ACHIEVEMENTS AND INITIATIVES OF
Ministry of Power, Coal and New & Renewable Energy
GOVERNMENT OF INDIA
NOVEMBER 2015
A Period which started the journey towards 'Year Round Power for All'
ACHIEVEMENTS

- Power deficit reduced to 2.4% the lowest ever
- Highest ever generation capacity addition: 29,168 MW
- Over ₹3.40 LAKH Cr. of potential revenues to coal bearing states through transparent coal e-auctions & allotments
- 37,821 ckm Highest ever increase in Transmission lines
- ₹4.63/Unit Lowest ever solar tariff
- First time ever, exceeded renewable capacity addition targets in solar, wind, small hydro etc.
- More than 3 Cr. LED bulbs distributed
TARGETS

Doubling Coal India’s production to 100 Cr. tonnes/year by 2020

Power Generation to increase by 50% by 2020

5 Times increase in renewable capacity to 1,75,000 MW by 2022

Energy saving to increase to 10% of current consumption
MISSION

24x7
POWER FOR ALL
BY 2019
POWER IS DELIVERED THROUGH A CHAIN OF ACTIVITIES
A chain is only as strong as the weakest link

- Annual production growth of Coal only 1.5% between 2010-14
- Loss of ₹1.86 lakh Cr. estimated by CAG in Coal allocation
- >26,000 MW of power capacity idle due to lack of fuel
- Less than 1% of solar potential realized
- 28 Cr. people without access to power
- Largest power outage in history with 62 Cr. people in darkness in 2012
- Discos losing ₹60,000 Cr. annually and accumulated losses of >₹4,00,000 Cr.
- Spiralling consumer tariffs
- Lack of focused energy conservation efforts

Measures to build an exceptionally strong power delivery chain are on and are bearing results
UDAY (Ujwal DISCOM Assurance Yojana) of a powerful India
Permanent resolution of power distribution issues to enable 24x7 Power for all

Highlights of UDAY

- Improving efficiency through infrastructure improvement, smart metering and tracking of losses
- Reduced losses through public participation programmes
- Demand Side Management to reduce bills and save the environment
- Transmission Capacity Addition for reliable power supply
- DISCOM debt restructuring with alignment of State and DISCOM interests

Past
- State take over of debt

Present
- Enabling Quarterly Tariff Increase
- Operational Efficiency
- Lower Cost of Power
- Reduction in Interest Cost

Future
- Budgetary Discipline
- Future Bank Lending

Benefits

- 24x7 Power for all
- Electrification of all villages
- Enable Energy Security
- Revive investments in Power sector to create jobs
- Almost all DISCOMs to be profitable in 2-3 years
- More than Rs. 1.8 lakh crore of annual savings due to efficiency improvement
ENERGY EFFICIENCY REVOLUTION IS HERE

NATIONWIDE CAMPAIGN FOR ENERGY CONSERVATION LAUNCHED

ENERGY EFFICIENCY: ONE UNIT OF POWER SAVED IS WORTH 1.33 UNITS PRODUCED

TARGET TO SAVE 10% OF CURRENT ENERGY CONSUMPTION ALL INCANDESCENT BULBS TO BE CHANGED TO LED IN THREE YEARS

DOMESTIC EFFICIENT LIGHTING PROGRAMME (DELP) TO DISTRIBUTE 77 CRORE LED BULBS IN THREE YEARS

LED PRICE

>75% REDUCTION

Due to transparent procurement, price of LED has reduced by 74% from ₹ 310 in Feb 2014 to ₹ 73 in Jun 2015 while increasing specifications from 7W to 9W

Over 3 crore household bulbs and 4.5 lakh streetlights replaced with LED bulbs

CONSUMPTION
ELECTRICITY FOR EVERY VILLAGE

“It is now the solemn pledge of the “Team India” of 1.25 billion countrymen that the target of providing electric poles, electric wires and electricity to these 18,500 villages would be achieved within next 1000 days”

