Global Distributors Collective

Extending product lifetimes through decentralised repair services

Webinar: 29th July 2025

Photo credit: Kukula Solar

Today’s agenda

Photo credit: Kukula Solar

1. GDC Innovation Spotlight highlights
2. Trailblazer case study
3. Panel discussion
4. Closing

Partners

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Transforming
Energy
Access

Introduction

Are you currently offering
repair as a service?

Photo credit: Bopinc

Have you seen our *updated* spotlight?

What's new?

- In 2024, we ran a six-month pilot cohort with three GDC members: Natfort Energy, Kukula Solar, and Nyalore Impact
- Each tested repair as a service in real-world settings, with support from SolarAid
- The updated spotlight reflects what we learned together: Practical insights, real numbers, and tested models
- **Today, we're highlighting key additions to the updated publication**

Pilots in practice - what we did

Kukula Solar

Offering repair as a service through **trained repair agents**

Nyalore Impact

Offering repair as a service through **community repair hubs**

Natfort Energy

Offering repair as a service by **building it into their CRM**

All companies received a small grant, trailblazer support from SolarAid, and engaged in peer learning sessions to implement their repair as a service models. Although the models are all different, all went from idea to implementation.

Lesson #1: What customers *really* want

Photo credit: Natfort Energy

Yes they'll pay - if it makes sense

- Pricing sweet spot: ~20–30% of original product value
- Willingness to pay increased when service was fast, repairs were reliable, and savings were clearly communicated
- High-value products (e.g. solar water pumps) more likely to be repaired than cheap ones

Lesson #2: Spare parts - everyone’s headache

Spare parts access is still difficult

- All three LMDs struggled to get the parts they needed
- Common issues included high minimum order quantities, delays and inconsistent quality
- Some tried stockpiling commonly used parts or building their own components
- Without reliable access to spares, it is hard to scale repair

Photo credit: SolarAid

Lesson #3: Multiple models, no one-size-fits-all


Photo credit: Nyalore Impact

There is no single blueprint

- Some relied on in-house repair by agents, others partnered with informal technicians
- Several used tools like mobile apps, SOPs or printed manuals to support 3rd party technicians
- The best approach depends on your existing structure, product range and customer base

All three LMDs are continuing repair…

They’re tweaking **pricing**, training more **agents**, and integrating **learnings**

Still learning from each other via WhatsApp and informal **peer support**

The new **spotlight** captures this momentum to inspire others

Photo credit: Bopinc

Key recommendations for the wider ecosystem

1

Improve access to spare parts

Support local stocking and **reduce high minimum order requirements** so that repairs are feasible at the last mile

2

Role of manufacturers

Design products with repairability in mind and provide technical guidance, manuals and spare parts throughout the product's lifecycle

3

Policy and regulations

Encourage enabling policies such as Extended Producer Responsibility (EPR) and incentives for circular models like repair

Last mile repair

Innovation spotlight

July 2025 - updated with new learnings from GDC members pioneering last mile repair

Global Distributors Collective

Extending product lifetimes through decentralised repair services

E-waste is the world's fastest-growing domestic waste stream, fuelled by higher consumption rates of electronic appliances, the rise of low-quality appliances with short product lifetimes, and few options for repair. A record 62 million metric tonnes (Mt) of electronic waste was generated worldwide in 2022 (UN e-waste monitor), up 82% from 2010. Whilst still only representing a fraction of the total volume, e-waste from off-grid energy products, such as solar lanterns and solar home systems, is set to grow exponentially in the very parts of the world that are currently least able to process it. Efficiency for Access estimates that in 2020 more than 66 million off-grid solar products were no longer 'in use'. It is unlikely they have found their way into responsible electronic waste flows, which are non-existent or insufficient in low-income markets.

SolarAid, who have been pioneering e-waste management solutions in Zambia, found that almost 90% of out-of-warranty, non-functioning solar lanterns 'hibernate' within their customers' households. This is tragic because, after examining some of these products, SolarAid found that around 90% were repairable if customers or agents could access the right tools and spare parts. SolarAid research findings from 2022 and 2023 suggest that households are spending money purchasing new products when they could be saving money repairing their old ones, or in some cases are going without solar electricity altogether.

