



Consolidated Energy Consultants Limited
Est. 1990

An ISO 9001: 2015 Certified Company

CORPORATE PROFILE

www.cecl.in



Towards Total Energy Security

Our journey began in 1986- conscious of the growing demand for energy and the emerging opportunities for the renewable energy sector in particular- a band of electrical engineers, equipped with decades of experience, decided to work together to explore a nascent industry.

Consolidated Energy Consultants Limited (CECL) came into being in 1990, with Wind Energy as its core area of activity.

A large team of engineers and technical experts with proven track record have since been pressed into service to meet the exacting requirements, the new challenges and to upgrade expertise.

CECL believes that acquisition of knowledge is a continuing process, innovation and socio-economic growth are imperative tasks alongside continuous endeavour to develop and sharpen 'skill'.

The ultimate goal being achievement of Energy Security in terms of both availability and affordability.



38 Years Of Service To The Wind Energy Sector

CECL has field experience in providing turnkey services with specialized and experienced manpower, an enormous database of metrological and RE industry knowledge, and advanced computing softwares to assist investors from concept to commissioning.

350+ Clients

600+ Projects

340+ Locations

20GW+ sites

6 countries

Spectrum Of Services

- Site Identification
- Wind Resource Assessment
- Micro-siting and Energy Estimation
- Validation of Energy Estimation
- Feasibility Study
- Design & Engineering
- Due Diligence
- Procurement and Contracting
- Project Management
- Monitoring & Energy Estimation
- Performance Improvement
- Repowering
- Lender's Engineers
- Wind Solar Hybrid Systems



Clientele



GAIL (India) Limited



MINISTRY OF FOREIGN AFFAIRS OF DENMARK



POWER FINANCE CORPORATION LTD.

