



Energy for Prosperity: *Ahlin Yaung* (Light) Fund

Transforming rural Myanmar through
increased access to clean and reliable energy

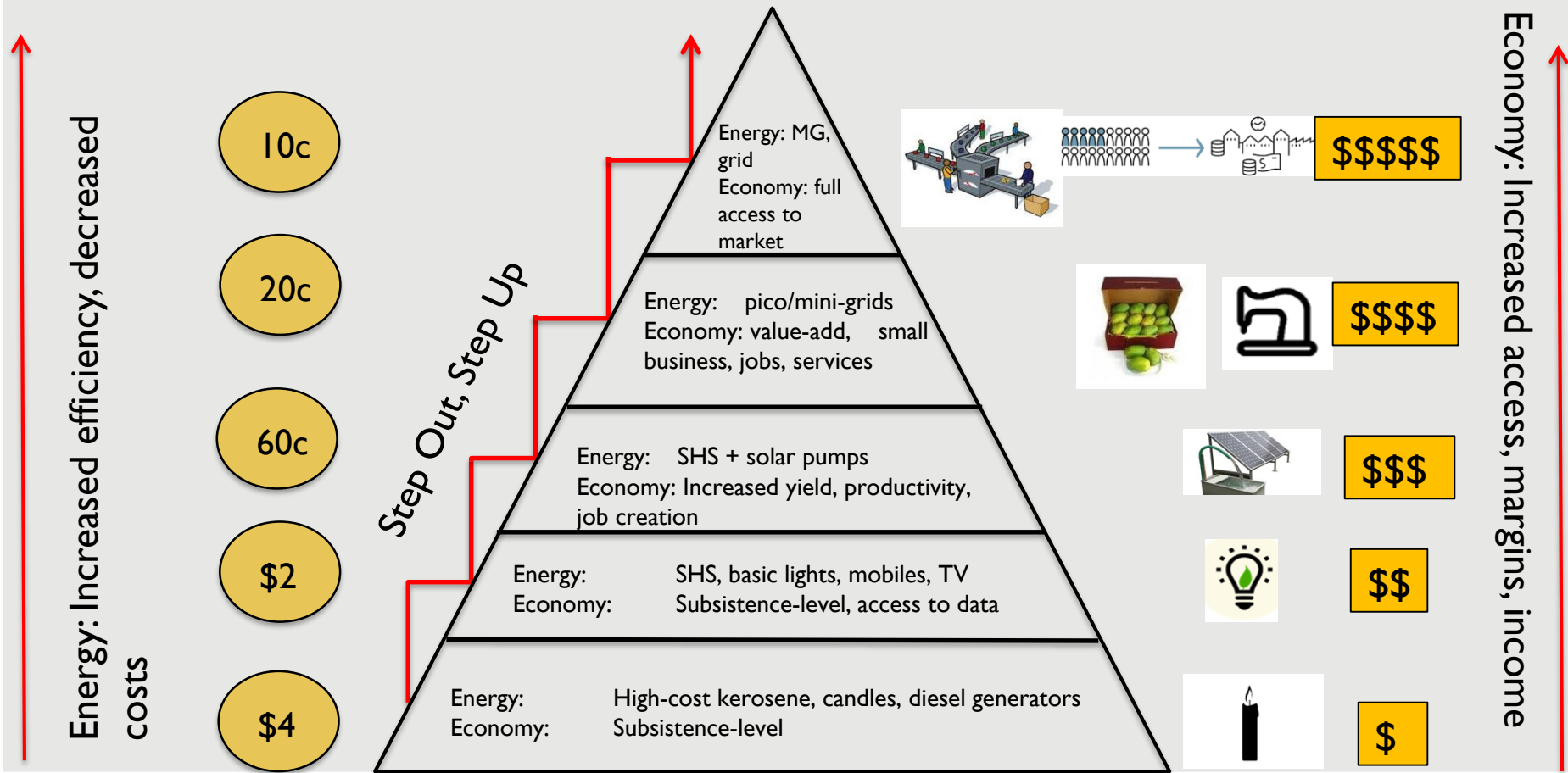


Leveraging Finance to Deliver Energy Access for the Last Mile, ACEF 2017
June 7th, Manila, Philippines

