



FROM TRASH TO TREASURE

E-Waste Management and Green Jobs For Rwanda

In 2014, the Rwanda Green Fund (FONERWA) invested close to US \$1.5 million (Rwf 1.26 billion) to develop a national e-waste management strategy. Thanks to the fund's investment, Rwanda has now established an e-waste recycling facility, with the capacity to process 10,000 tonnes of e-waste annually - making it the second state-of-the-art e-waste dismantling and recycling facility in Africa.

As Rwanda positions itself as a leader in Information and Communication Technology (ICT) in the region, there has been an increase in the use of electronic equipment such as laptops, televisions, computers and smartphones. This, paired with high consumer demand for the latest gadgets, has led to significant growth in e-waste. In response, the Government of Rwanda, through the Ministry of Trade and Industry, went about solving this problem in partnership with the Rwanda Green Fund.

Since it began operations, the e-waste recycling facility has processed more than 120 tonnes of materials and prevented 279 tonnes of carbon dioxide equivalent emissions from entering the atmosphere..

INVESTMENT MILESTONES

- A National E-waste Management Policy
- A five-year strategic plan
- An e-waste law and relevant regulations
- E-waste technical guidelines
- Two standards on e-waste developed with the Rwanda Standards Board
- National E-waste Recycling Facility



CLIMATE CHAMPIONS

It's the people behind our innovative and exciting investments that make a difference in the lives of Rwandans. Their work ensures community ownership, climate resilience and sustainability for generations to come.



This project has greatly transformed waste management because there was no solution before, especially for e-waste. Rwandans used to keep electronic and electrical waste in their offices and homes or in storage. When we conducted the initial assessment study, we found that some of the waste was even dumped in landfill. This project provides a solution to that. It is also protecting the health of Rwandans and our natural environment by avoiding contamination from e-waste,



Olivier Mbera
E-Waste Project and Facility Manager

THE CHALLENGE

E-waste is often found in large quantities in offices, warehouses and households and contains chemical elements such as lead, mercury, arsenic, cadmium, and selenium that have harmful effects on the environment and human health.

An inventory carried out in 2015 indicated that Rwanda has an e-waste generation potential of more than 10,000 tonnes per year, of which 82% is from individuals, 6% from private institutions and 12% from public institutions. The report also showed an annual growth of about 6% in the importation of electronic equipment to Rwanda. This knowledge provided urgency for the Government of Rwanda, through the Ministry of Trade and Industry, to find a sustainable solution to e-waste.

THE SOLUTION

The Rwanda Green Fund saw the potential of transformational change in an e-waste strategy, associated laws and a world-class recycling facility. This led the fund to invest in a Ministry of Trade and Industry project for the design and implementation of a national e-waste management strategy for Rwanda.

One success of this investment has been the establishment of an e-waste recycling facility at the Bugesera Industrial Park in Rwanda's Eastern Province. The facility began operating in mid 2017 and was officially launched in December 2017.

NATIONAL E-WASTE RECYCLING FACILITY

- With support of the Rwanda Green Fund, the Ministry of Trade and Industry established an e-waste recycling facility.
- The facility collects end-user electronic equipments from offices and homes and either refurbishes them or recycles the raw materials.
- The e-waste recycling facility is located in Bugesera Industrial Park in Rwanda's East.
- More than 300 green jobs have been created, with 700 more in the pipeline.
- The potential next phases of the facility include lead-acid battery recycling and precious metals recovery.



Inside the e-waste recycling facility at Bugesera

RETURN ON INVESTMENT AFTER SIX MONTHS OF OPERATION

120
tonnes of e-waste
collected and treated at
the facility

400
computers refurbished
for use by schools

300
green jobs created (with
700 more in the pipeline)

279
tonnes of carbon dioxide
equivalent emissions
mitigated

60
tonnes of e-waste dismantled



Rwanda was worried about how to dispose of all the e-waste in the country, but the management of electronic waste is finally here. The facility has also signed an MoU with the Rwanda Education Board so that refurbished computers from this facility can be distributed to local schools.



Alice Muhozayire
E-Waste Facility Team Member



GREEN JOBS

While the project aimed to provide a sustainable solution for electronic waste to support the continued growth of ICT in Rwanda, it has also created green jobs for more than 300 people. This number is expected to rise to more than 1,000 once the facility and nationwide collection points are fully operational.

Jean de Dieu Munyankindi has been employed at the e-waste recycling facility since November 2016. He says that working at the facility has tremendously improved his life.

“The first and most important benefit I am getting from working at the facility is the new skills I have developed. I did electronics at university, but now I understand much more about how they work. I have realised that all the electronic devices we think are complex, are actually very simple. I have also become more financially secure from the salary I earn.” Jean de Dieu says he is proud to contribute to Rwanda’s green growth.

FUTURE PLANS

With the facility now operational, local and regional plastic and metal manufacturers have expressed interest in using the recycled raw materials to produce new products. This will support Rwanda’s efforts to foster a circular economy. The management team also plans to raise awareness on the benefits of the facility, locally and internationally, so that others may learn from Rwanda’s experience.

A private-public partnership agreement has been signed to facilitate the running of the facility and the collection of e-waste from across the country, which will increase the number of people employed in e-waste recycling in Rwanda. Under the agreement, the lease fee paid to the Government of Rwanda will be reinvested in environmental and green growth initiatives through the Rwanda Green Fund.

As the facility grows, and potentially extends to lead-acid battery recycling and precious metals recovery, Rwanda has positioned itself to become an importer of e-waste and benefit substantially from turning trash into treasure.



I used to work at an electronic equipment repair shop. Some of the materials we used were very harmful to the environment and to our health. But now I am very proud to be part of the team that is preventing e-waste from harming people and the environment.



Jean de Dieu Munyankindi

RWANDA GREEN FUND

The Rwanda Green Fund is a national environment and climate change fund that invests in public and private projects that have the potential for transformative change and that align with Rwanda’s commitment to building a green and climate resilient economy. Learn more at www.fonerwa.org or follow us on Twitter at @GreenFundRw.

RWANDA GREEN FUND PARTNERS

This fund is thankful to our partners who have joined us on the journey to build a green Rwanda and we look forward to even greater impact in the future.

