate-kenia-west/>) is a project being implemented by Solibrium <http://solibrium-solar.com/index.html>. This project aims to tackle issues related to electronic waste from off-grid solar products. The main project goals are the lifetime extension of off-grid solar products and the introduction of economic viable business models for waste management and the recycling of solar home systems.

Q. What are the aims of REWMOS?

- Reduce the negative environmental impact of solar home system (SHS) at their end of life and Increase the value-add associated with owning a SHS for the user
- Identify best practices for disposal and recycling at the end of the lifespan, and develop a network of stakeholders and partners to facilitate this
- Identify a viable business model that can bring all stakeholders together -attractive to the end-user, viable for retailer, whole-seller and manufacturer, and practical for recycling.

Q. Who implements the REWMOS project?

- myclimate (<https://www.myclimate.org/>) is a Swiss non-profit organisation that works with its global partners for effective climate protection through consultation, education and climate protection projects.
- Solibrium (<http://www.solibrium-solar.com/>) is a for-profit social enterprise based in Western Kenya working to bring affordable solar products to local communities.
- REPIC (<http://www.repic.ch/repic-en/>) is the interdepartmental platform formed as a joint initiative of the Swiss State Secretariat for Economic Affairs (SECO), the Swiss Agency for Development and Cooperation (SDC), the Federal Office for the Environment (FOEN) and the Swiss Federal Office of Energy (SFOE), and tasked with the promotion of renewable energy, and energy and resource efficiency, in international cooperation.

Q. What are some of the projects deliverables?

- Local workshop consultation with solar users and sales people.
- Life Cycle Analysis -LCA

Resource Efficiency and Waste Management for Off-grid Solar Products in Kenya

[Implemented in Partnership by myclimate & Solibrium]

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- High-level stakeholder interviews.
- Solar user's surveys.

Q. What is E waste?

- E-waste refers to electronic products nearing the end of their "useful life", for example, solar components, computers, televisions, VCRs, stereos, copiers, and fax machines. Many of these products can be reused, refurbished, or recycled.

Q. What should be done with E waste?

- Reduce, reuse, and recycle. Reduce your generation of e-waste through smart procurement and good maintenance. Reuse still-functioning electronic equipment by donating or selling it to someone. Recycle those components that cannot be repaired. Most electronic devices contain a variety of materials, including metals that can be recycled.

Q. Why Prevent Electronics from Entering a Landfill?

- Some electronic device components contain constituents that, if improperly handled, could be harmful to the environment and its inhabitants. E-waste that is not recycled ends up in the environment. Water is poisoned, air turns toxic, soil becomes dead, and wildlife and plant life suffer.
- Certain components of electronics contain measurable amounts of regulated heavy metals, including lithium ion, lead, silver, barium, cadmium and mercury. Many of these metals can be recovered and responsibly disposed of.

Q. Why Does it Cost Money to Recycle Some Electronics?

- Materials such as antimony, arsenic, lead, and mercury used to manufacture electronics are unhealthy to us. If not recycled properly, it is surprisingly easy for these materials to ultimately end up in our bodies and cause major issues including lung damage, cancer, and seizures. E-waste that is not recycled ends up in the environment. Water is poisoned, air turns toxic, soil becomes dead, and wildlife and plant life suffer.
- To avoid these harmful effects on both our bodies and our environment, reputable e-cycling companies provide outlets for responsible riddance of your old electronics. Unfortunately, some companies lower their costs by exporting e-waste to countries like Ghana, Nigeria, Pakistan, India, and China where it gets broken down by men, women, and children who are usually unprotected from the toxins.

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Q. What is Materials Accountability?

A. Refers to the tracking of materials throughout their entire lifespan (from initial manufacture through its use - to reduction to commodity via de-manufacture). True accountability requires per-item documentation and disposition records to the very end, when assemblies are finally broken down into clean commodities and are no longer considered unclean hazardous wastes.

Q. What is a consolidator?

A. These are organizations that only collect and transport materials to Recyclers but do not actually process the materials (scrap brokers).

Q. What is a Recycler?

A. This is an organization with facilities that accumulate and de-manufacture materials into their base materials to be sold to processors to use in new goods manufacturing.

Q. What is the 3 'R's Rule?

A. The "3 R's" Rule - best practices of solid waste management and environmental stewardship: Stands for "Reduce" consumption, "Reuse" until no longer useful and lastly "Recycle" what cannot be reused - each step to be considered in order to minimize or delay materials entering the waste stream.

- Reduce – First step of the “3 R’s” Rule - reduce consumption, which in turn minimizes the volume of what will eventually become waste.
- Reuse – Second, step of the “3 R’s” Rule - reusing materials for as long as is practical. With regard to electronics -this usually requires an investment of labor and parts for reconditioning and redistribution of goods. Reuse extends the lifespan of these materials and greatly "Reduces" consumption of new manufactured goods.
- Recycling - Last step of the “3 R’s” Rule - and is supposed to be the last resort when an items' reuse in its original intended purpose is no longer an option. Recycling processes destroy materials for scrap materials, which are sold to processing facilities who in turn add new material to the reclaimed and then sell the material to new product manufacturers.

Q. What is a waste diversion score?

A waste diversion score is a calculation of how much waste received is recycled and kept out of landfill. This not only includes the hazardous materials within the device such as lithium, lead and mercury, but also the casing which can be made up of plastic, metals or even engineered wood. For an electronic waste (E-waste) recycler, a waste diversion score serves as an environmental benchmark measuring the efficiency of not only their recycling practices but commitment to sustainability.

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Q. What is the environmental impact if electronics are not disposed of correctly?

E-waste contains valuable non-renewable resources. By reclaiming these materials for reuse, we reduce the environmental impact and energy consumption of mining and processing, and prolong their availability to future generations. What's more, without best practices in E-waste disposal, highly toxic elements such as mercury, lead, lithium and cadmium find their way into landfills or are shipped to developing countries where they are burned, dumped, or smashed apart by impoverished workers and children without proper protection, causing massive environmental damage and endangering human lives.