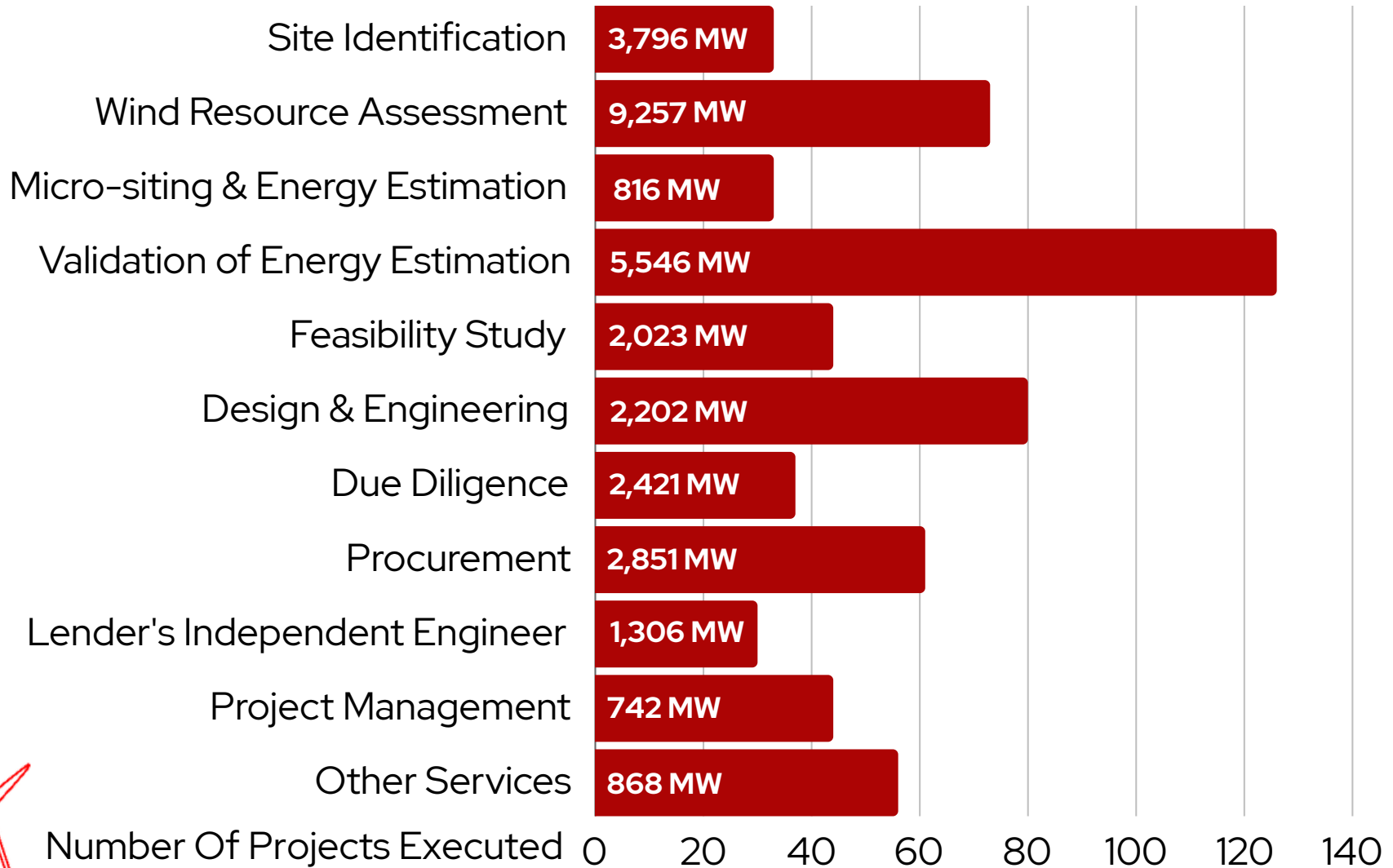


महाराष्ट्र विद्युत नियामक आयोग
Maharashtra Electricity Regulatory Commission



Experience & Achievements

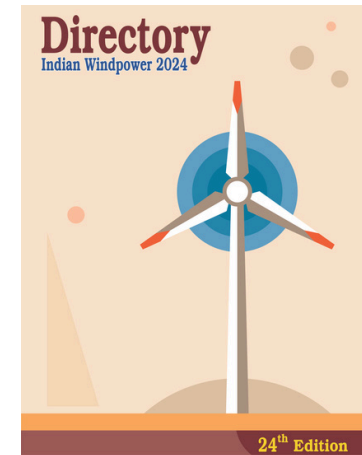
In Wind Power Projects As On 31.03.2024



Pioneering Efforts

Directory Indian Windpower

First to publish Annual Directory since 2001 on Wind Power containing most comprehensive information on all aspects. It is the most widely used reference source on Wind Power in India. The 24th Edition is available at: www.cecl.in/directory.



MP Windfarms Ltd

First to form a Joint Sector Company with equity participation of Government of India and State Government of Madhya Pradesh (the only company of its kind so far) for creation of wind power estate to facilitate cost effective implementation and high quality O&M services - a model that is now being followed by all manufacturers..

RE-Port

First to launch an exclusive website: www.re-port.in
The Renewable Energy Project Transaction Portal.



RE-PORT
Green Energy Confluence

The Renewable Energy Project transaction portal.



Windpower India Website

First to launch an exclusive website: www.windpowerindia.com. The website is regularly updated to benefit both national and international viewers.



Pioneering Efforts

CECL is the first Indian company to:

- Import, assemble, erect & commission a 55 kW WEG in 1986
- Prepare Master plan for implementation of Wind Farm Projects in Tamil Nadu in 1990
- Carry out grid study for windfarms in Gujarat in 1991
- Prepare Guidelines for DPR, & Tendering for IREDA, World Bank in 1993
- Prepare Micro Resource Survey study for potential windfarm areas around qualified wind masts in 2000
- Consult & determine tariff for windpower projects by MERC in 2002
- Assist ONGC, a PSU, to establish 50 MW windpower Project in Gujarat in 2007-08
- Conduct Repowering study of demonstration Wind farm Projects of MNRE in Gujarat & Tamil Nadu in 2009
- Carry out in house, MESO scale wind mapping, for identification of potential sites in India
- Carry out Meso scale wind mapping of NE states of India and prepare DPR for installation of offgrid wind solar hybrid systems in 2011
- Carry out Meso scale wind mapping for Mauritius, Srilanka & Bangladesh



Pioneering Efforts

Our core business strength is not just reinforced by our expertise in providing diversified consultancy services in the Wind Energy sector, but also by our constant demonstration of due competence in turnkey Project Development and Comprehensive O&M of Windfarms.