- Honble PM Shri Narendra Modi
on 15th August, 2015

Citizen engagement through Accountability, Communication and Transparency

Realtime tracking of LED bulb distribution

Track and find how to get LED bulbs from http://www.delp.in
Track Rural Electrification on Grameen Vidyutikaran app
TRANSMITTING & DISTRIBUTING POWER

POWERLESS TO POWERFUL

SMART GRID
National Smart Grid Mission approved to bring efficiency in power supply network and facilitate reduction in losses & outages

Level playing field in transmission through separation of POSOCO and POWERGRID

₹ 38,000 Cr.
GREEN ENERGY CORRIDOR project being rolled out to ensure evacuation from renewable energy plants

Projects worth ₹ 1 LAKH Cr. to be bid in the current fiscal year
Total investment of ₹ 1.4 lakh Cr.

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

- Total outlay ₹ 75,893 Cr.
- Feeder segregation for 24x7 power to rural homes, micro small and cottage industries
- Now small hamlets also covered
- Adequate power to farmers
- New transformers and upgradation of last mile infrastructure
- Remote Villages to be covered: Off-grids and micro-grids
- Solar Installations by Discos to promote clean and green energy

Integrated Power Development Scheme (IPDS)

An integrated scheme for urban areas covering:

- Total outlay ₹ 65,424 Cr.
- Smart-metering for large consumers and tamper-proof meters at homes
- Comprehensive sub-transmission & distribution infrastructure upgradation in urban areas
- Underground cabling and high tech GIS transformers in densely populated areas
- IT implementation for better customer service
- Solar installations like rooftop solar also covered
RENEWABLE ENERGY
AN ARTICLE OF FAITH FOR INDIA

Record targets towards India’s Intended Nationally Determined Contributions (INDC) including:

- Reducing emission of GDP by 33 to 35% by 2030 from the 2005 level.
- Achieving about 40% cumulative electric power installed capacity from non-fossil fuel based Energy Sources by 2030.
- Creating additional carbon sink of 2.5 to 3 billion tonnes.
INTERNATIONAL SOLAR ALLIANCE

- Envisioned as a specialized platform for mutual cooperation among 121 solar resource rich countries lying fully or partially between Tropic of Cancer & Tropic of Capricorn
- Dedicated to address special energy needs of ISA member countries
- Secretariat planned to be hosted by Government of India

SOME QUOTES:

“I welcome this initiative because if (these) countries can formulate ambitious targets for renewables by modifying regulatory frameworks for financing and improving technologies for lowering price of solar energy, then it will be a major contribution to the implementation of climate agreement”. Francois Hollande President of France

“ISA can provide a unique focus in supporting global efforts to increase the uptake of renewable energy through the development of solar policies, the promotion of applications to reduce poverty and the facilitation of energy access. I welcome this initiative by an IRENA Member Country and the Chair of the IRENA Council, India, and look forward to supporting ISA member countries in all possible ways”. Adnan Z. Amin, Director General, IRENA

“There are several countries blessed with high solar radiation. We are making efforts to bring these countries together for enhanced solar energy utilization through research and technology upgradation. These countries have immense strength and capabilities to find solutions for their energy needs through solar energy”. Narendra Modi Hon’ble Prime Minister of India
100,000 MW of Solar and 60,000 MW of Wind capacity

Green Generation for Clean & Energy Secure India

India is running the largest renewable capacity expansion program in the world

Increasing the overall renewable capacity target by MORE THAN 5 TIMES from 32,000 MW to 1,75,000 MW by 2022

Opportunity for unemployed graduates & farmers to become solar entrepreneurs

World's largest renewable energy financing meet. Commitments of 2,73,000 MW

62,000 MW of renewable manufacturing commitment

70,000 MW of renewable financing commitment

118 exhibitors from 7 countries

200 global investors & financiers

Nearly 2500 delegates from 32 countries

202 speakers including international speakers from 29 countries

Financing Green Energy

RE-Invest 2015
RAPID GREEN PROGRESS

“We are like tenant farmers chopping down the fence around our house for fuel when we should be using Nature’s inexhaustible sources of energy – sun, wind and tide.”

