



ENGINEERING PRIVATE LIMITED



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Our Management



Mr. Arjanbhai Rabari
Chairman & MD LCC Group

With over 27 years of expertise in civil engineering and infrastructure development, he provides strategic leadership across the entire project lifecycle, from planning to execution. Currently overseeing all operational and strategic aspects of the company, his focus is on driving sustainable growth and achieving key organizational objectives.

Since 2004, LCC Projects Ltd. has been building India's future through critical infrastructure across 12 states. Specializing in dams, canals, bridges, mines, and water supply systems, we are united by "Many Hands, One Vision" to deliver excellence, foster sustainability, and create a lasting legacy of progress and connectivity.



Mr. Laljibhai Ahir
MD LCC Group

He brings over 15 years of extensive experience in business management, finance, administration, and operations. His leadership is central to the company's strategy, where he oversees overall management to drive operational excellence and ensure sustainable growth.

At LCC Projects Ltd., our strength is built on innovation, integrity, and a shared vision: "Many Hands, One Vision." United with our dedicated team and partners, we are committed to shaping India's future. We deliver impactful projects that contribute to the nation's progress, building a legacy of meaningful infrastructure and development.



Mr. Rajkumar Jayswal
Director & CEO LCC Engineering Pvt. Ltd.

Mr. Rajkumar Jayswal holds a B.Tech in Mechanical Engineering from NIT Silchar and a PGDBA in Marketing from Symbiosis University. With over two decades of experience, he brings profound market insight and a record of strategic leadership across diverse sectors. As CEO of LCC Engineering Pvt. Ltd. (LCCEPL), he champions a culture of innovation, focusing the talent of the team on delivering profitable growth through advanced solutions in green energy and water infrastructure.

About Us

LCC Engineering Private Limited (LCCEPL), a dedicated subsidiary of LCC Projects Limited, is shaping the future of sustainable infrastructure through expertise in solar power, green hydrogen, and advanced water management systems. In the energy sector our strategic mission is aligned with India's ambitious mandate of achieving 500 GW of non-fossil fuel capacity by 2030.

In Water Sector, by integrating advanced engineering with sustainable practices, we play a pivotal role in the nation's flagship initiatives, including the Jal Jeevan Mission for clean water security and the irrigation mandates of 'Har Khet Ko Pani' and 'Per Drop More Crop' to optimize agricultural productivity.



Vision

To become a dynamic leader in industry, expanding our reach & impact while continuously innovating to meet the evolving needs of our customers.



Mission

To be a globally recognized leader in integrated engineering & energy solutions businesses to contribute for nation building and to improve quality of life.



Values

We are committed to integrity, innovation, and excellence. We believe in continuous learning, adaptability, and empowering our team to achieve their full potential, ensuring that our success is built on a foundation of trust and shared purpose

Business Portfolio



Irrigation



Water Works



Solar System



BESS



PSHP



SCADA & Automation



Desalination



Substation

Our Journey



Strength of LCC Group

- 1800+ Work Employee
- 70+ Project Completed
- IN-HOUSE DESIGN TEAM
- CONSTRUCTION AUTOMATION
- QUALITY, INFORMATION SECURITY, ENVIRONMENT, HEALTH & SAFETY
- FINANCIAL DISCIPLINE
- DIGITAL PROJECT MANAGEMENT
- PLANT & EQUIPMENT
- 20+ YEARS OF EXPERIENCE
- CREDIT RATING- A+

Green Energy Solutions

Solar EPC Solutions

The Need for "Net Zero Emission by 2070"

LCC Engineering Pvt. Ltd. provides comprehensive Solar EPC solutions, from design and supply to commissioning. We ensure seamless turnkey project delivery with dedicated operations and maintenance support.



Solar Parks



Solar Captive & Utility scale Projects



Solar Commercial & Industrial Rooftop



Solar Floating (FSPV)

Key Process Followed by our Team

Project Analysis



The project site analysis is needed for proper estimation & checking the Technical & Financial Viability of Project.

Engineering



The Project Engineering is key aspect and it covers the designing of Civil (Foundations, Road, Drainage, Fencing etc.) Mechanical structures & Electrical(Wiring, Panels etc.)

Erection & Commissioning



The Erection will covers the Supply & Installation part as per Designing, Commissioning will covers the Testing & Synchronization to grid.