Looking at energy access through the community lens



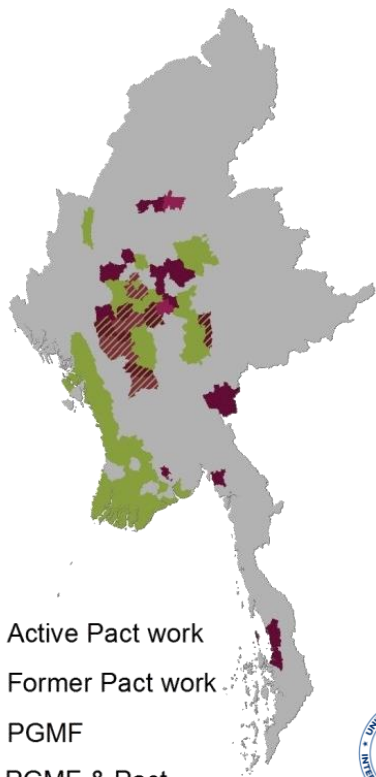
Energy for Prosperity



84% of rural population in Myanmar has
no access to grid electricity



Pact's Presence in Myanmar



Largest integrated development iNGO in Myanmar

2 distinct functions:

- National microfinance with net assets of \$200 million
- Integrated development program

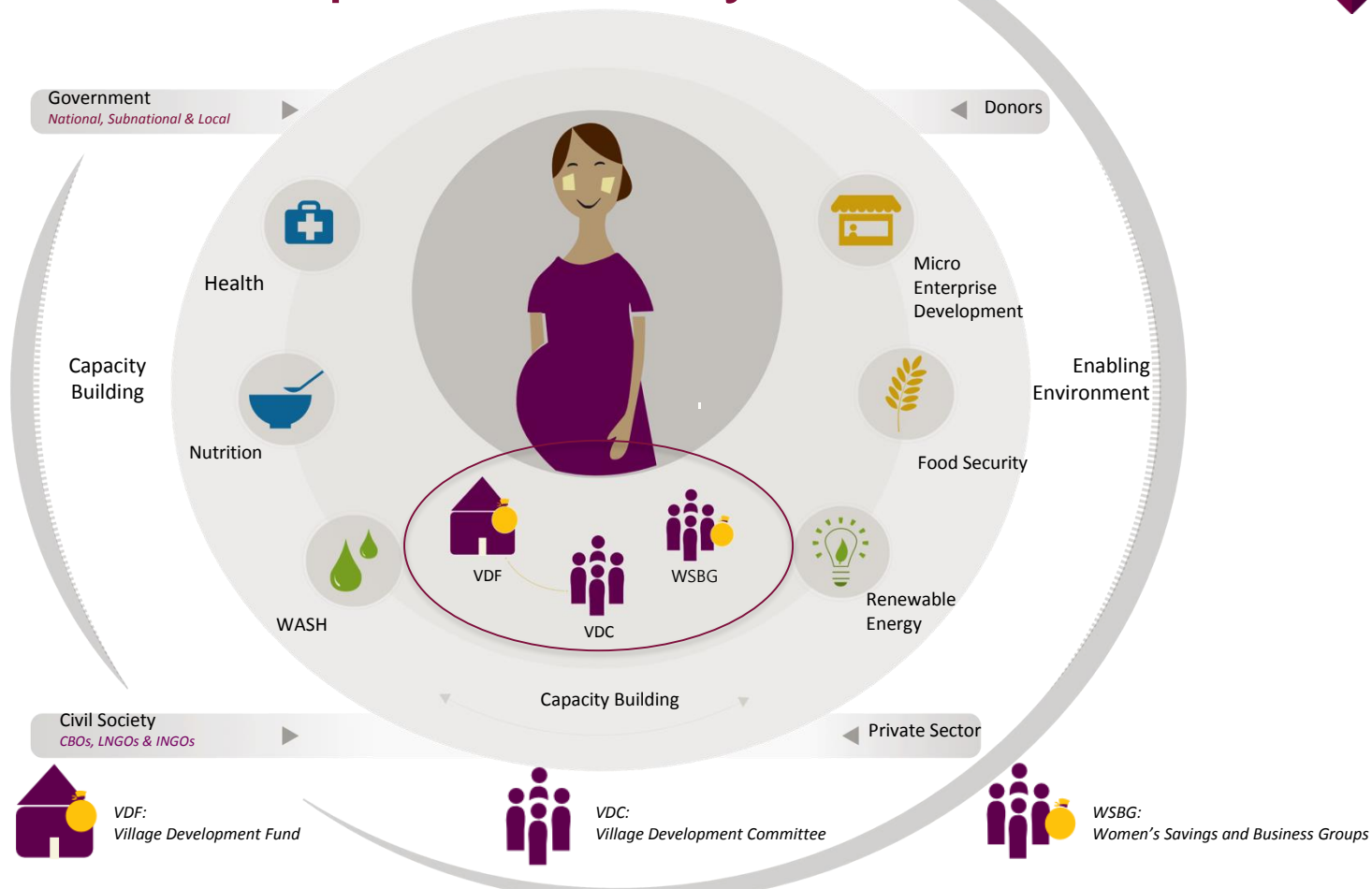
Impacts: > 7.8 million Myanmar citizens from 15 000 villages across 10 states and regions



