Virtual Clean Power Network for Clean Energy
MAMTA SONWALKAR / POWER2PEER

Project Summary

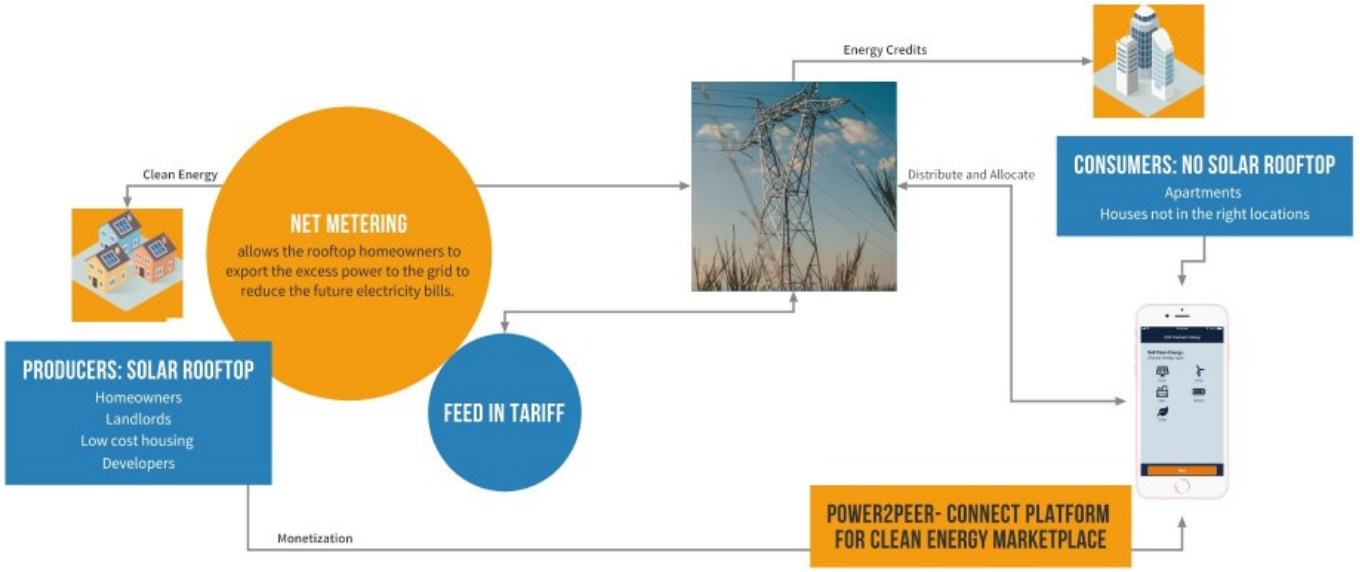
Reliable clean energy distributed sources of energy are necessary for preventing natural and man-made disasters bringing down the traditional grids. If renewable energy is to flourish, it will require a virtual marketplace equipped for high volume peer-to-peer transactions harnessing clean energy solar, wind, or geothermal microgrids working as a virtual power network. Our solution comes in the form of the mobile app P2P Connect App. The P2P Connect App will work as the front-end connecting energy consumers with solar energy producers. Power2Peer's vision is to own and operate a scalable blockchain-secured distributed energy trading platform that will facilitate the purchase and sale of millions of clean energy kilowatts between producers and consumers. Power2Peer is dedicated to creating the first resilient and adaptive energy trading platform for consumers anywhere in the world. Consumers receive clean energy from producers using a mobile app.

Key Milestones & Deliverables

	The design, development and testing of the VCPN for solar and wind microgrids. The project requires development of both blockchain software platform for SDN controller and peer to peer transaction energy and also development of hardware for the IoT enabled solar microgrids connected by a network junction box communicating over the internet with the software defined controller.

Market

The market for residential and commercial solar systems is growing at 30+% CAGR with size of the market reaching $3.2 Trillian dollars. In order to enable the residential solar power producers and prosumers to sell their excess clean power to neighbors, we are creating for the first time a virtual clean power network (VCPN) which is a similar concept as virtual private network in communication industry. At present, the residential owners of the solar systems (ground mount or roof-top) are not able to aggregate excess power and conduct a peer to peer trade of power because of lack of technology interface and also the regulatory hurdles. We are the first company to democratize the power systems by creating VCPN while bringing much desired stability and reliability to grid by IBR integration for the meeting demand contingencies.



Key Personnel/Organizations

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Teaming Partner Facility and Resources:

Makrand Joshi at Schneider Electric