

Solar Water Pump Consumer Awareness Raising Campaign pilot Evaluation

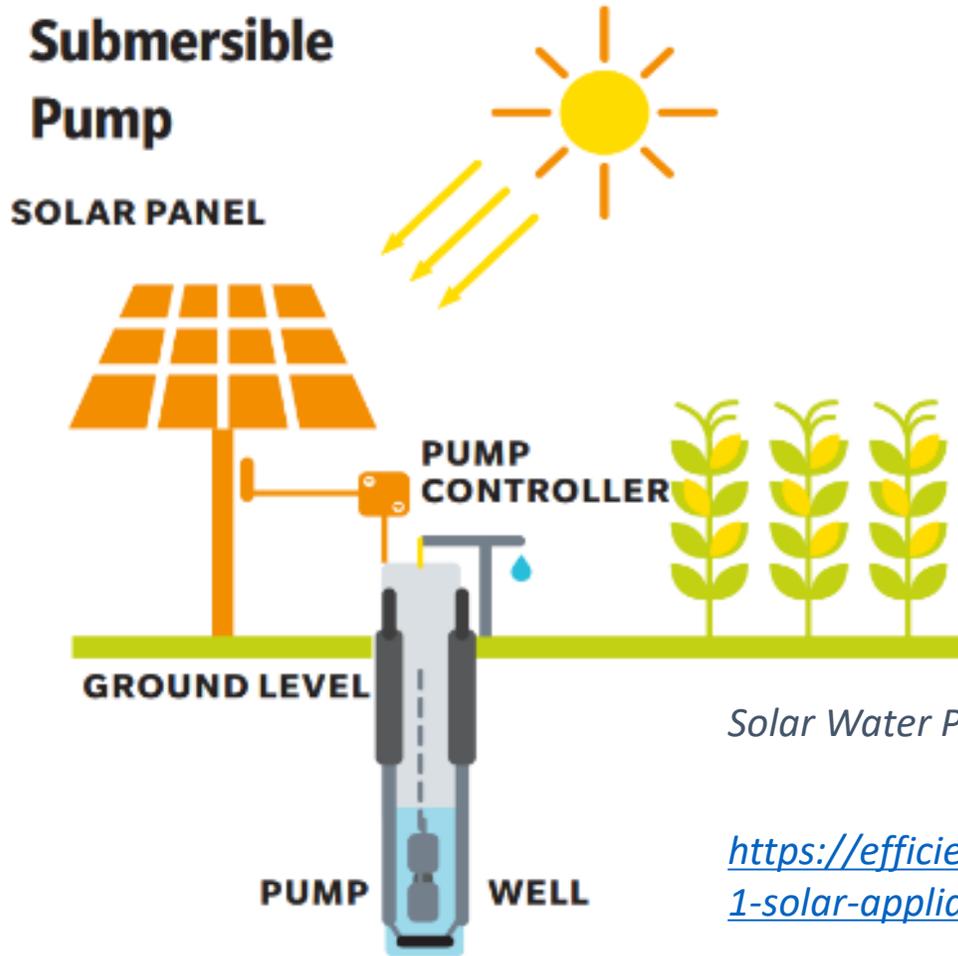
Machakos, Kenya

September-December 2021

David Kenington UCL
Yasemin Erboy Ruff CLASP
Sheree Conibear EST
Gordon Achola Exp



Background and Context: What are Solar Water Pumps and why create a consumer campaign to promote them in Machakos?



Solar Water Pump components overview

<https://efficiencyforaccess.org/publications/2021-solar-appliance-technology-briefs>