Delivered through subsidiary company M.P. Windfarms Ltd.



Jamgodrani Hills, Madhya Pradesh, 13MW

Developed, commissioned and operated by MP Windfarms Ltd (Subsidiary of CECL in partnership with the central govt of India (IREDA) and govt of Madhya Pradesh (MP Urja Vikas Nigam)

Commissioned in 1995-1997 and de-commissioned in 2015-16 after successful completion of 20 years of project life. 58x NEPC Micon, 225kW wind turbines installed for 15 private investors.



Nagda Hills, Madhya Pradesh, 15MW

Developed, commissioned and operated by MP Windfarms Ltd (Subsidiary of CECL in partnership with the central govt of India (IREDA) and govt of Madhya Pradesh (MP Urja Vikas Nigam)

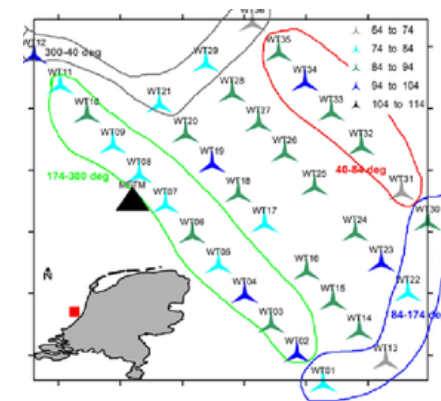
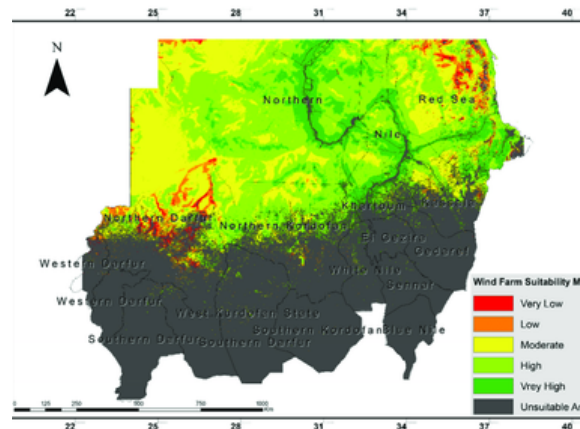
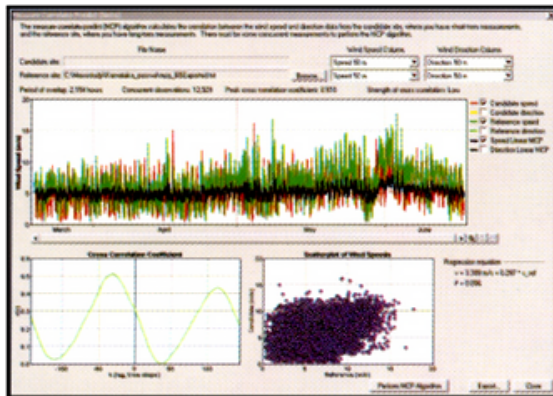
Commissioned in 2007-2008, currently operational. 25x Vestas-RRB, 600 kW wind turbines installed for 5 private investors.