USAID
FROM THE AMERICAN PEOPLE



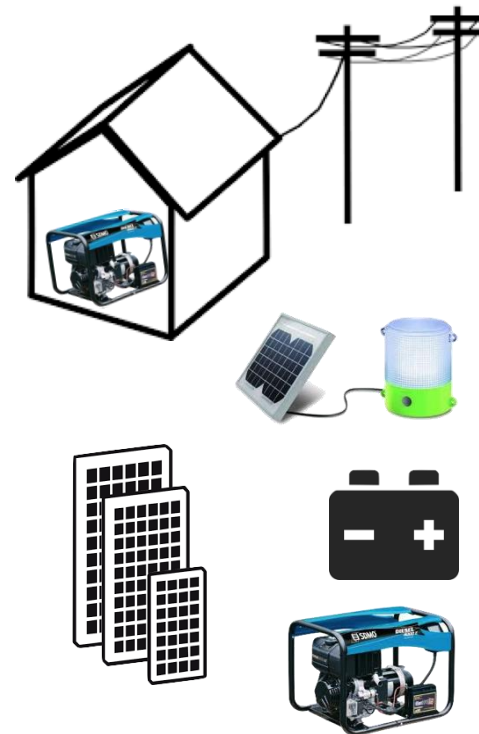
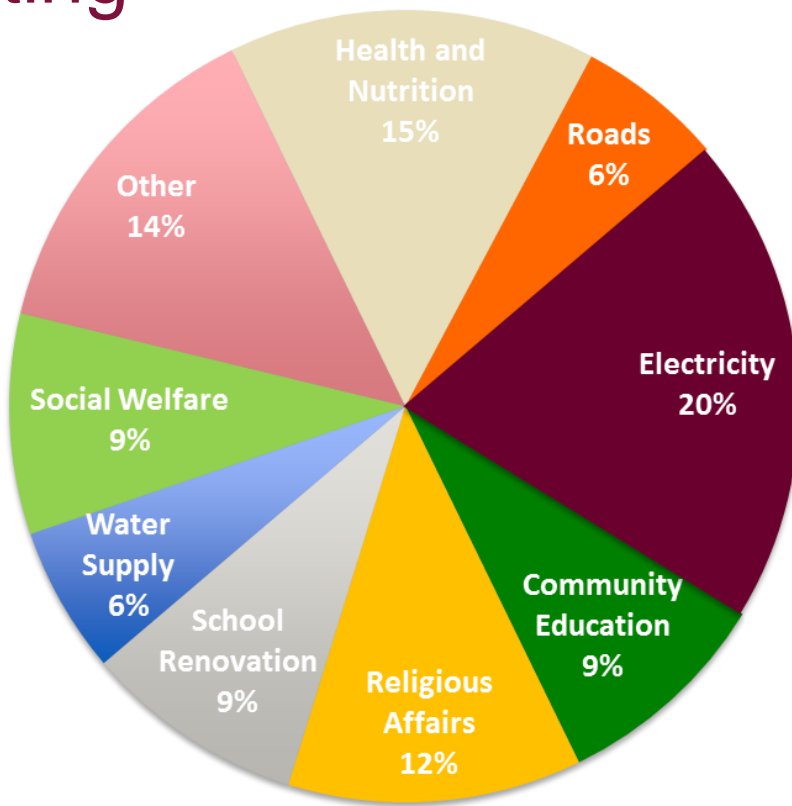
Integrated Development Ecosystem