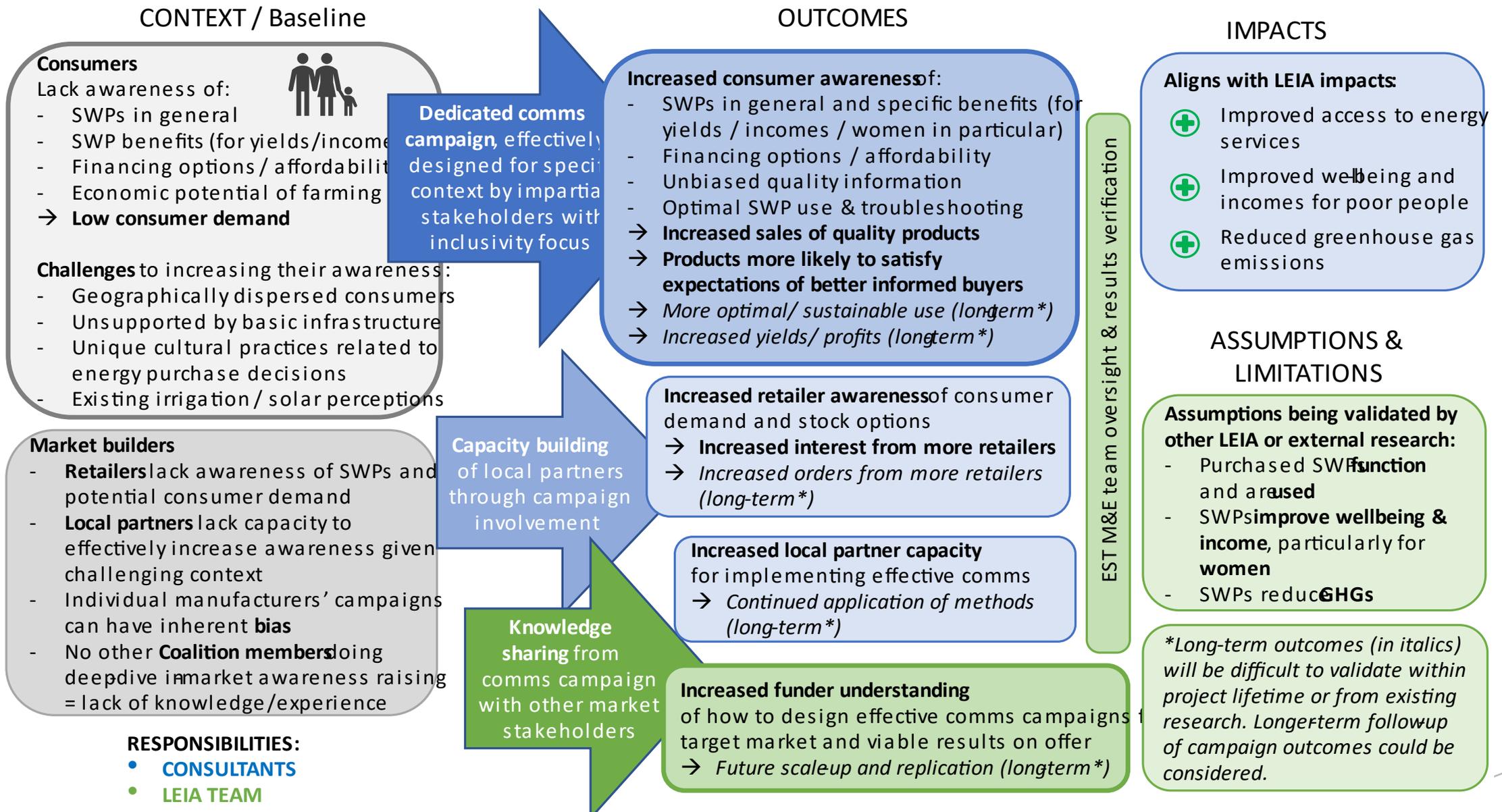
SDG INTERLINKAGES



SOLAR WATER PUMPS

- SDG 1: No Poverty
- SDG 2: Zero Hunger
- SDG 4: Quality Education
- SDG 5: Gender Equality
- SDG 6: Clean Water & Sanitation
- SDG 7: Affordable & Clean Energy
- SDG 8: Decent Work & Economic Growth
- SDG 9: Industry, Innovation & Infrastructure
- SDG 10: Reduced Inequalities
- SDG 11: Sustainable Cities & Communities
- SDG 12: Responsible Consumption & Production
- SDG 13: Climate Action

Background and Contest: SWP awareness campaign Theory of Change



SWP Campaign overview



**KILIMO BORA,
MAPATO BORA**
NA SOLAR WATER PUMPS

**KILIMO BORA,
MAPATO BORA**
NA SOLAR WATER PUMPS

Solar water pumps is a clean, modern irrigation solution that has the

Solar water pumps is a clean, modern irrigation solution that has the

The **aim** of the in-person awareness-raising campaign was to **stimulate consumer awareness and potentially increase demand for a productive use technology** in a mature enough market where increased demand could be met with supply, and environmental conditions were conducive to its use.

