

Policy Brief: Off-Grid Residential Solar Power in India

Highlights

- Off-grid solar power adoption can alleviate energy poverty and address social inequality in rural India.
- Regional disparities, socio-economic factors, and policy initiatives significantly influence solar adoption.
- Persistent social disparities necessitate targeted interventions for equitable access to solar energy.

Summary

The adoption of off-grid residential solar power has emerged as a promising solution to combat energy poverty and social inequality in rural India. Key findings highlight the transformative potential of solar power, while identifying disparities and barriers that require policy intervention. Policymakers can leverage tailored strategies, such as state-specific initiatives and targeted subsidies, to promote inclusive energy transitions.

What's the issue?

Despite advancements in renewable energy, energy poverty and social inequality persist in rural India. Off-grid solar power adoption has the potential to address these challenges but faces barriers such as regional disparities, socio-economic inequities, and limited awareness.

Why is this important?

Solar energy offers a sustainable and inclusive pathway to bridge the energy gap in rural India. By improving energy access and reducing reliance on fossil fuels, off-grid solar power can enhance socio-economic development, particularly for marginalised communities.

What should the policymakers do?

1. **Adopt and Scale Successful State Initiatives:** Learn from states like Odisha and Uttar Pradesh to implement region-specific programmes, such as solar parks, mini-grids, and subsidies for solar pumps.
2. **Targeted Subsidies and Financial Assistance:** Provide financial support and subsidies to low-income households and marginalised groups to promote solar adoption. Initiatives like the Jawaharlal Nehru National Solar Mission (JNNSM) exemplify successful approaches.
3. **Educational and Awareness Campaigns:** Promote the benefits and use of solar power through targeted outreach efforts to increase adoption and community engagement.

4. **Community-Based Solar Projects:** Develop projects that ensure shared benefits for entire communities, promoting equitable access to solar energy.
5. **Partnerships and Collaboration:** Work with NGOs, local organisations, and financial institutions to facilitate solar adoption and strengthen grassroots efforts.

By implementing these measures, policymakers can harness the transformative potential of solar energy to create a more inclusive and sustainable energy future for rural India.

Citation

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