Spend-shifting



VDF



20% of VDF loans is used for electrification

Understanding the Problem

ENABLING ELECTRICITY ACCESS IN MYANMAR DIESEL MINI GRID ASSESSMENT IN NOVEMBER 2016



U Kyaw Thu comes home at 6pm after spending the day at his farm growing lentils and sesame. A diesel engine starts growling in the background and the street lamps light up. Some of his friends and neighbors switch on their television sets while the children open their books to make best use of these 2 hours before the village plunges into darkness. After 9pm, while the village prepares to sleep and the diesel engine stops, children light up candles in their homes to study for another few hours so that they do not have to spend their lives being farmers in this darkness of these villages in Myanmar.

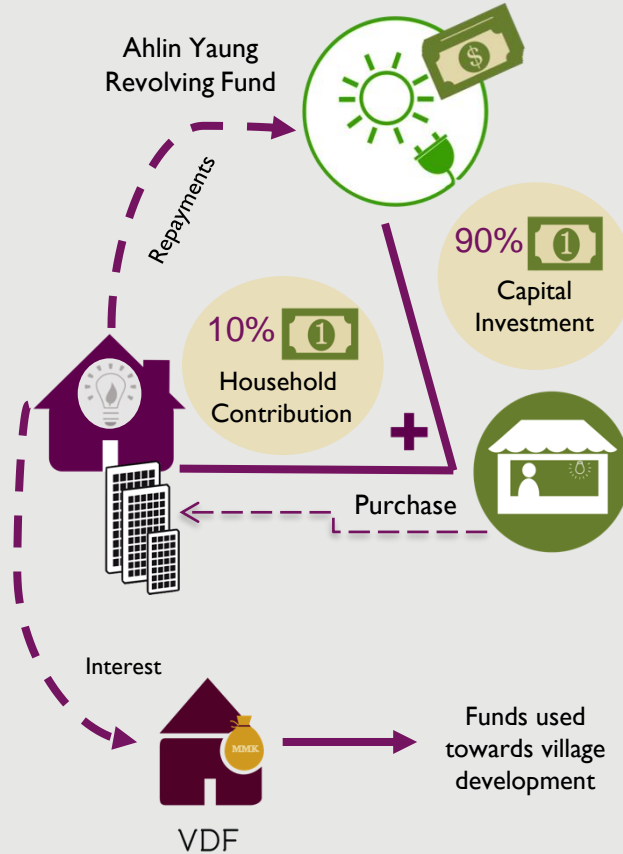
Through this assessment, Pact Myanmar seeks to understand the struggle, needs, ingenuity and outlook of villagers seeking to gain access to electricity in Myanmar and who have established diesel mini grids in their villages. We explore U Kyaw Thu's village, Kome, which lies in Selphya Township and another 9 villages in Magway Region to understand how the village community has collaborated to establish basic electrification and whether there could be ways to improve the systems and provide electricity for not only lighting but also productive use, which could accelerate the overall village development.