Community Forums



Image 1: Two facilitators engage with a mixed group in Mwala sub-county



Image 2: Paul engages a women's saving group in Kathiani sub-county

Marketing Activities – wall branding, radio and TV



Image 3: A branded wall at the market centre in Mwala sub-county.



Image 4: Shamba Shape Up crew on site recording the SWP episode.

Reach: 397 Community forums engaging men and womens groups, 7,529 household visits were recorded. Radio adverts and programmes reached a very large proportion of the community through a sustained campaign with two local stations (Reach >3M).

Evaluation approach

- A Theory-based evaluation was undertaken, with quantitative and qualitative research undertaken before and after the campaign, alongside campaign monitoring activities

Evaluation design and research methods overview

Pre-campaign baseline research (May-September 2021)

- 189 face-to-face surveys with target SHFs in Machakos
- 10 in-depth interviews with SHFs
- 5 in-depth interviews with local SWP traders and local Government

Campaign monitoring (late September-December 2021)

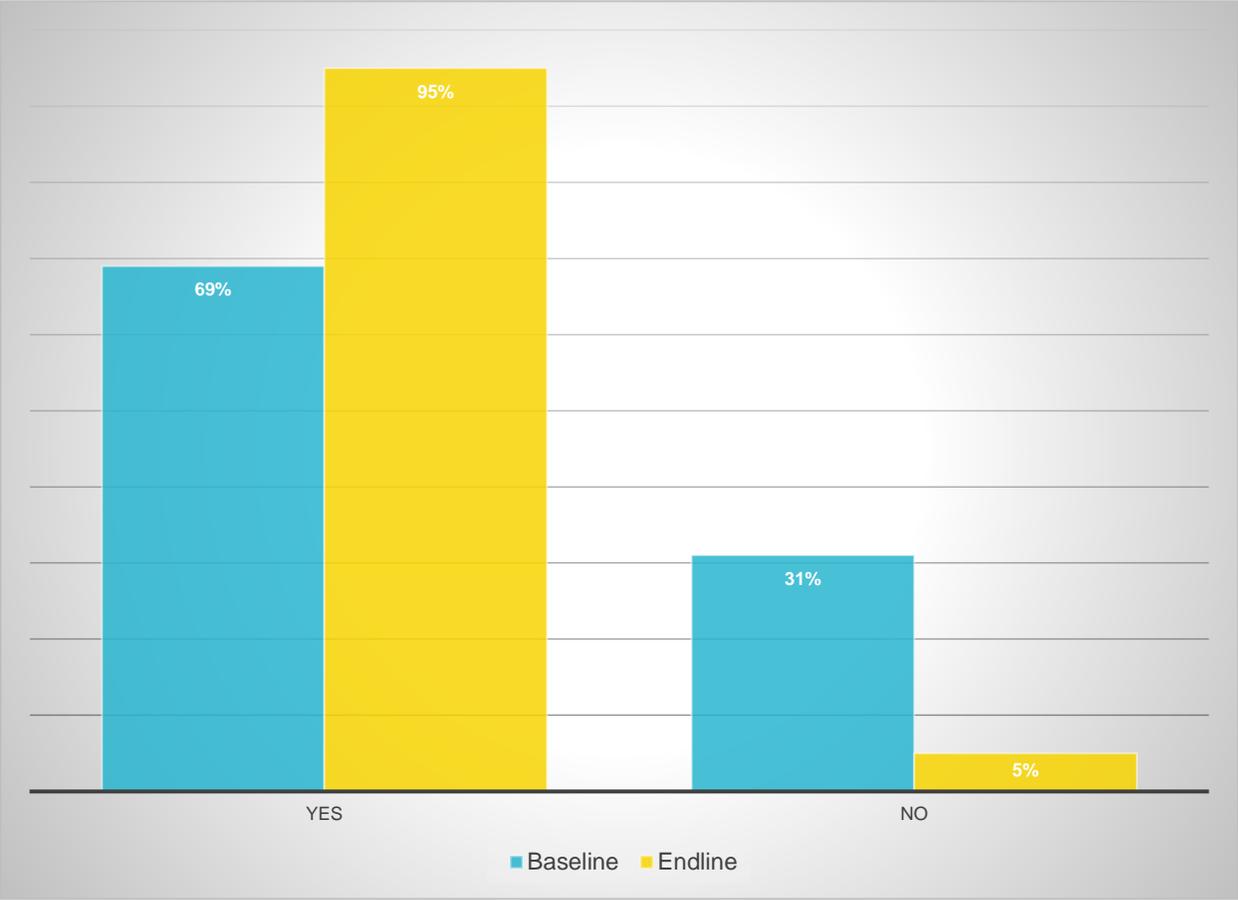
- Campaign monitoring activities:
- Radio reach: 3M people
 - Interpersonal communications (farm visits, small group forums): 7,529 households (28,700 people)
 - Community forums/demonstration sections: 397 forums (6,703 people)

