

HUSK POWER SYSTEMS

PROBLEM:

Traditionally, decentralized renewable energy (DRE) in India has been focused on household solutions using pico solar, solar home systems (SHS) or clean cookstoves, which are essentially consumer goods.

Minigrids, however, are energy infrastructure that require considerable upfront capital to build, with operations lasting over 20 years. Maximizing capacity utilization over the lifetime of that infrastructure is a key success factor. Solely relying on household demand to make the minigrids business model scale is not commercially viable. In order to increase demand, Husk Power Systems (“Husk”) instituted a new market strategy to address this challenge and prove that minigrids can not only reliably serve a diverse set of customers

with heavier loads, but also outperform both DISCOMs and diesel generation.

INTERVENTION:

In order to scale demand and increase its minigrids’ Capacity Utilization Factor (CUF), Husk focused on businesses that had the potential for significant daytime use, such as welding, agro-processing and food production, small-scale manufacturing, cold chain, irrigation, and other applications. At the same time, Husk instituted an end-user pay-to-own credit scheme that allows these types of customers to acquire more energy efficient machines, thereby reducing the cost of operations while also increasing productivity.

IMPACT:

Since implementing its strategy, Husk’s ‘heavy load’ customers have steadily increased.



The company now has about 6,000 micro-small- and medium-sized enterprise (MSME) customers, the highest average revenue per user (ARPU) and the highest CUF of any minigrid developer in the industry.

More precise impact data is still being collected, but clear benefits are already being passed on to customers. For example, Santosh Yadav, the owner of Baba Rusk Biscuit Factory in Uttar Pradesh, was a heavy diesel user before converting to Husk Power, and now saves 25-30 percent on power each month, as well as reduced maintenance costs.

Husk Power was also the first minigrid developer to monetize emissions reductions by displacing diesel generation, offsetting 15,000 tonnes per year.

ABOUT THE ORGANIZATION:

Husk, founded in 2008 with India as its initial focus, has grown to become the global leader in solar hybrid minigrids and rural clean energy services. (The company’s original biomass gasification solution using waste rice husks continues to be used at larger sites in combination with solar). Today, the company has more than 130 minigrids in operation across India, Nigeria and Tanzania. India operations are focused mainly on Bihar and UP, and largely serve under-the-grid communities.

Husk has raised about \$40 million till date from investors including FMO, Swedfund, Engie Rassembleurs d’Energies and Shell, and has also received support from The Rockefeller Foundation and its Smart Power India program.