

**SPEED**

Smart Power for Environmentally-sound Economic Development

# SMART POWER FOR ENVIRONMENTALLY SOUND ECONOMIC DEVELOPMENT



## “SPEED”

## Overview Presentation

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# Long-term Goal of SPEED

**SPEED**

Smart Power for Environmentally-sound Economic Development



**Positive impact on the lives of poor and vulnerable populations by providing affordable, reliable clean energy to rural communities, thereby improving the quality of life and enhancing livelihood security**

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# Overall Objective of SPEED

Smart Power for Environmentally-sound Economic Development

**SPEED**



Over a period of three years the ***“SPEED model will be established as a widely replicable mechanism for local economic development through delivery of reliable, affordable and clean electricity; it will influence policy to create a more conducive environment for investment in sustainable rural electrification”***.

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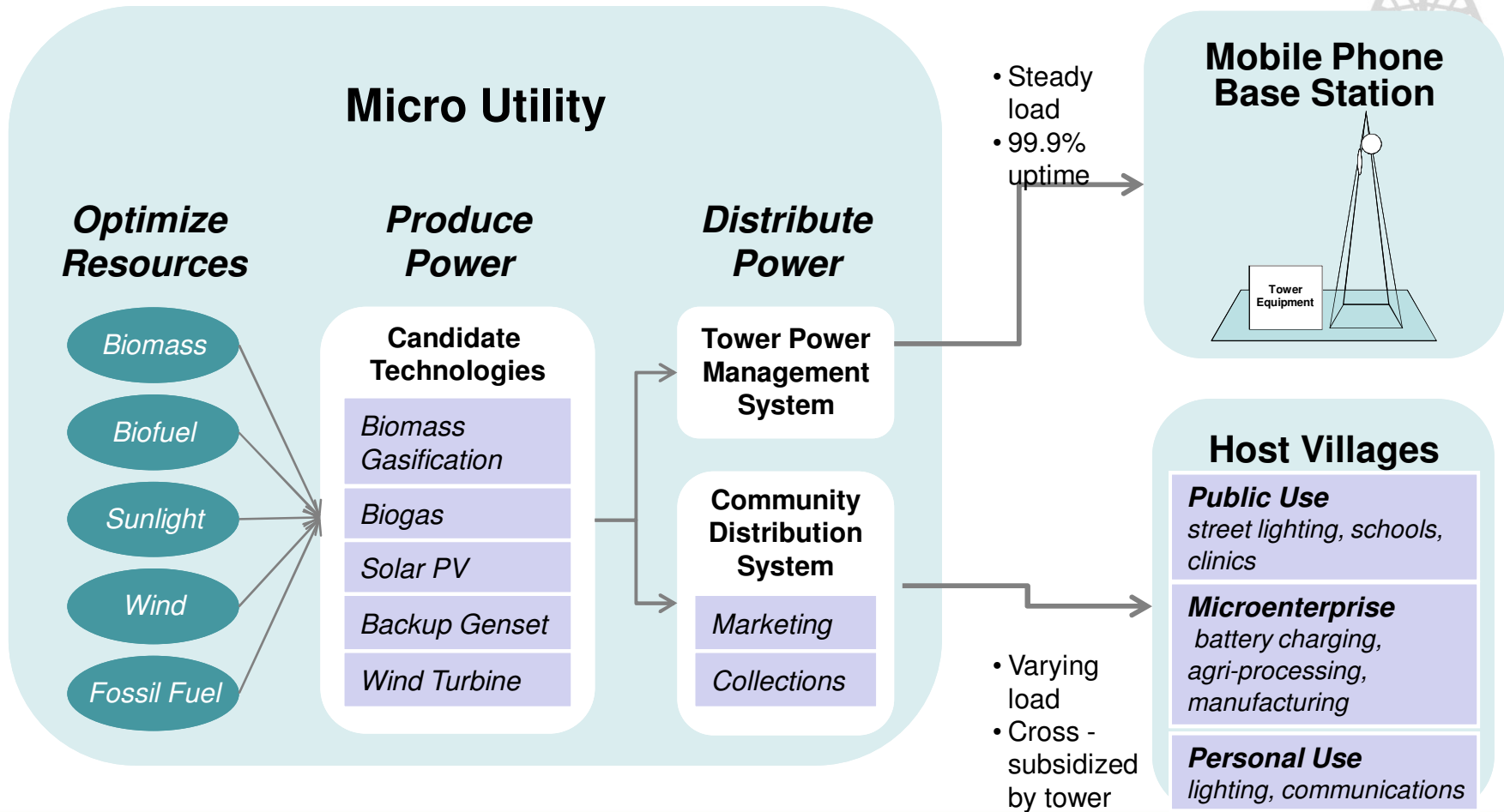
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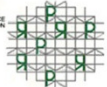
# Integrated Solution