Post-campaign endline research (February 2022)

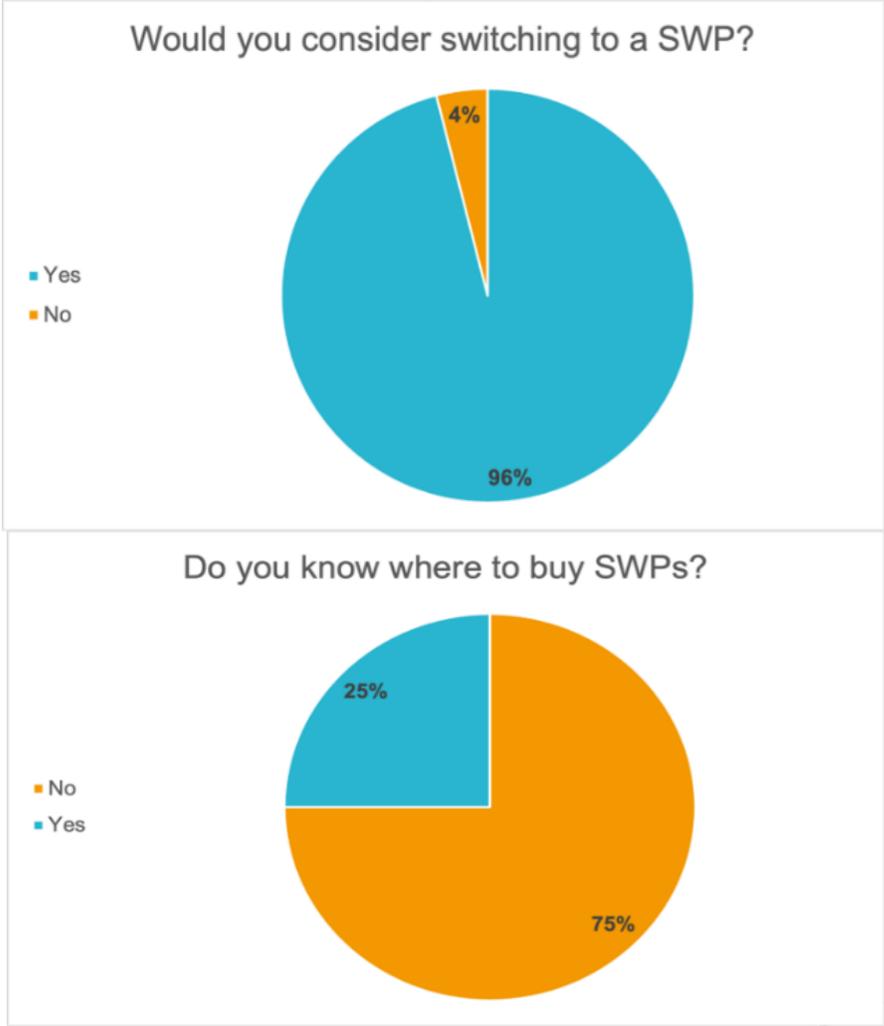
- 219 face-to-face follow up surveys with SHFs in Machakos (83% of respondents participated in the baseline survey)
- 16 in-depth interviews with SWP aware SHFs, including SWP users and non-users

Evaluation findings overview

SWP stated awareness before and after campaign



Baseline survey



Evaluation findings: Campaign reactions

- Messages were welcomed and well understood, leading to increases in awareness and knowledge about SWPs
- Those interested in acting wanted more information on specific brands and their capabilities, as well as where to purchase.
- More physical demonstration of SWPs as part of the campaign would have been useful to help demonstrate how they work, and how they could fit into their current farming practices.