Benefits of last mile repair services

1. Improved **customer satisfaction and loyalty**
2. **New revenue streams** from the same product
3. Opportunity to meet **sustainability commitments**

Photo credit: Kukula Solar

Dive in to find all lessons, case studies, and practical advice for LMDs to start offering repair as a service.

Trailblazer presentation

SolarAid


Off-grid solar repair in Africa
From Burden to
opportunity
SolarAid

Why repair services?

150 million solar products sold across SSA

75% have ceased to function

Limited infrastructure for recycling

Vibrant rural repair economy

The customer voice vs takeback Initiatives

Most products are repairable and in households

Solar saver: What we did

Testing SEK repair

Pro-active repair of SEKs and end user & stakeholder surveys to understand the feasibility, volume & opinion of repairing products

Testing localised approaches

Testing the viability of repair services with in-house product distributors & third-party technicians

Explore barriers

Understanding and trying to overcome the barriers to repair itself and the challenges posed by limitations in infrastructure & policy

Set-up

Training 5 third party technicians & 15 sales agents

Sourcing spare parts

Provision of repair tools

Repair

Rural community repair days

Over 1000 products repaired in the last phase

Evidence base for common faults across multiple products

Surveys

Baseline & follow-up surveys with:

SEK customers

Repair technicians

Solwezi Technical School students

Results and LEARNIN

Photo credit: SolarAid

1

Solar abundance

24% of households owned 5+ offgrid solar products

2

Repairable solar

91.3% of products were repairable.

On average, repair costs were around 31% of replacement cost.

3

Waiting, not waste

Around 90% of households “hibernate” their broken solar products.

4

EXTEND the reach

Greater effort to extend repair services in far flung areas

5

Business model

We need to further understand the business models to ensure that Repair Agents & Technicians are making a profit

NEXT STEPS

Photo credit: SolarAid

objective

Sustained access to electricity through accessible and affordable repair services for all

