Executive summary

Access to safe and sustainable energy is crucial to help refugees stay safe and rebuild their lives (UNHCR, 2019). In the 'Global Strategy for Sustainable Energy 2019-2024', UNHCR states that "all refugees, host communities and support structures should be able to satisfy their energy needs in a sustainable manner, without fear or risks to their health, well-being and personal security, while ensuring the least possible environmental impact" (UNHCR, 2019). Sustainable and cost-efficient energy solutions are recognised as being able to increase the self-reliance of vulnerable people and release social tensions. Therefore, giving access to safe sustainable energy to those in displacement settings and surrounding communities is of paramount importance.

As the recognition for the need of sustainable energy access in settlements increases, more Off-Grid Solar (OGS) devices and other electronic products are provided to the population. This increasing amount of e-product inevitably results in an increasingly important quantity of e-waste. However, in order to prevent hazardous materials contained in e-waste from contaminating the environment and people's health, e-waste needs to be managed appropriately. E-waste thus requires a tailored solution through both bottom-up and top-down approach in order to holistically and sustainably improve the situation. To design such solution and recommendations, a detailed analysis of the legal framework, the Electrical and Electronic Equipment (EEE) flows and the stakeholders involved in Ethiopia, Kenya and Uganda was required.

The detailed analysis of the legislations and regulations at international and national scale in Ethiopia, Kenya and Uganda was conducted and demonstrated the lack, if not the total absence, of e-waste legislation. EPR was highlighted as a strong complementary tool to ensure that producers and importers are responsible for their e-waste, and also to incentivise the eco-design of products. EPR systems have many different features which allow them to be tailored to many different contexts. However, an EPR system can only be put in place either through regulation or on voluntarily-basis by producers. Finally, a set of interviews were organised with key local stakeholders to better understand the EEE flows and the current e-waste management and disposal practices.

Based on all the analysis, a set of recommendations and actions were designed at different levels. At global level, for UNHCR to develop an e-waste management strategy, at national level, to improve the lack of regulations tackling e-waste in the targeted countries, and finally, at settlement level to improve the e-waste situation on site. These recommendations were complemented by a business-driven scenario based on the case study of Rhino Camp in Uganda, clearly outlining the different steps required to efficiently and rapidly improve the e-waste situation in settlement context and including the operations, the stakeholders, the enforcement and control as well as the financial mechanism required for a successful implementation.

Overall, in-depth information was obtained in Ethiopia, Kenya and Uganda regarding the current state of e-waste legislation, the EEE flows and the identity of various stakeholders along the EEE life cycle. The set of recommendations targeting the legislation, UNHCR e-waste strategy and settlements are aligned towards one same goal: the appropriate e-waste management in settlement to prevent any further environmental and health impact to persons of concern.