



INNOVATION (#)

CLIMATE BENEFITS (#)

Access to clean and reliable source of electricity is vital to a country like India, where about 300 million people are still without access to electricity and 44 per cent households face erratic supply. The main source of lighting in such households is kerosene, which results in poor lighting, often at a higher expense, and leads to indoor air pollution as well. Thus, a basic need such as lighting still remains a far-fetched aspiration for a large number of people in India.

Though there are various solar technologies that can address the energy access challenge, there is a constant need to innovate the way in which technologies function along with an immediate need for developing innovative business models for wider penetration of clean energy solutions.

BOOND, a social enterprise company, has developed innovative technologies to facilitate energy access to remote and underserved communities in an effective and scalable manner. Through its prepaid microgrid solutions, Boond is especially addressing the needs of such communities for whom access to finance is difficult. The solution aims for execution of financially sustainable solar micro grids, while also addressing some of the key challenges associated with them. Through its democratic energy access, Boond consumers have 24x7 energy access, while allowing them to pay as per their energy usage. The model has also helped address the issue of over-consumption through enabling features such as real-time display and dynamic pricing that helps customers self-regulate their usage. High voltage DC transmission along with prepaid model has reduced theft and has also eased the process of payment collection.

The key innovation of Boond's solution is the USB stick based recharge that allows the customer to buy energy units as per their needs. The customer can recharge the USB stick at a central station, with the lowest denomination of D10. The units are transferred to the USB stick via an easy-to-use android application and bluetooth technology. The customer can then plug the USB stick into the energy meter installed at their homes for the units to be transferred. Two types of connections are available that include a 20W energy meter providing basic LED lighting and mobile charging at a cost of D1200, and a 60W meter that includes DC fan and DC TV in addition to lighting loads at a cost of D2200.

Another interesting feature by Boond is the benefit offered to the consumer who lends his rooftop for the installation of the grid. This consumer, in turn, becomes an entrepreneur, and receives a commission with every recharge done through the system. Boond also provides ease of after-sales services, which is enhanced through its remote monitoring services that allow consumers to register the complaint at the central station for timely resolution.

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