Operations & Maintenance



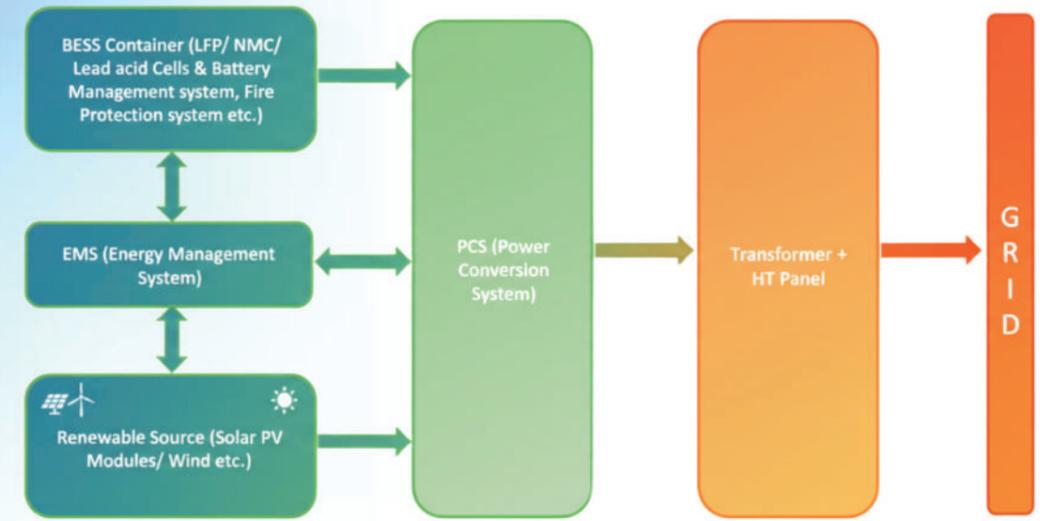
Ensure peak solar performance. Our expert O&M includes monitoring, cleaning, and repairs to maximize your energy production and protect your investment.

BESS (Battery Energy Storage System)



Battery energy storage system (BESS) is an electrochemical device that charges (or collects energy) from the grid or a power plant during off peak hours and then discharges that energy at a later time during peak hours. Energy storage systems, such as batteries, play a vital role in balancing renewable generation and grid demand. LCC Engineering Pvt Ltd is offering Lithium Ferro Phosphate (LFP) based containerized BESS solutions comprising of Liquid cooled high voltage battery racks, battery management systems, DC Combiner cabinets, FFS and auxiliary within the BESS container. In addition, a bidirectional inverter charges and discharge the BESS through power connectivity point of plant.