Cost of rural electricity: 1 hour = 24 hours in Yangon,
the commercial capital



Biggest obstacle: limited access to finance for low-income households to purchase sustainable solutions


Ahlin Yaung - Integrated Social Investments Vehicle



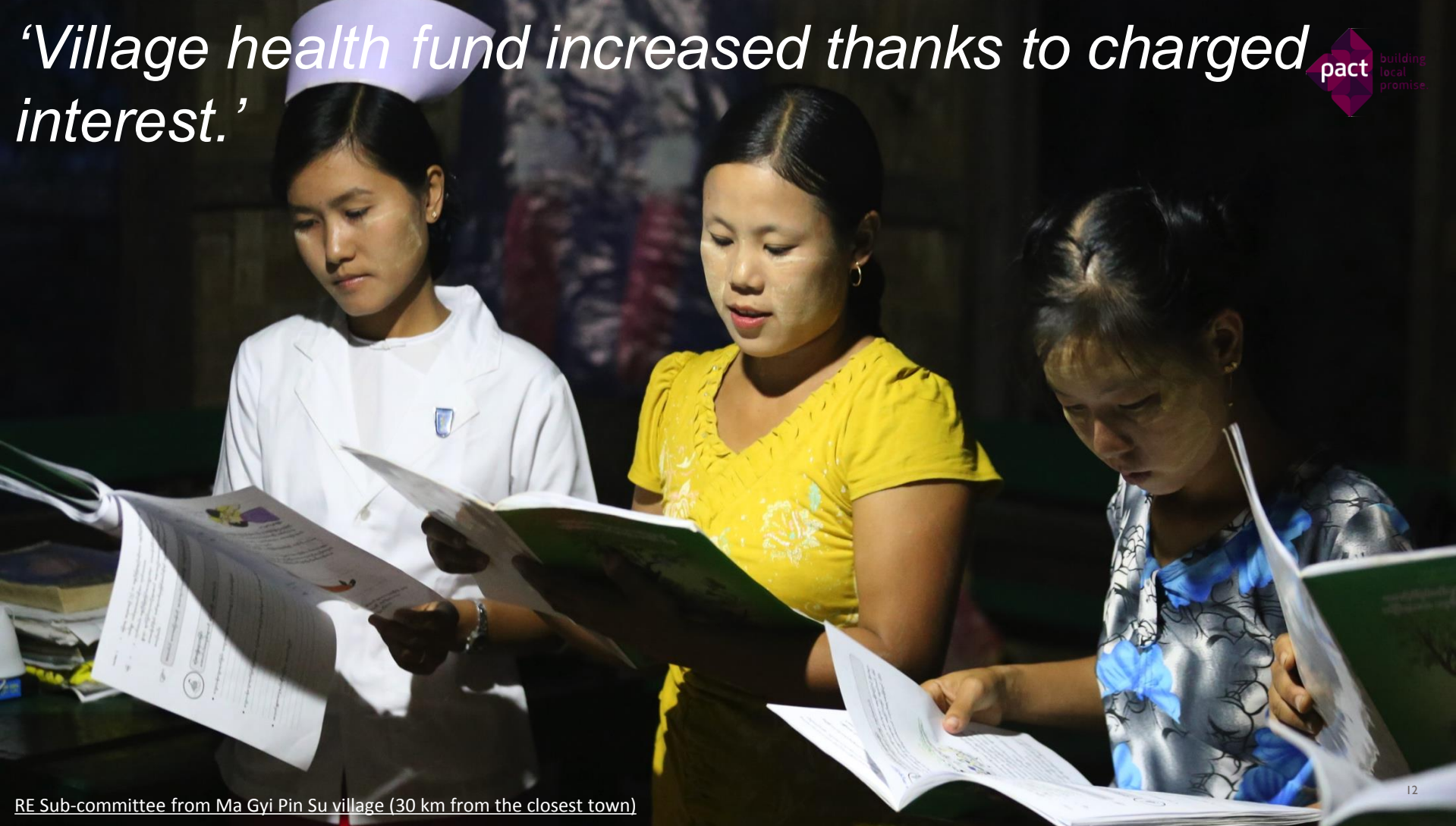
Access to Energy Program in Numbers



- Over 360 villages in 4 regions in Central & Southern Myanmar



'We can now extend our business working hours and get extra money by making handicrafts at night with the help of solar energy.'



‘Village health fund increased thanks to charged interest.’

RE Sub-committee from Ma Gyi Pin Su village (30 km from the closest town)

‘Children can safely study after dark, quality batteries replaced candles.’



‘The solar products are priced reasonably and fulfill the needs of our villagers.’



‘We now have a good knowledge how to maintain the solar equipment and teach this knowledge to other villagers.’



Ko Ko Myin Myat from Ywar Lin village (12 km from the closest town)

Main Challenges -> Solutions?

- **End-user financing gap** -> transform & scale Pact's access to finance funds
- **Excessive subsidization & distribution of lower quality products** -> advocacy for market-based approach and coordination with the government
- **Missing regulatory environment in off-grid electrification** -> broader support to accelerate the policy design and the capacity of the policy makers
