POWER FOR ALL RESEARCH SUMMARY
Latest Evidence Shows Positive Benefits of DRE to Households

Non-profit venture fund Acumen recently released an Energy Impact Report, which explores the impact of its DRE investments in eleven countries. The report finds that the majority households served by DRE products are near or below the poverty line and that DRE products on average show positive impact in all well-being metrics measured.

DRE companies successfully target and serve low-income customers without prior access to modern energy.

- The report surveys 5,500 customers served by 21 DRE companies (solar lanterns, solar home systems, mini-grids and cookstoves) across 11 countries—including India, Kenya, and Tanzania for a total of 750,000 data points.
- Based on survey results, out of a total of 81 million customers, 73% of customers live on less than US$5/day. (9)
- 70% of customers gained access to modern lighting for the first time through their purchased DRE solutions. (9)
- On average, in the first year after buying a DRE product households saves $43. This is particularly significant since the first year often incurs the highest costs in the form of deposits, down payments, and financing (24).

Lighting and power DRE products show positive impact on key quality of life and well-being metrics.

- The report also looks at individual company impact using 18 indicators to help measure five different metrics: changes in quality of life, increased daily hours of light, engagement in income generation, increased study hours, and perception of improved security. 2
- On average, 74% of customers reported an improvement in quality of life. (30)
- 67% of customers indicated that they felt safer with the product. The gender difference in response is small, though men refer to home security while women more refer to health and accidents. (30)
- Households gained 1.2 extra hour of light and 1 extra study hour daily. There is a saturation point after which additional lighting use tapers off. (30)
- 31% of customers engaged in income generating activities through their DRE products by charging others, phones, lighting their stores, or powering small electronic devices. (30)

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By the Numbers:

73%
DRE CUSTOMERS SERVED
WITH A DAILY INCOME
LESS THAN $6

70%
DRE CUSTOMERS ENJOYING
MODERN LIGHTING FOR
THE FIRST TIME

31%
DRE CUSTOMERS ENGAGING
PRODUCTS FOR INCOME
GENERATION

DRE products represent an opportunity to leapfrog into clean, reliable, need-based energy services. Additional development is still needed to support the sector.

» Initial down payments and ongoing financing costs for systems can still be too high for lower-income families, leading to over-indebtedness. New, improved, flexible financing solutions and a focus on product longevity are critical. (41)

» Increased support is needed for the entire DRE ‘ecosystem’ including enabling technologies such as smart meters and financial systems that prioritize affordability. (42)

» Lean Data is the first of its kind customer-based benchmark of product or service impact performance. More standardized tools are needed to differentiate between high- and low-impact companies and to understand how changes in business or finance models change customer experience. (42)

Share the Message
Investment in DRE products yields positive impact for low-income households. Join Power for All and share the following message:

» Acumen’s Lean Data project shows the importance of robust data. More data on impact and support for standardized impact metrics is needed.

» Customer-based data show that DRE products provide positive impact on household quality of life, income generation, safety, light and study hours.

» More support for the new financing solutions and other enabling technologies is needed.

Sources:
1. Acumen, Energy Impact Report, 2018
2. Specific metrics varied widely for specific products. Some results on performance of products across indicators may have to do with marketing and family choices more than the product or service itself (29).