Site Identification and Wind Resource Assessment

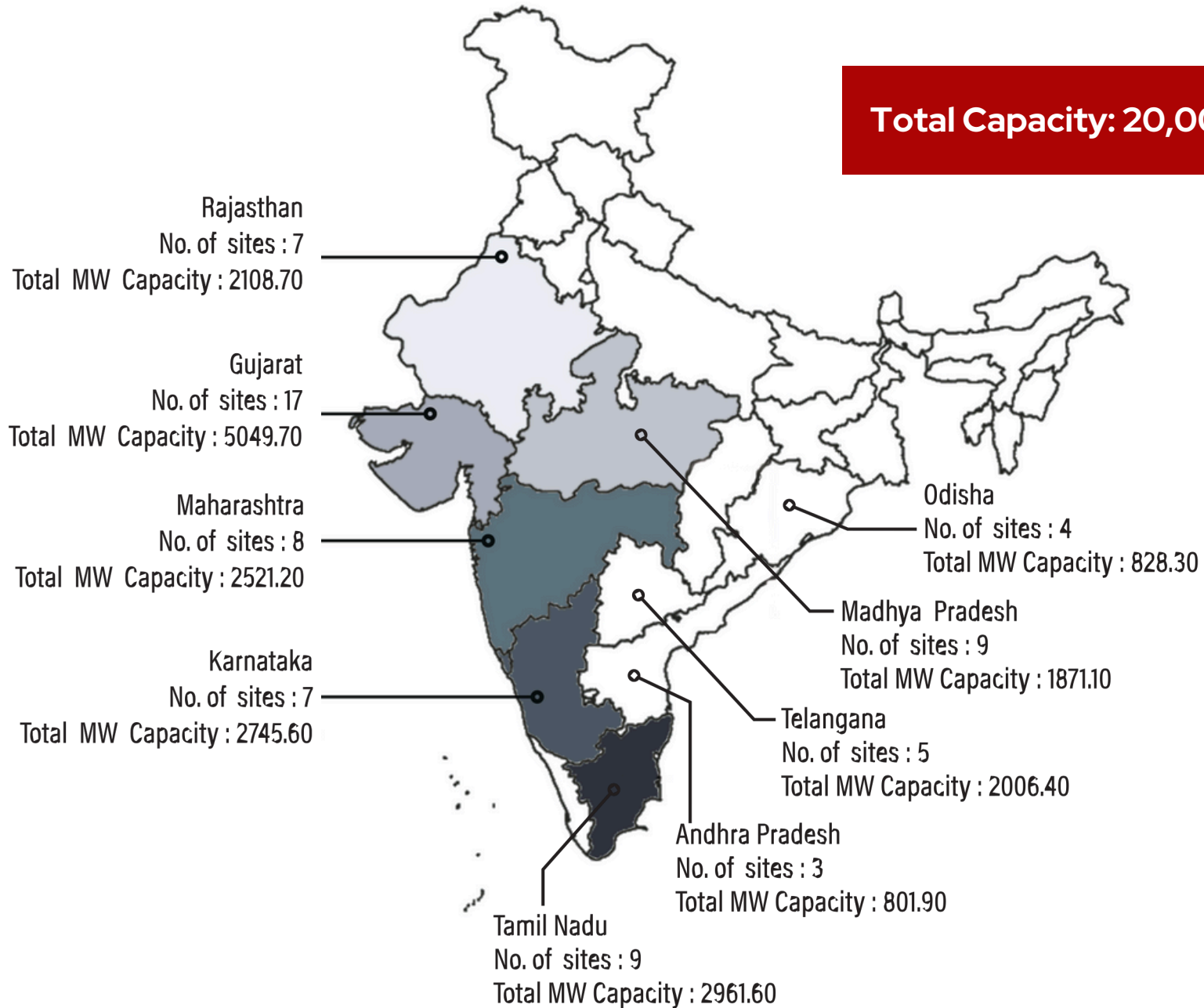
Accurate wind resource assessment and turbine location determination is the most critical factor to ensure project viability / profitability.

- Meso-Scale Mapping of Wind Resource through long term NASA-MERRA data
- On site Anemometry and Data Collection
- Verification of Anemometry Data
- Contour Survey
- Site Features, Roughness & Obstacles
- Energy Estimation based on Power Curve of Wind Turbine
- Micro-Siting for Turbine Locations
- Layout Optimization
- Probability Analysis
- Correction Factors
- Comparison With Nearby Projects
- Long-term Validation



Identified Greenfield Sites

Total Capacity: 20,000 MW +



Greenfield Site Sales

S. No.	State	Site	Capacity (MW)	Land type	Client
Meso Scale Study with Wind Resource Monitoring					
1	Madhya Pradesh	Kukru	50	Private	Betul Windfarms
2	Madhya Pradesh	Nipaniya	100	Forest & Revenue	Inox Wind
3	Gujarat	Bhuj	400	Forest	Continuum
Only Meso Scale Study					
4	Madhya Pradesh	Shajapur	200	Revenue	Inox Wind
5	Madhya Pradesh	Mandsaur	100	Revenue	Renew Power
6	Madhya Pradesh	Katni	100	Forest	Renew Power
7	Madhya Pradesh	Mandsaur	100	Private	Trishe
8	Madhya Pradesh	Mandsaur	100	Revenue	Panama
9	Gujarat	Bhavnagar	500	Private	ANMS
10	Gujarat	Tapi	500	Private	ANMS
11	Rajasthan	Rajsamand	500	Private	ANMS
		Total	2650 MW		



