

# GEF SolarChill Project

## Reliable, Climate-friendly Vaccine And Food Refrigeration Technologies

Clean Energy for Health Care  
Conference, 2019

*Cicilia Magare, UNEP*



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET



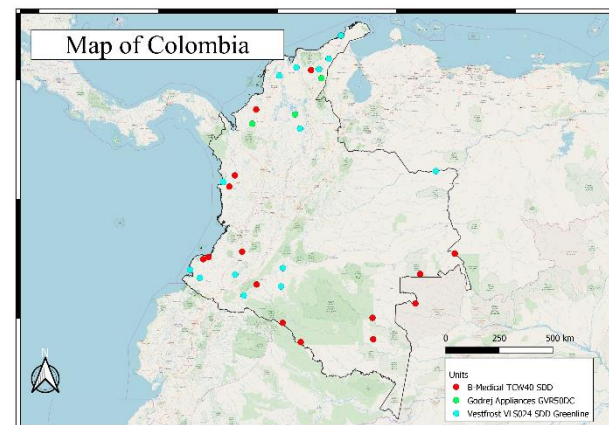
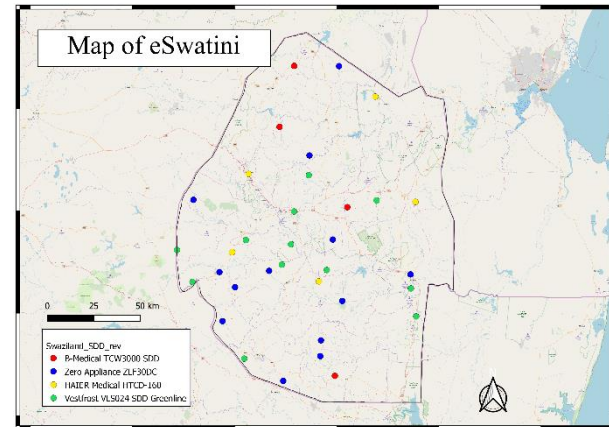
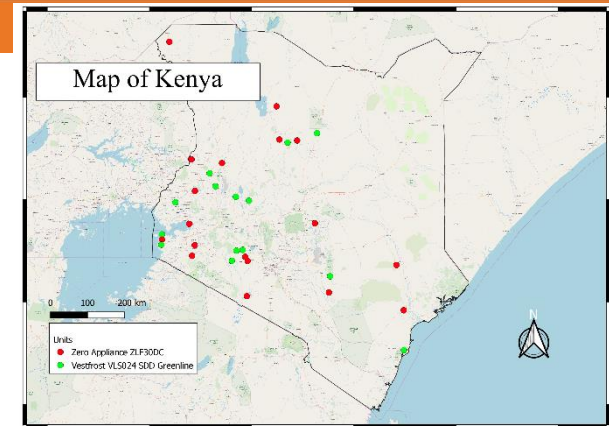
skat Swiss Resource Centre and  
Consultancies for Development



**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

# 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





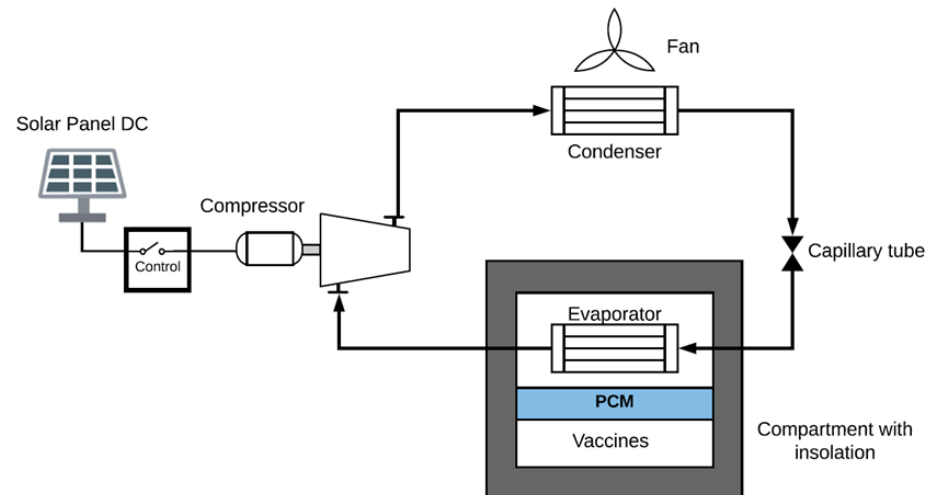
# SolarChill facts

- 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



Lisa Murray / UN Environment

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



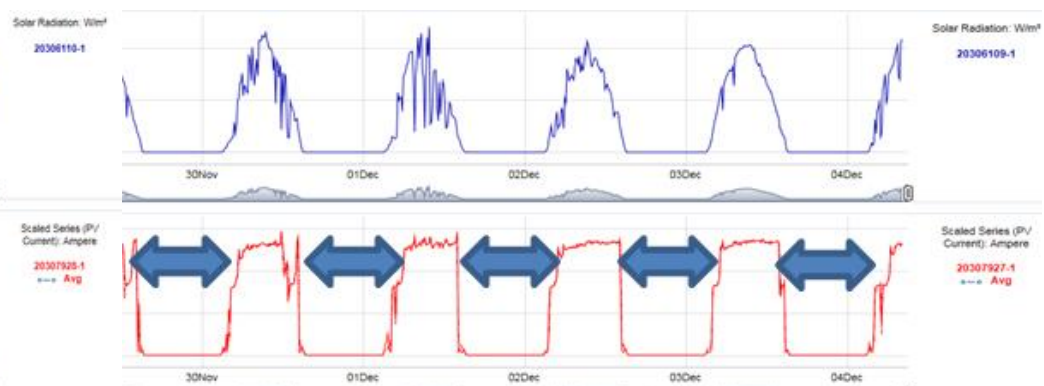
# Achievements and key take aways

## Field test results (will be published):

- SolarChill technology works reliable under real use conditions
- Performance stability varies across different SDD technologies
- Excess energy available (potential for additional appliances)
- Power demand varies accross 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](http://www.solarchill.org)



# Monitoring results