2. DC COUPLED BESS (BATTERY ENERGY STORAGE SYSTEM)

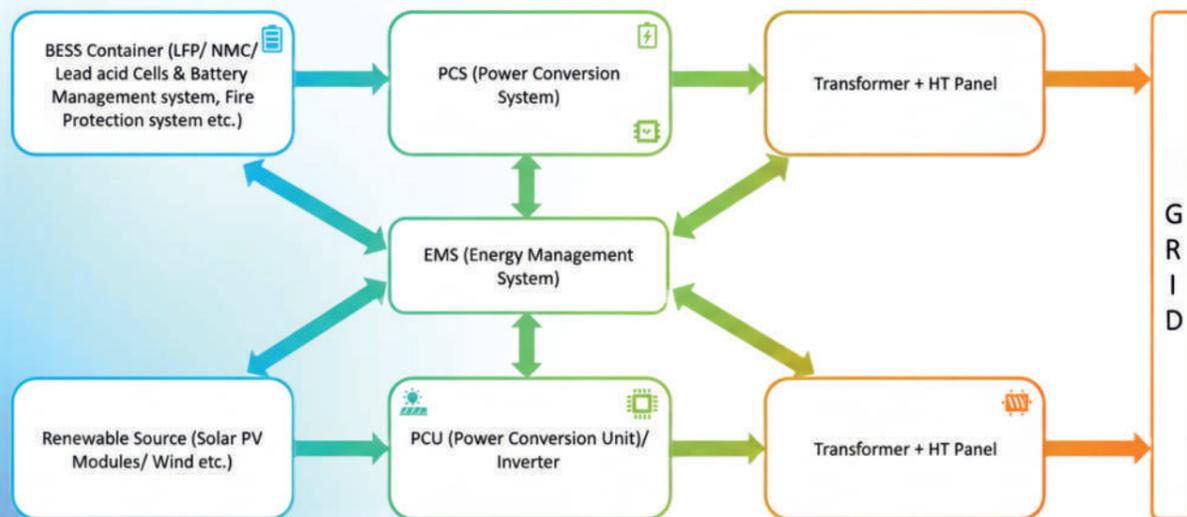


Energy Management System



1. AC COUPLED BESS (BATTERY ENERGY STORAGE SYSTEM)

INTEGRATED RENEWABLE ENERGY SYSTEM



- **Peak shaving and valley filling :**

According to the configured peak shaving and valley filling charging and discharging strategy, the energy storage system is charged during low-priced valley electricity and discharged during high priced peak electricity, effectively reducing the electricity cost of the load.

- **Demand control Control :**

Control the energy storage discharge to prevent the load power consumption from exceeding the maximum capacity of the transformer, resulting in excessive capacity electricity charges.

- **Reverse power protection :**

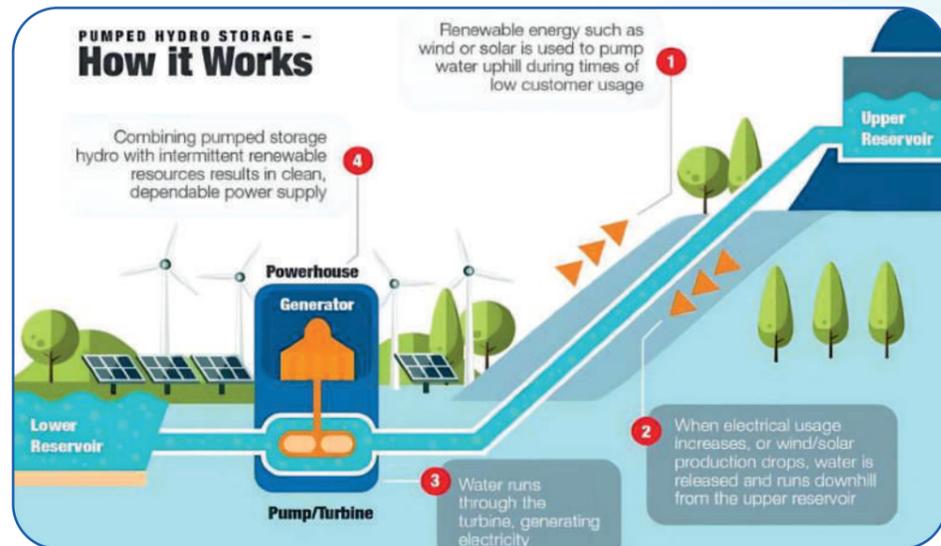
According to the load power consumption status, ensure that the energy storage discharge and photovoltaic power generation will not flow back to the grid without permission.

- **Intelligent strategy :**

According to load forecasting, time period electricity price, energy storage system, photovoltaic operation, etc., intelligent planning is carried out, and the charging and discharging strategy for the next 24 hours is planned every minute (adjustable) to maximize revenue and safe operation.

Pumped Hydro Storage Plants (PSP)

Pumped Hydro Storage Plants is a large-scale method of energy storage that functions as a gravitational battery, utilizing two water reservoirs situated at different elevations. During periods of low electrical demand, surplus energy is used to pump water from the lower to the upper reservoir. When demand peaks, this stored water is released to flow back downhill through turbines, generating electricity on command. Systems are categorized as either open-loop, which are connected to an existing natural water source like a river, or closed loop, which operate as a self-contained system between two artificial reservoirs without an ongoing connection to a natural watershed, offering greater siting flexibility and often a reduced environmental footprint.



Offerings by LCCEPL :

With over 20 years of experience in high-complexity infrastructure, LCC Group provides a single-source solution for the planning and execution of large-scale Pumped Storage Projects. Our legacy in building Dams & Barrages and Large-Diameter Pipe Networks ensures that every project is optimized for performance and longevity.

1. Major Civil & Hydromechanical Engineering

We deliver critical structural components with precision, leveraging decades of expertise in Underground Excavation and fluid dynamics: Storage & Intake Systems: Design and construction of dams, reservoirs, and intake structures.