Other Projects

Due Diligence

- Energy Estimation
- Land Rights
- Power Evacuation
- Permissions & Clearances
- Selling Options
- Completion Schedule

Project Management

- Management Of Time Schedule
- Construction Supervision
- Quality Assurance
- Post Commissioning Checks

Fringe Services

- WEG Technology Evaluation
- ERC Regulatory Issues
- Power Projects Gasification
- Projects Rural Electrification

Procurement

- Preparation of Bid Document
- Bid Evaluation
- Drafting/Vetting Of Contract
- O&M Arrangements

Performance Improvement

- Power Curve Based Generation Guarantee (PCGG)
- Analysis of Performance
- Corrective Measures

Monitoring

- Verify Generation Data
- Verify Operational Data
- Periodic Reporting
- Suggestive Measures
- SCADA

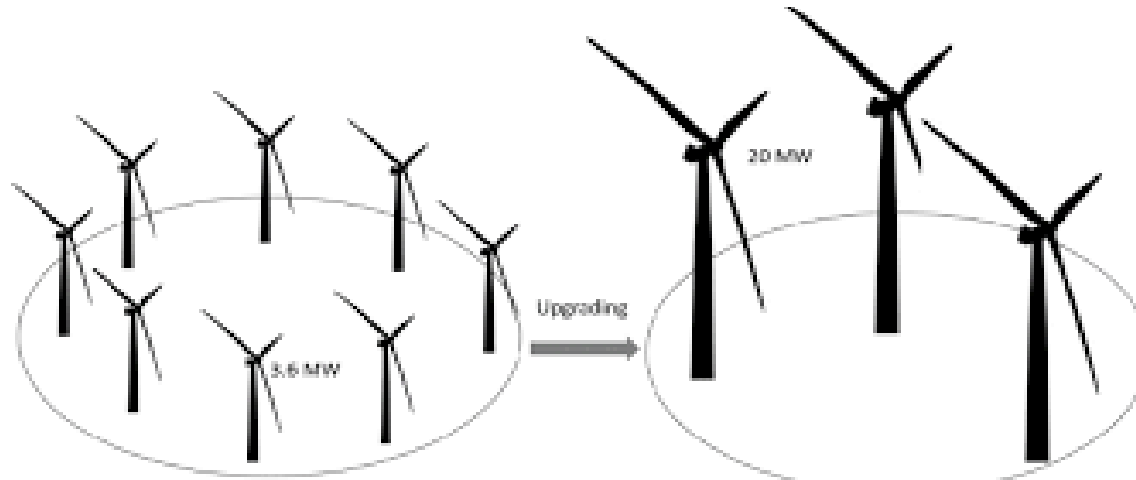


Wind Power Project Re-Powering

Repowering of wind farms involves replacing old turbines with newer, more efficient models or upgrading components to increase energy production. It is important because it maximizes the energy output from existing sites, reduces maintenance costs, and helps meet renewable energy targets without needing new land, making it an efficient way to enhance power generation.