- Thomas Edison

Highest ever increase in solar capacity of 1,112 MW

42% increase in solar capacity during 2014-15

Reaching grid parity with record low tariff of ₹4.63/unit

25 solar parks with capacity of ~1000 MW each planned

Accelerated depreciation restored for wind power from July 2014 to help increase wind capacity

Coal cess quadrupled from ₹50 to ₹200/tonnes to help finance clean energy projects and Ganga rejuvenation

Tender by NTPC to setup 2,170 MW of Solar Projects
RAPID INCREASE IN GENERATION CAPACITY

5 new Ultra Mega Power Projects of 20,000 MW to be setup in plug-and-play mode attracting an investment of > ₹ 1 LAKH Cr.

Agreement signed for expansion of Patratu Thermal Power Station, Jharkhand to 4,000 MW

All clearances and linkages will be in place before the project is awarded by a transparent auction system.

Old plants to be upgraded to enhance capacity and reduce emission.

GENERATION
CANCELLING COAL
REMOVING THE TAINT

Cancellation of 204 coal blocks by Supreme Court presented a potential grave crisis of:

ENERGY
Shutdown of plants dependent on cancelled coal mines

EMPLOYMENT
Livelihood of thousands of workers endangered

ECONOMY
Economic activity halts, NPAs mount

Crisis averted by focused action through implementation of transparent e-auction process in just four months
REGIONAL DEVELOPMENT

Coal bearing states like Jharkhand, Chhattisgarh, Odisha, West Bengal, Madhya Pradesh, Maharashtra and Telangana to get potential revenue (including auction proceeds and royalties) of

₹ 3.4 lakh Cr.

From auction of 32 Coal blocks & allotments of 41 coal blocks to states/PSUs over the lifetime of the mines

REJUVENATED ECONOMY

Prevented NPAs, reduced import bill, generated momentum for ‘Make in India’ and raised resources for renewables & Ganga cleaning through coal cess.

Lower Power Tariff
through liberal coal swaps from inefficient plants to efficient plants and from plants situated away from mines to pit-head plants to minimize cost of coal transportation

Reduction in coal theft using

RFID/GPS tagging

Coal price rationalization
based on Gross Calorific Value (GCV) to optimize tariffs

Coal Project Monitoring Portal
for quicker decision making, faster dispute resolution and accelerated removal of bottlenecks

Improved coal quality
using compulsory crushing, washing and third party sampling

Legislation Enabled
Coal Mines (Special Provision) Act & Mines and Minerals (Development and Regulation) Amendment Act enacted to enable growth of coal sector and provide for the welfare of locals particularly tribals in the mineral bearing areas
DOUBLING COAL INDIA PRODUCTION IN 5 YEARS

Trebling exploration activities for enhancing coal production
Over 60 new mines to be opened
Better evacuation of coal planned by investing massively in new railway rakes, expediting railway lines, modern equipment and mechanization
Partnership between Railways, coal-bearing states and Coal India to strengthen infrastructure creation. Signed MoUs with Odisha and Jharkhand

Swachh Bharat

The PSUs under the three Ministries were actively involved in this effort and constructed 1,28,000 toilets separately for boys and girls by 15th August, 2015 particularly in the needy states such as Bihar, Odisha, West Bengal, Jharkhand, Chhattisgarh, Andhra Pradesh and Rajasthan. After construction, the PSUs are also maintaining these toilets for a period of five years thus ensuring a complete sanitation programme.

Awareness is being created in local communities to improve over all sanitation.
India has now graduated from megawatts to gigawatts in terms of renewable energy production.

Prime Minister Narendra Modi at RE-invest 2015