24-month programme

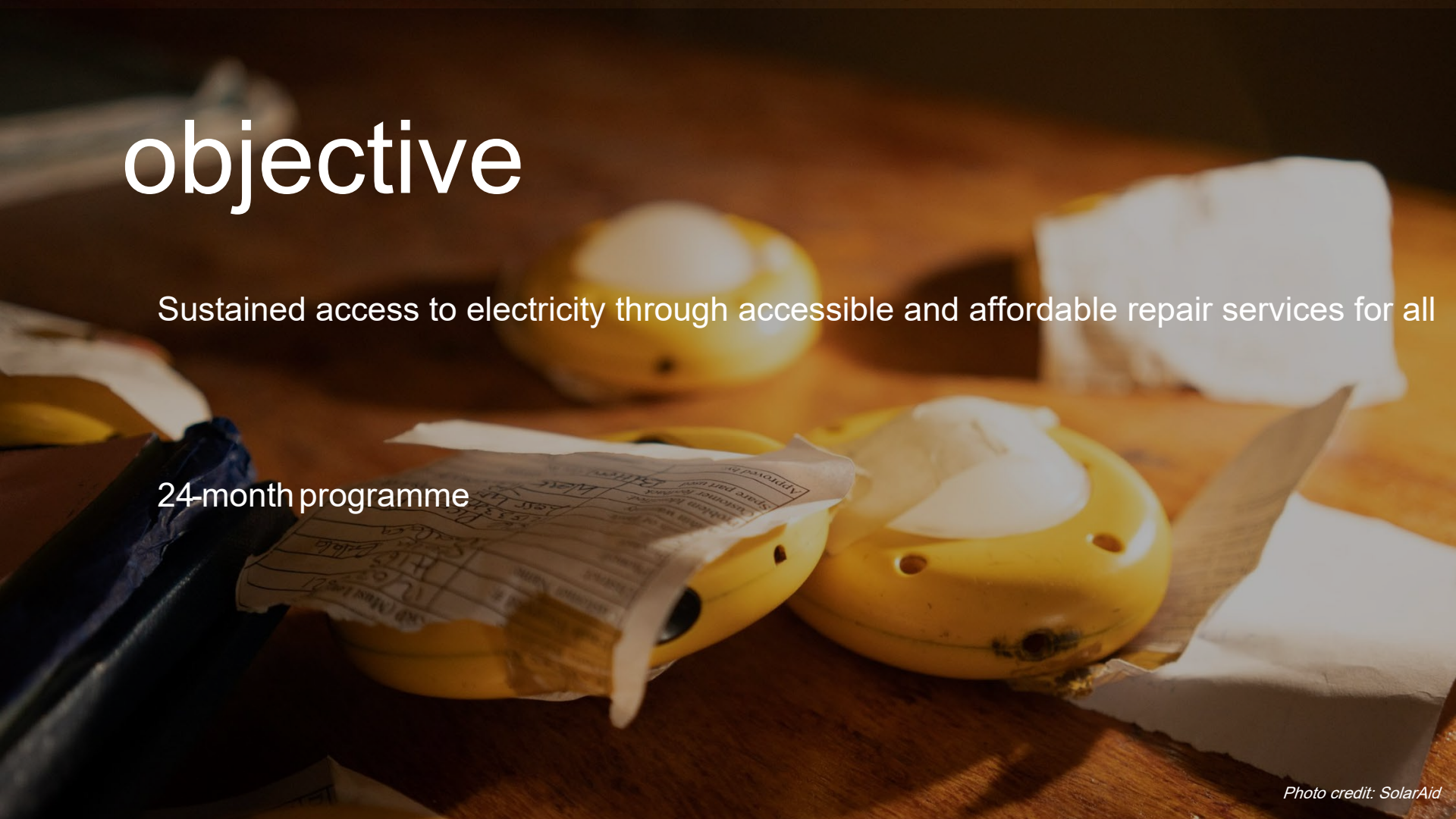
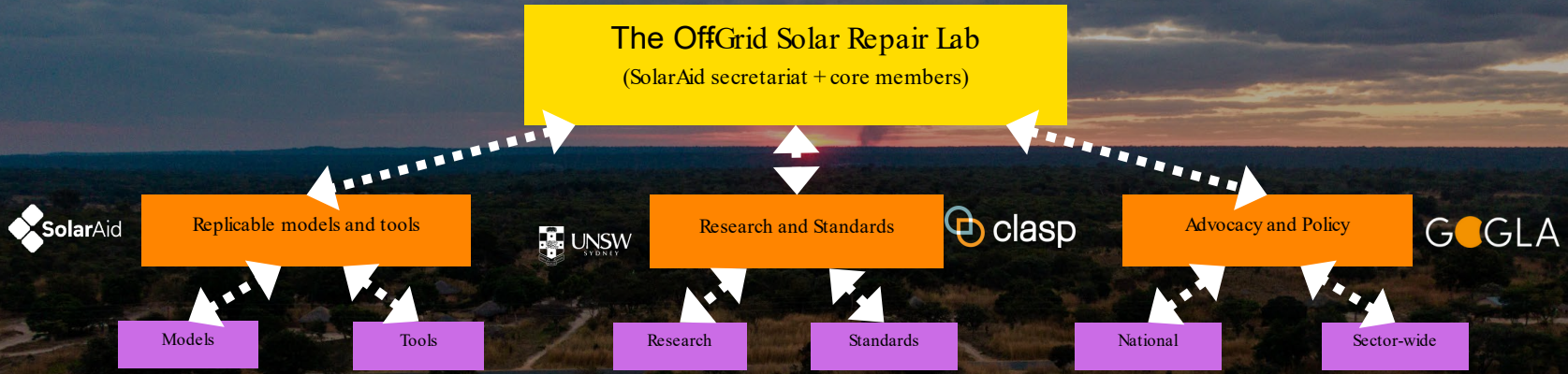


Photo credit: SolarAid

What is the Lab?



Uniting leading sector actors on repair in high demand

Ecosystem impact & technical assistance

Long-term ‘home’ for innovation, open-source solutions and collective, inclusive action

Sector-wide, product agnostic focus

Photo credit: SolarAid

DOWNLOAD THE REPAIR APP

contact

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Sunnymoney Repair App

Panel discussion

Kukula Solar, Natfort Energy, Nyalore Impact

What's your biggest barrier to launching repair?

Wrap up and what's next

Photo credit: Natfort Energy

Thanks for joining!

- The updated spotlight is available for download on the GDC website
- Interested in piloting repair or connecting with others? Get in touch with the GDC team!
- Keep an eye out for more learning sessions on sustainable solutions in the last mile