

# Energy Access Monitor

September 2017

## Trending topics

### Rural Electrification



- Over 1 lakh houses to be covered under rural electrification scheme
- After powering villages, PM Modi govt plans to light up rural homes
- Nearly six-fold jump in electrification pace needed to meet Saubhagya targets

### Financing Energy Access



- Renew Power Collaborates With IIT To Launch Research Facility On Renewable Energy
- Indian Renewable Energy Development Agency lists Green Masala Bond in UK

### Energy access and SDGs

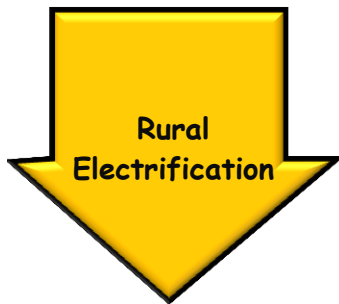


- BRICS Commit to Cooperate on SDGs, Climate Change

### Women and Energy Access



- How Women Are Bringing Solar Power to These Villages In Bihar



**Over 1 lakh houses to be covered under rural electrification scheme.** State energy secretary Nitin Madan Kulkarni convened a review meeting at AIADA Bhavan in Adityapur in view of the ongoing rural electrification project in Kolhan. It is estimated that over one lakh households in rural areas of Singhbhum and Seraikela-Kharsawan will be covered under the rural electrification scheme by March 2018.

The review meeting was attended by Jharkhand Urja Vikas Nigam Limited's (JUVNL) General Manager KK Verma, superintending engineer, Jamshedpur circle, Manmohan Kumar and executive engineers of Jamshedpur circles. According to the sources two agencies, Eastern India Company and IL&FS in the rural electrification project are engaged to ensure completion of the project.

**After powering villages, PM Modi govt plans to light up rural homes.** Close to fulfilling its promise of powering all un-electrified villages ahead of deadline, the government is scheduled to clear on a plan to light up all homes in the hinterland over the next two years or so. According to the government sources the plan, christened '*Saubhagya*', is estimated to cost Rs 17,000 crore and is expected to be taken up by the Cabinet's economic affairs panel at its meeting.

The scheme is a natural corollary to the village electrification scheme. PM Narendra Modi had on August 15, 2015 set a target for the power ministry to electrify all 18,452 unelectrified villages within 1,000 days. Today, there are only 3,046 inhabited villages that remain to be electrified as per the government data. The rapid progress in village electrification, combined with the free LPG connection for poor households, had paid rich dividend for the BJP in the UP assembly election. The present government's energy plan changed people's lives and helped them connect with the PM's development politics. The focus on household electrification will help the BJP strengthen that connection as it gears up for the 2019 Lok Sabha polls by universalizing access to power and make the 'Power for All' a reality. Under the current official definition, a villages is considered as electrified if at least 10% of its households get a power connection. An estimated 4.5 crore rural households are still without access to power.

- Electrification of such a large number of rural households will yield social and economic dividends by pushing growth in demand for power and appliances household appliances, which will help the manufacturing sector.
- The scheme will also boost 'Ujala' - the scheme to popularize LED bulbs and other energy efficient appliances such as fans through a unique non-subsidised financial model that leverages scale. through a survey using technology such as GPS mapping etc. There are several models of delivery, which also looks at involving state government officials.

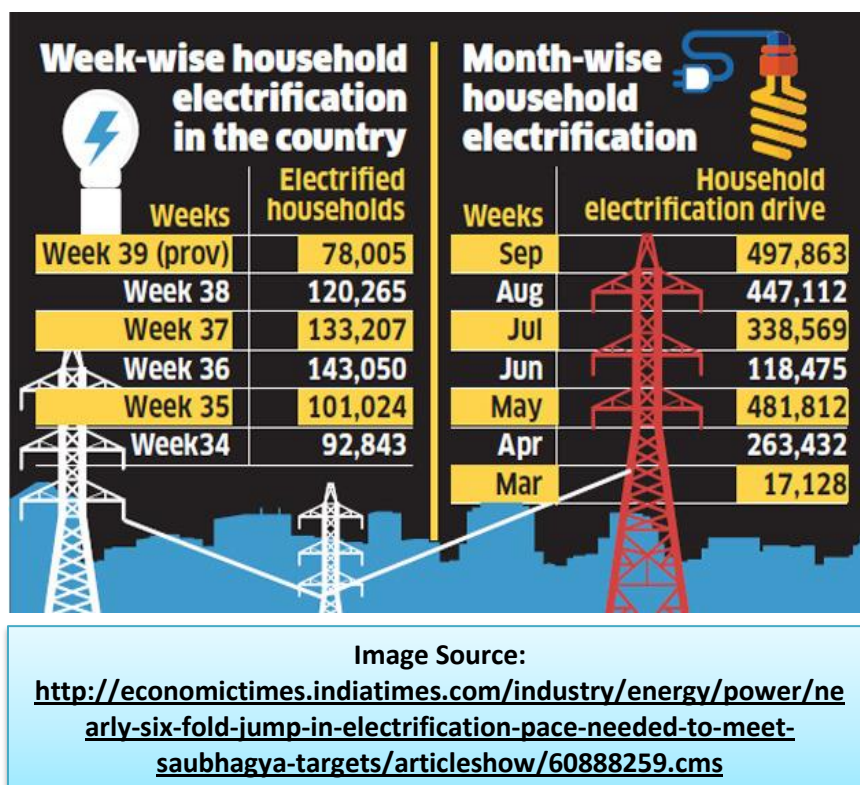
**Nearly six-fold jump in electrification pace needed to meet Saubhagya targets.** India needs a nearly sixfold jump in pace of