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## Strategic Imperatives

- Implement **successful pilot projects in 30 to 50 villages**
  - demonstrate sustainability of the model
  - create verifiable conditions for its scaling up to 1000 villages or more
- Build an “**ecosystem**” around the **SPEED** concept by:
  - supporting the spread of scalable, sustainable implementation models
  - engaging critical industry players
  - creating financing models
  - promoting favourable policies

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## Specific Objectives

- Demonstrate sound **Business Systems** for rural electrification and create verifiable conditions for scaling up
- Accelerate local economic development through **Community Engagement and Micro-Enterprise Development**
- Ensure **Capacity Building** for efficient and effective operations and management of prototype projects and delivery of allied services
- Stimulate **Policy Influence** and effective **Knowledge Management** for promotion & scale up of decentralised rural electrification projects

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## Programme Partners

- **TARA**

... overall Programme Coordination and Capacity Building, Policy Dialogue, Knowledge Management & Communications

- **cKinetics**

... Analytics, Business Modelling and Investment

- **Pradan**

... Community Engagement and Micro-enterprise Development

- **CII – Godrej Green Business Centre**

- **DESI Power**

- **Sambodhi (Monitoring, Learning and Evaluation)**

- **Prayas (Policy Research)**

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# SPEED Framework

## ➤ **Aggregator – ESCO Construct**

- **Point of departure from other projects**

*... driven by “investability” logic and financial imperatives for scale-up*

## ➤ **Variants emerge from a three-dimensional view of**

- **Nature of project (demand profile)**

*... three contexts and five generic types worked out*

- **Different ownership approaches (capital structure)**

*... have achieved modelling capability and options are emerging*

- **Grid Interactivity: Off-grid, Grid-connected and Transition**

*... Priority states for pilot are Jharkhand, Bihar, Madhya Pradesh, Uttar Pradesh, Chattisgarh, Orissa and West Bengal*

