



## **Remote village electrification at Viral, Karnataka**

Project done by Gram Oorja Solutions Private Limited with Bosch Solar Energy AG

## Why Viral ?

- Off - Grid Village
- Chances of getting electrified via grid extension are remote due to forest regulations
- Initial social interaction showed willingness of villagers to set up a community level project
- Villagers showed willingness to take ownership of operations and maintenance of the plant and formed registered village trust for the same
- Villagers handed over the land required to the set up the plant to the trust
- Villagers contributed in plant installation as well as collected a small amount as connection charge
- Village trust has decided a tariff, trust will collect the amount per household according to the monthly bill, which will be the fund for plant maintenance and battery replacement



## Village details

- Name of Village: Viral
- Grampanchayat: Bazar kunang
- Tehsil: Joida
- District: Uttar Kannada
- Distance from Tehsil place : 40 km
- Nearest railway station: Castle rock
- Population: ~ 90
- No. of Beneficiaries: 22

## Technical details

- Solar Photovoltaic capacity: 5.04 kWp
- Solar modules: 240 Wp, 21 No, mono - crystalline , Bosch make
- Battery bank: 240 V, 100 Ah, Tubular, Exide make
- Solar Charge Controller: 240 V, 25 A, MPPT, Swelect make
- Inverter: 5 kVA, Swelect make
- Mini - grid- 230 V, 50 Hz, 7 Poles, grid length 350 m.



## Project Highlights

- 5.04 kWp solar photovoltaic based mini power grid
- No. of beneficiaries are 22 including one school and one temple
- Preliminary utilization of electricity is for domestic lighting, street lighting, mobile charging, running appliances such as TV sets, computers, music system (occasionally for community function) and flour mill
- Cost of the project is Rs. 25 Lakh
- Project commissioned on 13<sup>th</sup> March 2014
- Project executed by Gram Oorja Solutions Private Limited
- Technology and funding provided by Bosch Solar Energy AG
- Local facilitation in community engagement by Sanjeevani Seva trust, Joida
- Plant operations and maintenance by Shri Aadi Bramini Mayadevi Trust (a local trust managed by villagers)
- Amount collected by the trust from the beneficiaries as connection charge is Rs. 40,000/-





### Project impact

- Reduction in Kerosene use, hence smoke & carbon
- Reduction in migration by creating employment
- Reduction in human efforts for basic needs

---

Contact: +91 20 64001402, Email: [office@gramoorja.in](mailto:office@gramoorja.in)