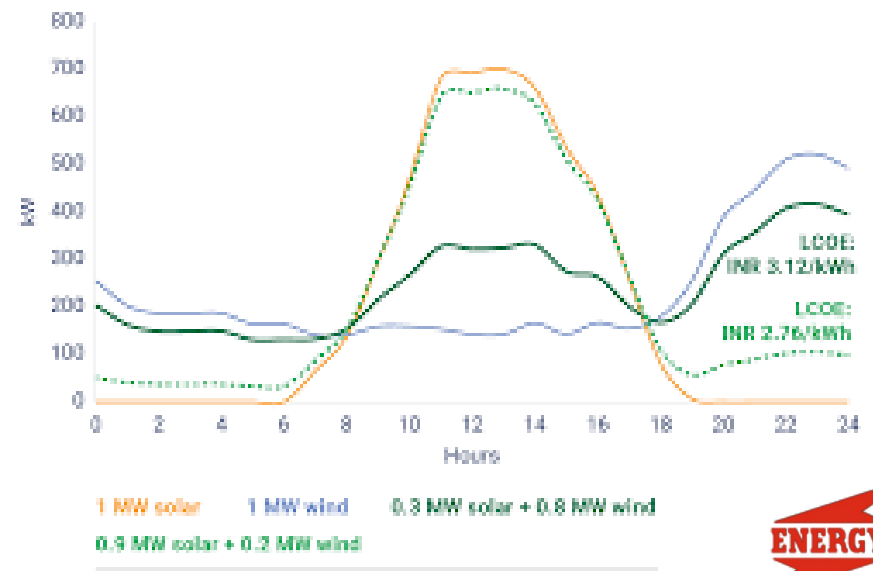
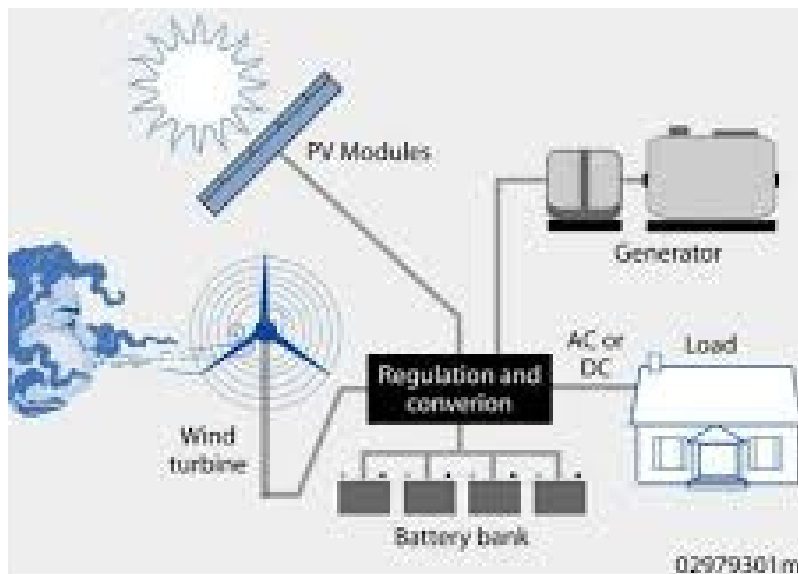
CECL has carried out design for re-powering of old wind farm projects for:

- **Ministry Of New and Renewable Energy Demonstration Projects**
- **Dalmia Cement Bharat Ltd.**
- **Bharat Wind Farm Ltd.**
- **M.P. Windfarms Ltd. (Wind-Solar Hybrid with Storage – 20 MW)**



Wind Solar Hybrid Systems

- CECL's has scientifically assessed wind resources and development of several projects in the North-Eastern States and Leh and Kargil for MNRE.
- These Wind-Solar Hybrid projects were designed to meet the mounting needs of people in areas where grid supply cannot be ensured.



Assignments Executed

Under Different Categories (as on 31.3.2024)

S. No.	Category	No. of Assignments Executed
1.	International Agencies	14
2.	Central Government Agencies	14
3.	State Government / Union Territories	68
4.	Public Sector Undertakings	35
5.	Financial Institutions	46
6.	WEG Manufacturers	42
7.	IPPs	84
8.	Private Companies	197
Total Number Of Clients Served		500



Client Testimonials



ASIAN DEVELOPMENT BANK

"The assignment was successfully and satisfactorily completed."



"The whole work was satisfactorily completed well within time schedule. We are appreciative of the commendable work done by the staff of CECL and the management as well."



"We are pleased to put on record that the assignment was successfully executed by the CECL within schedule to our satisfaction."



"We are appreciative of the CECL's skill, meticulous planning and close monitoring on a time based scale. The initiative shown by the personnel of CECL in achieving the scheduled completion of job is highly professional, very re-assuring and praiseworthy."



"We are appreciative of the commendable work done in a professionally dignified way by the personnel of CECL"



"We would like to put on record our appreciation of commendable work done by the staff of CECL.... you have really proved that any activity with good scientific approach always pays better results."



"The assignment was successfully completed by M/s CECL to our satisfaction."

Customer Satisfaction Index

No. of Clients	No. of Repeat Orders
13	10+
15	5-9
52	2-4



Contact Details



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