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# SPEED ECOSYSTEM

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# SPEED

Creating fundable projects

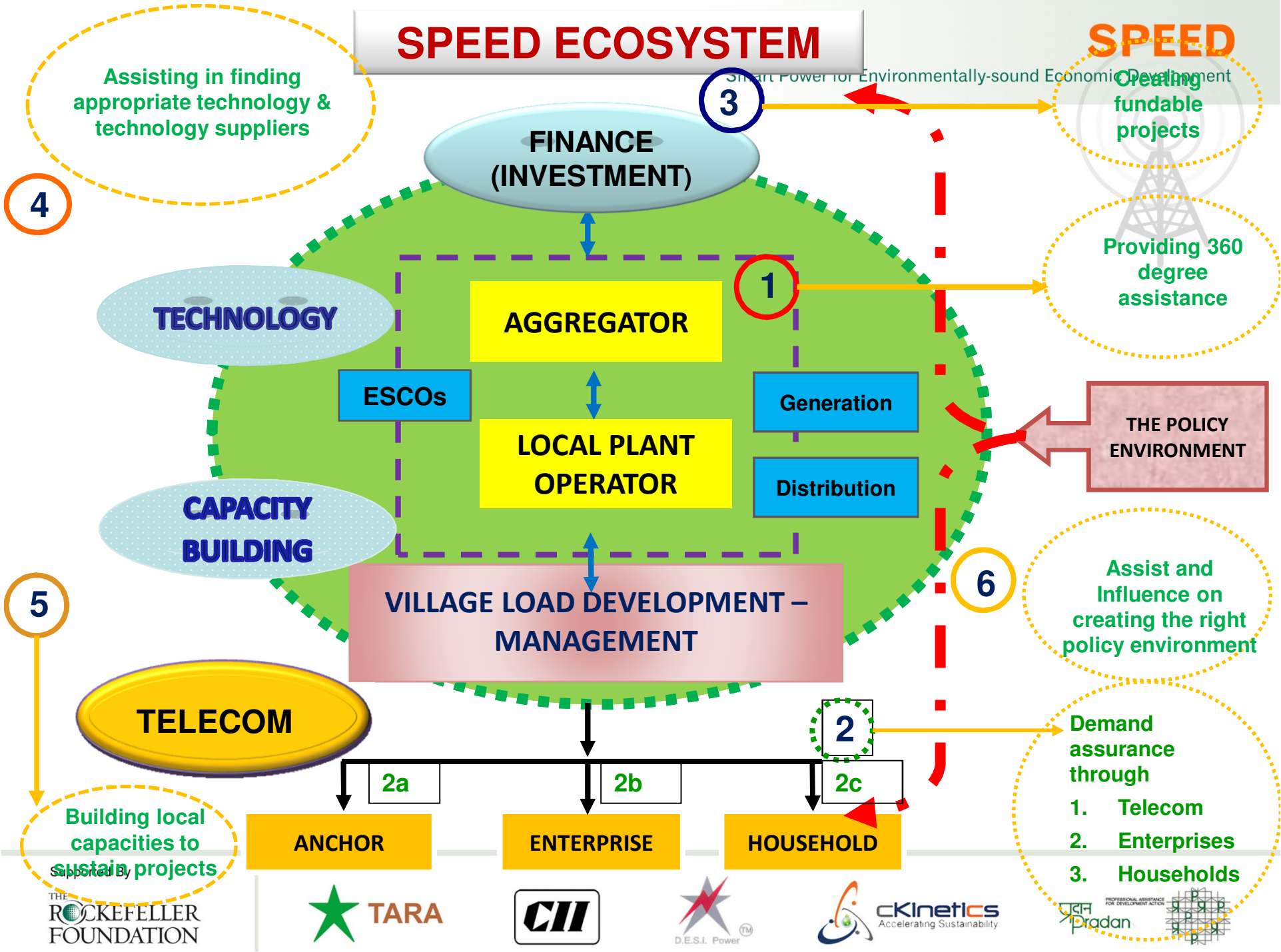
Providing 360 degree assistance

THE POLICY ENVIRONMENT

Assist and Influence on creating the right policy environment

Demand assurance through

1. Telecom
2. Enterprises
3. Households



## SPEED Support

- **Catalyzing demand through anchor load and local micro-enterprise development**
- **Engaging critical industry players in the mobile phone and renewable energy industries**
- **Creating financing models based on a mix of private equity, investment from Financial Institutions, Government subsidies and Donor supported incubation funds**
- **Promoting favorable policies and regulatory changes pertaining to renewable energy based power generation and distribution**

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# SPEED Finance Inputs

- **Business Structuring**
  - Plant Economics: Capex Optimization vs. sizing
  - Business Models
  - Revenue modeling and pricing inputs
- **Investment Access**
  - Investor workshops
  - Investment Advisory support
  - IREDA and MNRE facilitation
- **Project Attractiveness Tools**
  - Demand Assurance
  - Consumer Preference Incentive
- **Innovative Financial and Guarantee Instruments**

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## Major Milestones : Achieved

- Characterizing demand through stakeholder interaction, field visits and analysis of existing projects and potential sites in Jharkhand and Bundelkhand.
- In-depth analysis of plant economics for various prototypical projects, preparation of a feasibility assessment methodology and tool for business modelling
- Energy Service Companies (ESCO) identified and shortlisted based on their interest and financial capability
- Creating financing models based on a mix of private equity, investment from Financial Institutions, Government subsidies and Donor supported incubation funds
- Understanding amongst all the SPEED partners is getting strengthened and is now visible as **SPEED** Team.

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## Key Challenges

- **ESCO engagement (across spectrum of prototypical projects to test different variants)**
  - ... canvas and assess across a range of “promoters”*
- **Demand assurance for plants through local enterprise development**
  - ... need to bring in partners active in target geographies and able to leverage MED schemes and other resources*
  - ... commit support to local enterprises in “Type C” (remote) locations*

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# SPEED: Industry Engagement

- Confederation of Indian Industries – Green Business Centre leads the programme on engagement with business and industry in the Renewable Energy Technology, Telecom and ESCO space.
- A High Level Advisory Group. led by Jamsheyd Godrej, of key industry players, government representatives, financiers and technical experts has been set up.
- Initial meetings with Telecom and Tower companies have confirmed interest both as a consumer of electricity and potential investor or aggregator for projects.

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# SPEED: Policy Imperatives

- **Incorporating policy based subsidies and other incentives in business model (for aggregator – local operator construct)**
- **Issues of Compliance:**
  - **Conformity to Policy Guidelines and Regulatory Orders on tariff, service levels, etc.**
- **Issues of Grid Interactivity:**
  - **Technical, Scale, etc. particularly in the context of tail end generation.**
- **Issues of Long-term Sustainability:**
  - **Equity, Resources and Financial Health in a commercial environment.**

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