- **Limited capacity of SHS for higher-demand activities** -> other decentralised technologies (mini-grids) in specific locations
- **Insufficient focus on demand-side activities in national/donor strategies** -> Diversify Donor/Government grants & funding to allow experimentation



Transformation Potential of Ahlin Yaung Fund

2017 - 2021

Grow & transform AY Fund to continue & expand demand-side financing of energy access to increase prosperity (i.e. through RE mini-grid connections, fostering productive use of electricity)

Mid-2017

Expanded mandate of the fund - Loans to HHs for connections to existing grid

2015

Loans for **Solar Home Systems** in Central, later expanded to Southern Myanmar

Capacity building for O&M&Repair, Financial Management, RE Committees, Loan Collection

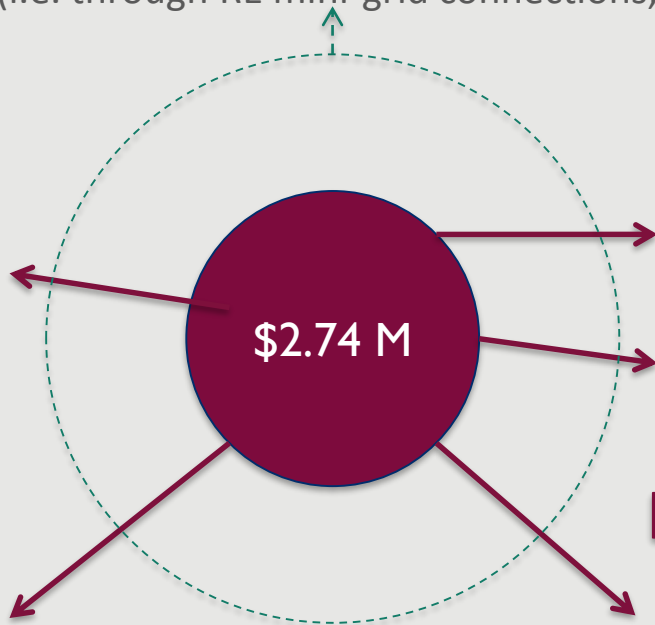
January 2017



Women groups manage community-level RE activities

November 2016

1st reinvestment -> Expansion to 4 new townships in Central Myanmar



Ahlin Yaung Financing Model

FINANCING



Community-managed revolving funds



Social Impact Investors



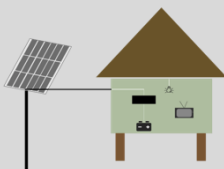
Bilateral donors, private and corporate funders

PACT FACILITATION

Diversified Rural Energy Access Fund



Solar Home Systems



Mini-grids



National Grid



IMPACT & INFLUENCE



Government engagement & advocacy



Research & Evidence Generation



ROI, Community Income, Social Benefits & Sustainable Environment

Comments,
remarks,
cooperation
ideas?