“The messages were about farming and solar (energy) is not new so it was easy for me to understand”.



Lessons Learned & Recommendations

What worked well?

From the monthly community engagement activities, this is what worked well:

- **Collaborating with local government:** Involving local administration (chiefs and assistant chiefs) worked well in profiling and identifying the right target audience and groups within the community.
- **Farm to Farm:** Door to door activations enabled the team to gather insights from household heads and triggered farmers to start thinking about the uptake of solar water pumping.
- **Leave behind IEC materials:** The brochures issued at the forums helped increase community knowledge since participants could refer to the IEC materials and make follow up calls for further inquiry from the facilitators.
- **Incentives:** Issuing branded merchandise (t-shirts) motivated the contact people who organized and ensured that the team met the scheduled group.
- **Influencer engagement:** Working closely with local farmer influencers motivated many farmers/community members to learn about the usage of solar water pumps. The influencers' success stories increased their interest in owning one.
- **Product demonstrations:** Carrying out demonstrations during field visits by representatives from a Global LEAP affiliated manufacturer enabled the community to connect with the campaign content.

What was a challenge?

- **Water sources:** Rivers and dams are the primary water sources in most parts of Machakos County, yet they are not easily accessible, hindering the solar water pump uptake amongst community members.
- **Lack of availability of other support mechanisms:** For example finance to help support take up.
- **Integration with the supply chain:** Support and integration of existing suppliers was difficult, which resulted in few demonstration activities and limited the ability to pass over to them to provide pricing and sales information
- **Busy farming season:** Our target audience mainly comprised farmers who were busy attending to their farms in preparation for the rains. The facilitators had to adjust their activities around the farmer's availability.
- **Cultural context and expectation of handouts:** Community members are used to getting money rewards when invited to public forums, and some opted not to attend the sessions because there were no cash allowances. Upcoming election campaigns also meant people were reluctant to give their contact details for follow up activities.

5 Key Recommendations



1. Avail product financing/purchase plan options for consumers

- The community members expressed a need for affordable payment plans that offer credit facilities to make SWPs more accessible and improve their uptake.
- To increase adoption, it is proposed that manufacturers and distributors sell certain products at subsidized rates. These discounts will incentivize sales, especially for those purchasing in cash.
- Manufacturers and distributors are encouraged to explore partnerships with financial institutions for example, farmer saccos, local banks and telecom operators to enable flexible payments for registered banking groups and individuals.



2. Develop and leverage local distribution networks

- To enable ease of access and convenient follow-up on sales opportunities, it is recommended that manufacturers work closely with partners to onboard local retailers or distributors. This will reduce the hassle of consumers travelling to the nearest town, Machakos or Nairobi, for purchases.
- Training community champions, leaders and influencers as key contacts on SWP information price, models and capacity will also address the knowledge gap at a local level.

5 Key Recommendations



3. Utilise mass media for increased reach

- Community radio worked well as an engagement tool for reaching the masses. To increase the efficacy and measurability of engagement activities, other media approaches, like farmer programs or an edutainment drama series covering a day in the life of a farmer can support increased awareness on the benefits of SWPs.



4. Implement a longer campaign for better demand creation, recall and impact

- For better measurement of impact, it is advisable to design a campaign that stretches over a longer duration, for example 2-3 years. This would help with follow on messages and to keep farmers who are interested but unable to purchase immediately engaged.



5. Design a sustainable campaign that can run beyond the face-to-face engagement duration

- In future, a more holistic campaign design that employs additional activities such as agricultural shows, farmer, partner workshops would support and sustain the initial awareness messages of the SWP Campaign. These activities could run quarterly or bi-annually.
- It is also recommended that influencer farmers are on-boarded on a platform for regular sharing of information on the technology and enabling interaction to get feedback on challenges and other available opportunities.



To learn more about the campaign, [watch this 4 minute video](#). If you have any follow up questions or feedback, please reach us at info@efficiencyforaccess.org.

We also welcome inquiries about partnering on a similar campaign.