

# Energising Bihar

## Addressing Access & Energy Security Challenges

### CONCEPT NOTE

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*India has volunteered to reduce the emission intensity of its GDP by 20-25% between 2015 and 2020*

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*MNRE has set a new national renewable energy target of 175 GW to be achieved till the year 2022*

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*Bihar is one of the fastest growing states in India*

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## Background

India, with a production capacity of 1,541 TWh in 2017, is the 3rd largest country in the world in terms of power generation. It's Cumulative Annual Growth Rate (CAGR) from FY-2007 to FY-2017(1) was 8.7%(2), fuelled by a cumulative installed capacity of 310 GW. Driven by the growing concerns for climate change, India has volunteered to reduce the emission intensity of its GDP by 20-25% between 2015 and 2020, despite having no mitigation obligations as such. India, in its Intended Nationally Determined Contribution (INDC), has stated that 40% of its cumulative power capacity will be from non-fossil fuel-based energy resources by 2030, through technology transfer and low-cost international finance, including sources like Green Climate Fund(3). Continuing such endeavors, Ministry of New and Renewable Energy (MNRE) also set a new national renewable energy target of 175 GW till the year 2022. Setting such an ambitious target clearly indicates that India is pushing its policy to facilitate the shift towards renewable energy.

Bihar, with an area of 94,163 sq. km is the 13th largest state in India, and the 3rd largest state in terms of population (as per 2011 census). It is one of the fastest growing states in the country. However, the growth in Bihar's power sector is not proportionate with its rapid economic growth. The per capita electricity consumption of Bihar was 258 kWh in 2017-18, which is paltry in comparison with the national average of 1149 kWh. In the last six years, the demand for electricity in the state has grown at a rate of about 8% annually, but the power supply position remains dismal, leading to a very high peak demand deficit. According to Central Electricity Authority (CEA), the peak power deficit and the energy deficit in Bihar were 18.9% and 19.2% respectively for the year 2017-18(4).

1 <https://yearbook.enerdata.net/electricity/world-electricity-production-statistics.html>

2 [http://www.ibef.org/download/Power\\_December\\_2016.pdf](http://www.ibef.org/download/Power_December_2016.pdf)

3 <http://www4.unfccc.int/submissions/INDC/Published%20Documents/India/1/INDIA%20INDC%20TO%20UNFCCC.pdf>

4 <http://www.cea.nic.in/reports/annual/lgbr/lgbr-2018.pdf>

## Current Status

Giving due attention to the concern of electricity accessibility, Government of Bihar has set a target to provide 24-hour electricity to all rural and urban households by 2018-19. Under 'Power for All' (24x7 PFA), a joint initiative of Government of India (GoI) and the state governments, Bihar is also receiving support from the Central Government. The initiative aims to provide 24x7 electricity to all consumer groups by FY19(5). Such an ambitious target necessitates not only a complete transformation of the power sector in Bihar but also harnessing the huge renewable energy potential of the state.

Hence, in 2017, Bihar Government announced a first of its kind Renewable Energy Policy for the state for the following five years, which would help the state realise energy sufficiency by adding 3433 MW of power from renewable energy sources into its generation capacity by 2022. The policy titled "Bihar Policy for Promotion of Bihar New and Renewable Energy Sources 2017" was truly inclusive and technology neutral, with focus on each RE technology to harness 3433 MW of clean energy in the next five years. With a clear target, fixed timeline, and emphasis on solar rooftop, Decentralised Renewable Energy (DRE) systems and transformation of the agriculture sector through clean energy are some of the key features of the policy. Bihar Government, for the first time, focused on creating land banks at district level and covered all government buildings' rooftops as potential sites for solar projects. To address the need of energy security and sustainability, the policy's specific targets in key areas were 1000 MW for rooftop solar and 100 MW for mini-grids.

## Way Forward

Given that it has been a year since the new policy was notified, the need of the hour is to expand the reach of this policy into implementable projects across the state. There have not been many projects on the ground due to the lack of guidelines. Guidelines play a crucial role in disseminating the policy thrust areas by identifying roles, responsibilities and the process involved. CEED has been working closely with BREDA, in cooperation with Shakti Sustainable Energy Foundation, to accelerate the process of framing such guidelines.

The conference *Energising Bihar* aims to bring together the key stakeholders in the state and to discuss the way forward in thrust areas like rooftop solar and mini-grids, with inputs from experts across all over the country. The conference will be initiated by the Hon'ble Minister of Energy, Shri Bijendra Prasad Yadav, along with other dignitaries from the Energy Department of Government of Bihar. We believe this conference will address the role of regulations/guidelines for various projects. Furthermore, the conference also aims to explore new territories of international transmission and distribution of renewable energy between India and Nepal, along with exploring the role of mini-grids to hasten the Power for All initiative in conjunction with the newly announced Kusum scheme of the Government of India.



### About CEED:

Centre for Environment and Energy Development (CEED) is an environment and energy expert group involved in creating sustainable solutions to maintain a healthy, rich and diverse environment. CEED primarily works towards clean energy, clean air, clean water and zero waste solutions by creating an enabling environment and policy framework to scale up investments in low carbon development, climate mitigation and adaptation. CEED engages with government, industries, leaders, think-tanks, stakeholders and public to create environmentally responsible and socially just solutions

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