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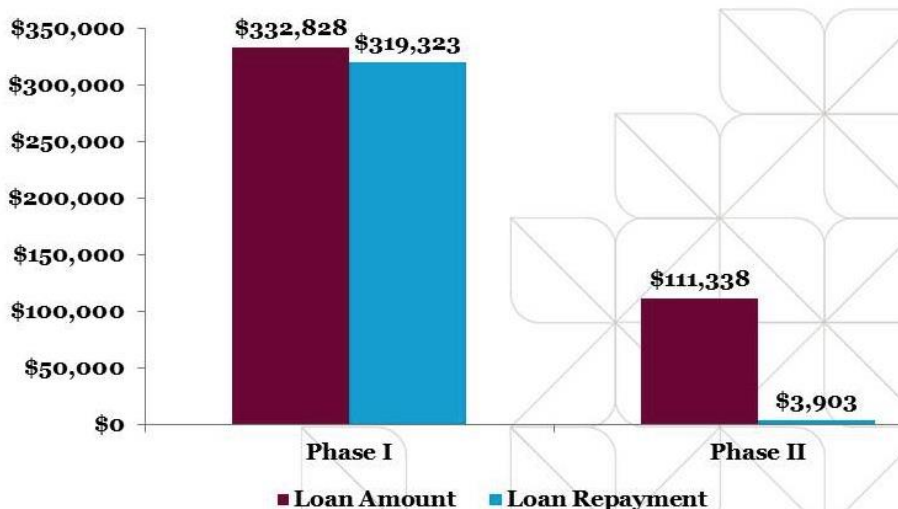
Attachment: Capacity & Price of SHS Packages

	Basic 1	Basic 2	Medium 1	Medium 2	High End 2	High End 1
Technical Specs	1 bulb x 6 h/day 3.3 W solar panel 3 Ah battery	2 bulbs x 6h/day 20 W Solar Panel 7 Ah Battery	3 bulbs x 6h/day 6 W Solar Panel 6 Ah Battery	4 bulbs x 6h/day Portable DVD player x 2 h/day 30 W Solar Panel 12 Ah Battery	1 lamp + 2 bulbs x 6h/day 24 inches LCD TV x 2h/day 80 W Solar Panel 65 Ah Battery	1 lamp + 2 bulbs x 6h/day 24 inches LCD TV x 2h/day 130 W Solar Panel 65 Ah Battery 300 W Inverter
Total Price	40,000 Kyat	55,080 Kyat	68,000 Kyat	98,000 Kyat	194,000 – 198,000Kyat	287,500 – 299,000Kyat
Pact Grant	10,000 Kyat	10,000 Kyat	10,000 Kyat	10,000 Kyat	10,000 Kyat	10,000 Kyat
Prepaid	3,000 Kyat	4,508 Kyat	5,800 Kyat	8,800 Kyat	18,400 – 18,800 Kyat	27,750 – 28,900 Kyat

Attachment: Loan Repayments

- Zero % delinquency in loan repayment collection
- No missed payments under monthly/quarterly repayment schedules

Loan amount provided by Pact and loan repayment by community to date (Data from end of April 2017)



Note: Phase I (Apr-15 to May-17); Phase II (Jul-16 to Oct-17)

Ahlin Young to date	Grant provided by Pact	No. of SHS distributed
For community place	\$20,340	500
For subsidised package households	\$3,865	95
For basic, medium and high end users	\$135,122	379 6126 1616
Total	\$159,327	8716

Data from April 2017