

# Making a difference

A company with a vision to become a one-stop clean energy services provider for rural India, Naturetech Infrastructure Pvt. Ltd. has benefited hundreds of families in rural Uttar Pradesh and is now a model for large-scale replication across the state



**R**ecognising the need to provide clean energy to the deprived rural communities in the state of Uttar Pradesh (UP), Naturetech Infrastructure Pvt. Ltd. was formed in New Delhi in October 2009, to work in that space. "Our existence is for serving rural households with reliable and smart electricity through a sustainable and scalable model," says Shyam Patra, Founder and Director of the company.

Having a dream and passion to do his bit in empowering rural India with access to sustainable, reliable and smart electricity, Patra resigned from Usha Martin in March 2011 as Assistant Vice President to pursue this dream. With an experience of around 15 years in techno-commercial, project financing and business development in the Power Sector, Patra formed a for-profit social enterprise for providing clean energy in rural areas of UP. He says that his company's vision is to become a one-stop clean energy (electricity, cooking gas and transportation) services provider for rural India.

As of now, the company has built 15 solar DC innovative micro-grids,

spread over nine villages in two districts of UP and one village in Bihar, operating since June 2011, benefiting about 400 families and making a difference to at least 2500 rural lives. The company has also built seven micro-grids for UP Non-Conventional Energy Development Agency (UPNEDA), which has become a model for large-scale replication across the state. Recently, the company commissioned its first ultra low-cost and most innovative Smart AC Solar Micro-grid in a village in Sitapur district. This project which is built, owned and operated by Naturetech Infra is the first of its kind in India.

Besides providing cheap electricity through solar micro-grids, the company is also promoting a wide range of solar home lighting systems, solar mobile chargers, solar radios, etc. to households in the areas of its operation, where micro-grid solution doesn't fit in. It has successfully launched a pilot model of very innovative Flexi Biogas plant in meeting the cooking gas and fertiliser needs of rural households. With 30 per cent rural households in UP having cattle, the flexi biogas plant has tremendous scope for improving the lives of rural women and reducing respiratory diseases caused by internal pollution and emission of toxic gases like CO during combustion of traditional fuels like cow-dung cake, wood, plant residues, etc. The company has also successfully demonstrated hassle-free operation of battery-operated cycles over a period of last two years. Patra says that if the

MNRE subsidy could be extended for battery-operated vehicles, and banks and state governments could extend similar financial assistance and loan for this product, it could be the biggest revolution in rural and urban transportation.

The company aims to electrify over 100,000 rural households through its cheap Smart Solar Micro-grids by 2017, besides promoting its range of complementary, innovative and low-cost clean energy products in areas of its micro-grid operation. Talking about government support, Patra says, "The government so far has only extended a subsidy programme through MNRE and MOP/REC have also tried a DDG scheme for village electrification. There is no documentation of performance of the subsidy programme for off-grid electricity and we are all aware that DDG scheme did not work out." He further adds that the delay in getting subsidy from MNRE is not helping the cause. Moreover, there is no support from the state government of UP, as the state doesn't yet have a policy for off-grid solar.

He suggests that the government needs to provide an effective, transparent and expeditious financial support programme, reduce taxes on imports of off-grid items, free inter-state movement of goods and extend a complimentary non-financial support by way of supportive policies so that developers and service providers like Naturetech find the job remunerative and less challenging.

*By Upendra Singh*

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