electrification if the targets set under the Saubhagya scheme announced by Prime Minister of India are to be met. The government will have to electrify about 2.7 million households every month to cover more than 40 million households in the next 15 months, as per the target laid under the scheme. The current rate of electrification is just 475,000 households per month, as per the data available with the power ministry. The Pradhan Mantri Sahaj Bijli Har Ghar Yojana, or Saubhagya scheme, worth over Rs 16,000 crore for universal household

electrification, will cover a total of 30 million households, 25 million in rural areas and five million in urban areas.

The electricity connection to households includes release of electricity connections by drawing a service cable from the nearest electricity pole to the household premises, installation of energy meter, wiring for a single light point with LED bulb and a mobile charging point. In case the electricity pole is not available nearby from household for drawing service cable, the erection of additional pole along with conductor and associated accessories shall also be covered under the scheme.

- The Saubhagya scheme will take at least a few months to kick off since the states will have to submit their detailed project reports to the Centre. Projects under the scheme will be sanctioned on the basis of detailed project reports or DPRs to be submitted by the states. There is no upfront allocation of funds under the scheme.





**Renew Power Collaborates With IIT To Launch Research Facility On Renewable Energy.** Indian renewable energy firm ReNew Power has launched 'Sumant Sinha ReNew Centre of Excellence (CoE) for Energy & Environment' at the Indian Institute of Technology (IIT), Delhi. The CoE aims to facilitate research in renewable energy space and also encourage talent to create opportunities for academic research and development.

According to Sumant Sinha, Chairman & CEO, ReNew Power, the partnership will facilitate innovative research and help develop leading edge clean energy solutions to preserve the Earth for future generations. It will also promote the exchange of ideas between industry, academia and policy makers from across the world to promote faster adoption of renewable energy. The centre was inaugurated by Union Minister for Human Resource Development, Government of India, Prakash Javadekar.

- In the current form, the CoE will be a hub at IIT Delhi for clean energy related research. The collaboration proposes research in the fields of solar rooftop, battery storage technology, renewable accommodation in the grid from utility scale plants, development of charging infrastructure for electric vehicles and others.
- The centre will provide status reports and advise papers to the relevant government institutions and multilateral organisations on renewable energy policy matters on periodic basis.
- It would also offer research and internship opportunities for undergraduate, postgraduate and Ph.D. students in the industry apart from skill enhancement of engineers, especially women for entrepreneurship.

**Indian Renewable Energy Development Agency lists Green Masala Bond in UK.** The Indian Renewable Energy Development Agency has launched a new Green Masala Bond on the London Stock Exchange's new International Securities Market to raise funds to finance renewable energy projects across India. The five-year dated bond raised approximately USD 300 million (Rs 19.5 billion), with a coupon of 7.125 per cent, and became the first Green Masala Bond to be listed on the International Securities Market (ISM).

According to Mr. Kuljit Singh Popli, Chairman and Managing Director of IREDA, Indian Renewable Energy Development Agency (IREDA) is fully committed to helping achieve Indian Government's vision of 175 GW renewable energy capacity by 2022. The Green Masala Bond is a significant milestone for IREDA in this regard, as they embark on the next phase of renewable and sustainable energy led expansion. He also described the listing as a step towards Prime Minister Narendra Modi's commitment to the Paris agreement on Climate Change.

IREDA, a state-owned non-banking financial institution, has a remit to promote, develop and extend financial assistance for renewable energy and energy efficiency conservation projects in India. The company provides financing for hydro, wind and solar energy projects, new and emerging technologies and for bio energy sectors.

- The new green bond is certified by Climate Bonds Initiative, an international, investor-focused not-for-profit, which helps build robust and transparent assurance frameworks around green bond investment. It marks the fourth green bond by an Indian issuer to be issued on London Stock Exchange.
- Axis Bank and NTPC joined in 2016, raising respectively USD 500 million and USD 300 million equivalent. In June this year, the Rural Electrification Corporation (REC) raised USD 450 million.
- London Stock Exchange claims to be the largest Masala Bond centre globally, with 42 bonds listed in total with an equivalent value of over USD 6 billion.

