Objectives

1. Reduce the environmental impact of hosting refugees through environmental protection efforts, restoration & awareness among refugees
2. Increase the use of safe and alternative energy sources in both refugee and host communities
3. Improve protection and wellbeing in refugee settlements through solar street lights installations and other environment-friendly energy initiatives

Progress (January - June 2021)

Access to sustainable cooking fuel
Liquified Petroleum Gas (LPG) assistance continued among refugees and host communities in Ukhiya and Teknaf in 2021, and throughout the lockdown period as one of the prioritized assistance projects approved by RRRC (Refugee Relief and Repatriation Commissioner). Since January, 459,603 LPG cylinder refills and 1,617 replacement cooking sets were provided to refugee households and 78,934 LPG cylinder refills were provided to host community households.

Access to sustainable power and electricity
- 2,200 solar streetlights were installed across both UNHCR and IOM managed camps to improve access for refugees to water and sanitation facilities, and to mitigate gender-based violence risks.
- Solar systems in Kutupalong and Nayapara Registered Camps were upgraded to 43-kilowatt peak capacity. These systems reduce carbon dioxide emissions from diesel generators, and support lighting at camp-in-charge offices, UNHCR offices and meeting points used by elected camp committees.
- A 40.3-kilowatt peak capacity solar minigrid has been installed in Camp 4 Extension powering a health facility serving over 7,000 refugees, some 200 refugee households, streetlights, and latrines.
- A large-scale uninterruptable power supply (UPS) of 100-kilovolt-ampere has been installed at Sadar District Hospital in Cox's Bazar. The system will back up all essential medical equipment at the hospital.

Environmental Restoration
- 12,200 seedlings including bamboo were planted in the host community area which includes gap filling in the existing planting sites and new plantation. 39,600 bamboo branch cuttings were set aside in the nursery to produce bamboo seedlings for 2022.
- 88,200 seedlings were raised in the nursery to plantable height and age and nearly 1 million vetiver grass slips are ready to plant for slope stabilization, erosion control and disaster risk reduction.
- 1,535 refugee and host community volunteer Forest Extension Workers were engaged in maintaining existing plantation sites in the camps and in the host community. 2,293 refugees received environmental education in Camp 4 and in Camp 4 Extension through awareness raising sessions.

Elephant Response
- Refugee and host community Elephant Response Team (ERT) volunteers in the periphery of the camps and near the border with Myanmar managed 77 Human Elephant Conflict incidents for which ERT members successfully deterred the elephants to the nearby forest without any injury to the refugees or to the elephants.
- The formation of 20 new Elephant Response Teams (ERTs) in strategic locations within host communities is ongoing. Locations have been selected in consultation with local Forest Department officials and based on a Human-Elephant Conflict survey conducted in the host community.

Challenges

Over 300 additional lightning arresters across all camps are needed to protect refugees from the ongoing threat of lightning strikes. 159 lightning arresters will be installed across all camps in 2021.

The ongoing countrywide lockdown and global supply chain disruption due to COVID-19 continues to delay the delivery and installation of equipment for many of UNHCR’s power supply projects.

Two adult elephants from Myanmar came to Bangladesh by crossing the Naf River. This appears to be a new migration corridor. The Bangladesh Forest Department and other government authorities, with help from UNHCR supported host community Elephant Response Teams managed to safely direct elephants to the Teknaf forest. Additional elephant response capacity in the host community beyond the vicinity of the refugee camps is needed.
**Way Forward**

The RRRC approved the plantation plan presented through the Energy and Environment Technical Working Group (EETWG). In 2021, UNHCR and partners aim to bring 20 hectares of degraded land under mixed vegetation and plant 50,000 bamboo seedlings to establish a sustainable supply chain, bank protection and watershed restoration to promote Disaster Risk Reduction and climate resilience. 10,740 bamboo seedlings have already been planted in host community areas and 7000 vetiver grass slips were planted in the refugee camps; the vetiver grass has long roots and has proved effective for use in slope stabilization and erosion control. Maintenance of plantation, nurseries, walkway, reservoir, and silt traps is ongoing.

UNHCR will continue to provide sustainable energy access including LPG cooking fuel for 90,000 refugee households. UNHCR began the distribution of LPG to refugees in 2018 to refugees’ basic needs for cooking fuel in a safe and sustainable way that reduces protection, health and environmental risks associated with reliance on firewood for cooking.

UNHCR will continue to work with partners and members of the Energy and Environment Technical Working Group to use data-driven approach to assess, plan and implement environmental conservation and restoration measures. This includes the co-development of technical guidelines as well as joint monitoring and evaluation of environmental conditions.

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**Key Figures (as of June 2021)**

- **99** Watch towers and solar maintained
- **437** New tools distributed to ERT (Elephant Response Team) (Search lights, torch lights, whistle, etc.)
- **47** Hectare of land maintained existing mixed vegetation in refugee and host community
- **1** Study conducted on impact of introducing pressure cookers to Rohingya refugees in Kutupalong camp
- **7** Education / training session on importance of environmental conservation conducted for refugees and host community members

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**Achievements (January - June 2021)**

- **220** Local bamboo growers supported with inputs and training
- **39,600** Bamboo seedlings raised in the nursery
- **145** Hectare of land covered by plantation
- **88,200** Seedlings at plantation age and height
- **280** Hectare of mixed vegetation maintained in refugee camps and host community
- **22** Human elephant conflict mitigated