

Status of Energy Access in India

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Powering villages in India

- Rural electrification is a key priority for Government of India
- Of a total of 597,500 villages, the villages electrified* are 572600
- Peak shortages range between 4 - 10 % regionally

Strategy

- Grid extension to all habitations with population above 100
- Separation of agriculture and non agriculture feeder to facilitate judicious rostering of supply
- Strengthening and augmenting sub transmission and distribution network.

Renewable energy assumes an important role

- Target of 175,000 MW capacity addition of grid connected renewable energy by 2022
- Decentralized distributed generation with RE for villages/habitations where grid extension is not feasible or cost effective or have less than 6 hours of electricity
- Enhancing the availability of RE based applications through market mode

Translating the national strategy into a implementation plan

- In a State/province like Madhya Pradesh, with nearly all 50,000 villages electrified, RE still has an important role to play
- Feeder separation has led to much better supply to rural domestic consumers
- Large tribal population dispersed over small habitations makes grid extension unviable.
- Thriving agrarian economy has created a demand for irrigation applications

Planning for smart interventions

- Creating enabling conditions for Independent power producers and micro grid entrepreneurs to operate and invest
- Identifying opportunities for distributed RE
- Creating financial models that leverage existing subsidies to catalyze growth in renewables

Greening public services in rural areas

- High electrification rates notwithstanding, role of RE in meeting unmet demand is critical
- Health centers, residential education centers, police stations, forest villages, street lighting, village governance offices , in off road and remote areas are ideal for solar applications

Micro grids – the next generation

- Rising aspirations and purchasing power in villages
- Desire for grid quality power has led to reassessing strategy for decentralized RE
- Focus on providing framework to support Micro grid operators and entrepreneurs
- Enabling Grid compliance