[Business World](#), 12 September 2017 | [Energy World](#), 30 September 2017



**BRICS Commit to Cooperate on SDGs, Climate Change.** Brazil, Russia, India, China and South Africa (BRICS) adopted the ‘BRICS Leaders’ Xiamen Declaration,’ reaffirming their commitment to fully implementing the 2030 Agenda for Sustainable Development, committing to enhance BRICS cooperation on climate change and expand green financing, and agreeing “to take concrete actions to advance result-oriented cooperation in such areas as prevention of air and water pollution, waste management and biodiversity conservation,” among others.

On climate, the BRICS leaders call for full implementation of the Paris Agreement on climate change, including the principle of common but differentiated responsibilities and respective capabilities, and urge developed countries to provide financial, technological and capacity-building support to developing countries to enhance their mitigation and adaptation capabilities. On agriculture, BRICS agree to deepen cooperation in five priority areas: food security and nutrition; adaptation of agriculture to climate change; agricultural technology cooperation and innovation; agricultural trade and investment; and information and communication technology (ICT) application in agriculture to, *inter alia*, contribute to the achievement of the Sustainable Development Goals (SDGs).

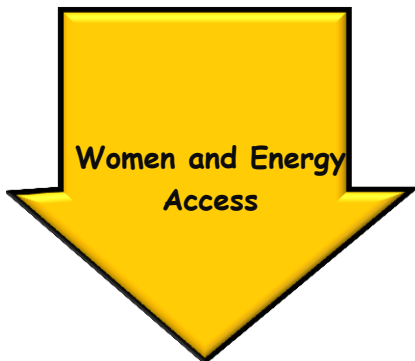
- On energy, the BRICS leaders commit to strengthen their cooperation, and acknowledge that clean and affordable energy needs to be affordable for all. They pledge to work to foster open, flexible and transparent markets for energy commodities and technologies, as well as to promote effective use of fossil fuels and wider use of gas, hydro and nuclear power to improve energy access.
- The BRICS leaders also, *inter alia*: reaffirm their commitment to industrial cooperation, including on industrial capacities and policies, new industrial infrastructure and standards; highlight the importance of innovation as a key driver for mid- and long-term economic growth and global sustainable development; agree to share experience and practices in realizing education-related SDGs; and recognize the importance of improving urban environmental sustainability.

The Xiamen Declaration is the outcome of the ninth BRICS Summit, which took place in Xiamen, China, from 3-5 September 2017, under the theme ‘BRICS: Stronger Partnership for a Brighter Future.’ It outlines the countries’ practical economic cooperation, as well as their contribution to global economic governance, international peace and security, and people-to-people exchanges. Annexes to



the Declaration include more than 60 BRICS cooperation outcome documents, the Xiamen Action Plan, a list of BRICS meetings for 2017 and proposals to be further explored.

[sdg.iisd.org](http://sdg.iisd.org), 12 September 2017



**How Women Are Bringing Solar Power to These Villages In Bihar.** The Bihar Rural Livelihoods Promotion Society's JEEVIKA has been working on renewable energy installations in the Tankuppa block. This area was previously infamously known as a corridor for Naxal operations. Solar mini-grids have been set up and are now operational in two villages. The Badil Bigha Village is situated on the foothills of the sacred the Brahmayoni Hills in Gaya.

The installation of a solar mini-grid was started in early 2015 and has been successfully operational since May 2016. Now the new 15 KW solar mini-grid is distributing power through a centralised power station with an individual smart meter. The solar mini-grid system is comprised of 15 KW Photovoltaic Panels (PV) connected to a battery bank. There are three separate 3KW DC pumps installed at specific locations to facilitate drip irrigation to the farmers. Each beneficiary has been provided with two 5W LED bulbs, one 20W DC fan and one 5W solar lantern with the connection.

#### **Community-Based Management of Solar Off-Grid in Badil Bigha:**

This project is owned and operated by the village women cell – JEEVIKA. Involvement of women is one of the most revolutionary components of developing an expert knowledge resource of solar mini-grid operation. Working through community inclusion at all levels of power distribution and maintenance is a big plus too. The village energy committee is working to review price slabs in a unanimous consensus with households accessing electricity. The JEEVIKA Women Cell has informed each household/beneficiary about how energy would change livelihoods and how this solar mini-grid shall bring dynamic economic empowerment in the village.

Badil Bigha has now overcome clouds of darkness. Villagers are using electricity at their homes, charging their mobiles, watching television and using the Internet to get connected. Recently, Victoria, a Cambridge University student visited Badil Bigha's solar mini-grid. She is studying the socio-economic paradigm shift after installation of a smart solar mini-grid in the village. Victoria appreciated this dynamic transition in the community where women are empowering a change in life and livelihoods.

[youthkiawaaz.com](http://youthkiawaaz.com), 20 September 2017