GEF SolarChill Project

Reliable, Climate-friendly Vaccine And Food Refrigeration Technologies

Clean Energy for Health Care Conference, 2019

Cicilia Magare, UNEP
Introduction

• Providing vaccines to the people at the last mile
• 113 health facilities have a SolarChill A unit installed
  • 36 SolarChill A units in Kenya serve a catchment population of more than 230,000 people
• Test the performance by monitoring over a variety of manufacturers
• Technology transfer with Palfridge and companies in Colombia
SolarChill facts

- Solar direct drive units, without batteries
- Independence of electric power supply
- Environmentally friendly
- Temperature autonomy of 5 days
- WHO PQS prequalified
- Many countries with large off-grid populations have sufficient PV power potential

- SolarChill A: Medical use
- SolarChill B: Household & Commercial use

Lisa Murray / UN Environment
Achievements and key take aways

Field test results (will be published):

- SolarChill technology works reliably under real use conditions
- Performance stability varies across different SDD technologies
- Excess energy available (potential for additional appliances)
- Power demand varies across different SDD technologies

Technology transfer: Cooperation with local manufacturers for medical and commercial use

- Potential to further optimize technology and costs
Looking ahead

Promote further uptake of the SDD technology, with a focus on domestic/small commercial units (open for cooperation)

• Cooperation initiated with commercial partners in Kenya

Seeking partners and funding for:

• Install SDD units to vulnerable communities
• Extended field testing for both medical and commercial units beyond 2019 for robust data
• Technology transfer to countries and manufacturers for uptaking the SDD technology
Thank you for your attention!
www.solarchill.org
Monitoring results

No power need 3 days