

UNHCR Project Flow

Solarizing Water Access through Innovative Finance

The Vision

Problem

To meet lifesaving water needs for refugees and their hosts, UNHCR operates close to 300 boreholes currently powered by diesel generators.

Diesel generators require low initial investment but on the long run they entail high operating costs and generate significant CO₂ emissions.

While, solar systems can solve these issues, they come with high capital cost.

Funding Challenges

Current funding structures with limited annual budgets are hindering investments in the transition to solar power.

Solution

Innovative financing mechanism can support transition of refugee-serving water systems to renewable solar energy.

Project Flow covers the initial solar investment costs, and the benefitting operation repays through the generated fuel savings.

The solar transition reduces the operational costs of the systems while also mitigating CO₂ emissions.

Potential Impact

A single dollar is re-used multiple times and operational costs are decreased, thereby improving efficiency and sustainability of financial resources.

USD 910,000

saved annually through solarization of 25 systems in the first round of implementation.

~60,000t CO₂

emission mitigated over 10 years.¹

1 million

beneficiaries (refugees and their host community)

With USD 10.5 million, **100 to 160** water systems solarized over 10 years. Traditionally with grant funding, this amount would cover only 50-70 water systems.

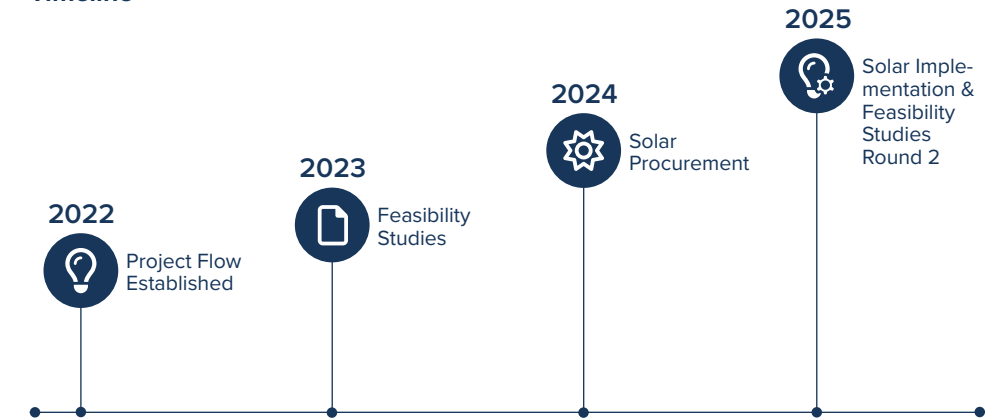
¹ With the solarization of the systems in the first round of implementation, it is estimated that ~14,000 tons of CO₂ emissions are avoided in 10 years. Per solarized system, which vary in size, 2 – 115 tons of CO₂ are avoided each year. Multiple rounds of implementation are foreseen for Project Flow, eventually aiming to mitigate ~60,000 tons of CO₂ emissions over 10 years.

How it Works

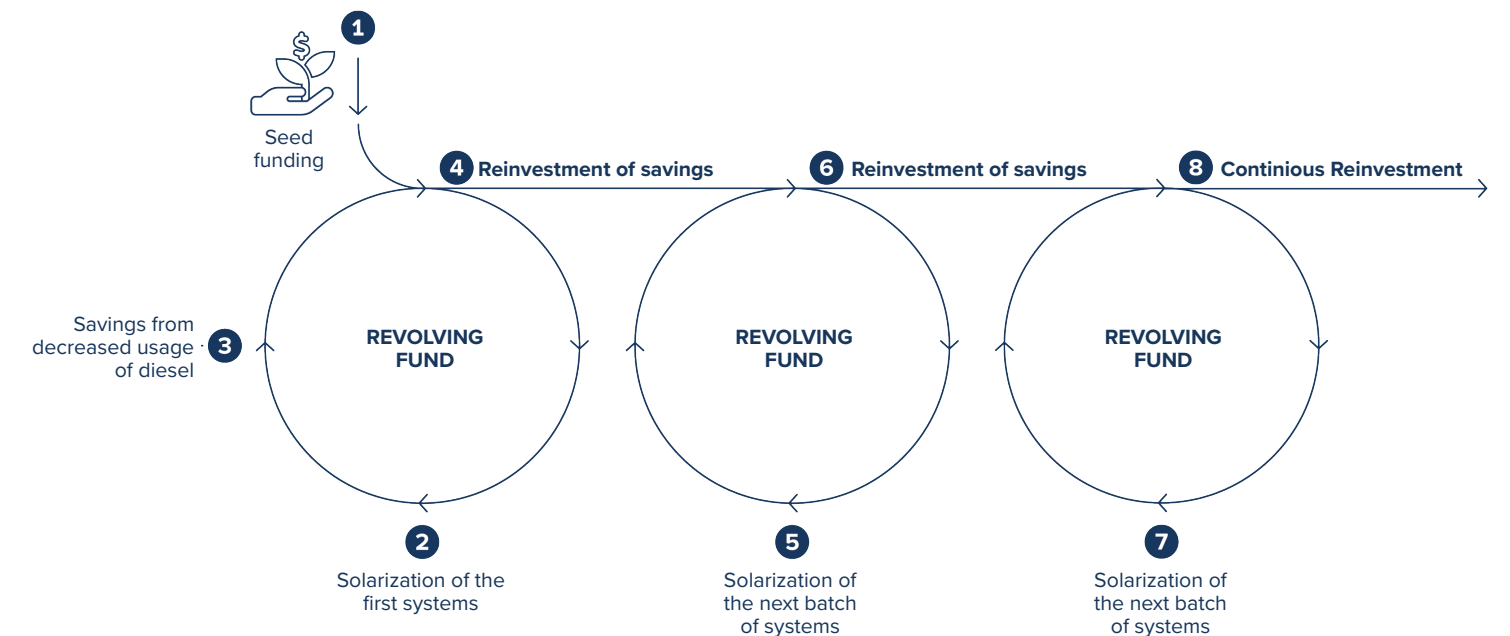
Funding

Project Flow has raised USD 10.5 million. This amount supports the delivery of Project Flow's solarization of water systems in line with UNHCR's Strategic Plan for Climate Action.

Timeline



Revolving Funding Model



Partners



POUL DUE JENSEN FOUNDATION GRUNDFOS FOUNDATION



giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



Innovative Finance

Anne Hyvärinen
Project Flow Manager
hyvrinen@unhcr.org