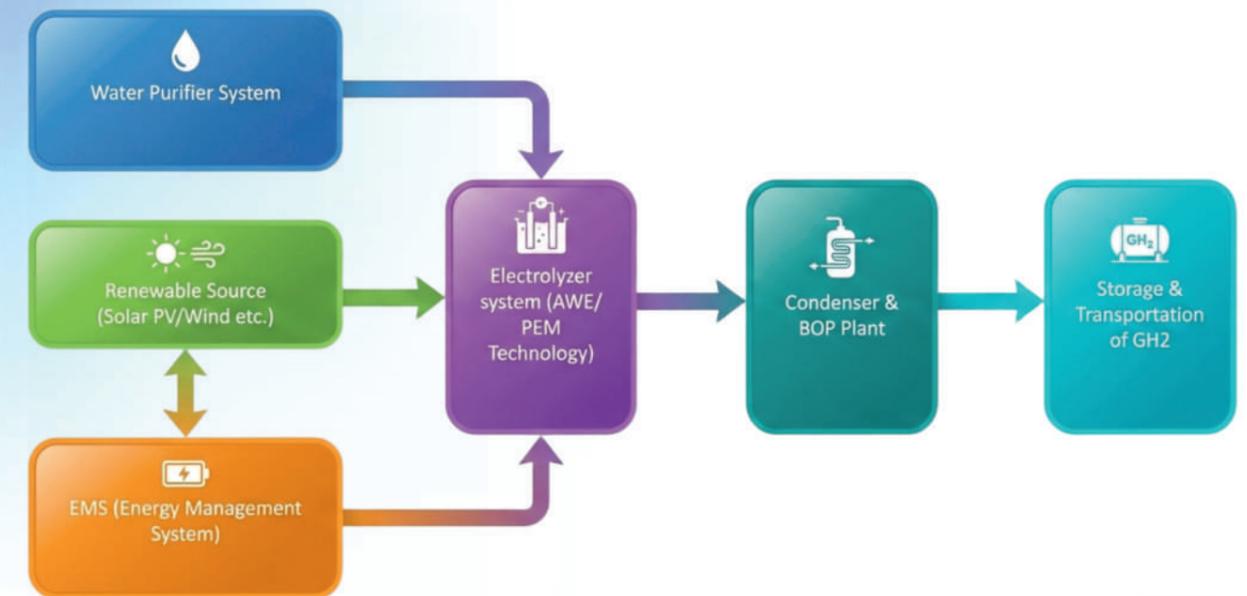
- **Water Conveyance:** Expertise in high-pressure shafts, penstocks, surge shafts, and tailrace tunnels.
- **Infrastructure:** Surface and underground powerhouses, including heavy-duty gate systems.
- **Dams, Barrages & Reservoirs.**

2. Electromechanical & Balance of Plant (BOP)

We provide complete Turnkey integration of the electrical and mechanical "heart" of the facility:

- **Integrated Systems:** Full-spectrum Electrical (E-BOP) and Mechanical (M-BOP) balance of plant, ensuring all ancillary equipment operates with maximum synergy.
- **Grid Infrastructure:** Design and execution of Substations and Transmission Lines for reliable energy dispatch.
- **Control & Automation:** Advanced instrumentation systems for real-time monitoring and rapid peak-load response.

Green Hydrogen Plant



Offerings by LCCEPL :

- **Water Management System :**

- **Infrastructure Park development :**

Electrolyzer (AWE/PEM Fuel Cell Technology) : Electrolyser is the Main part of green hydrogen production. Applying the process of hydrogen and oxygen production from water with the help of renewable energy, electrolyzers make it possible to produce green hydrogen.

- **BOP Plant : Complete BOP (Balance of Plant) :** High Performance Gas-Liquid Separators, Purification Systems, and auxiliary units, these systems are designed to meet diverse hydrogen production needs

TECHNICAL PARAMETERS OF GREEN HYDROGEN			
Capacity in MW	10MW Capacity	25MW Capacity	100MW Capacity
H ₂ Production Rate	2000Nm ³ /hr	5000Nm ³ /hr	20000Nm ³ /hr
O ₂ Production Rate	1000Nm ³ /hr	2500Nm ³ /hr	10000Nm ³ /hr
Nominal Pressure	1.6MPa	1.6MPa	1.6MPa

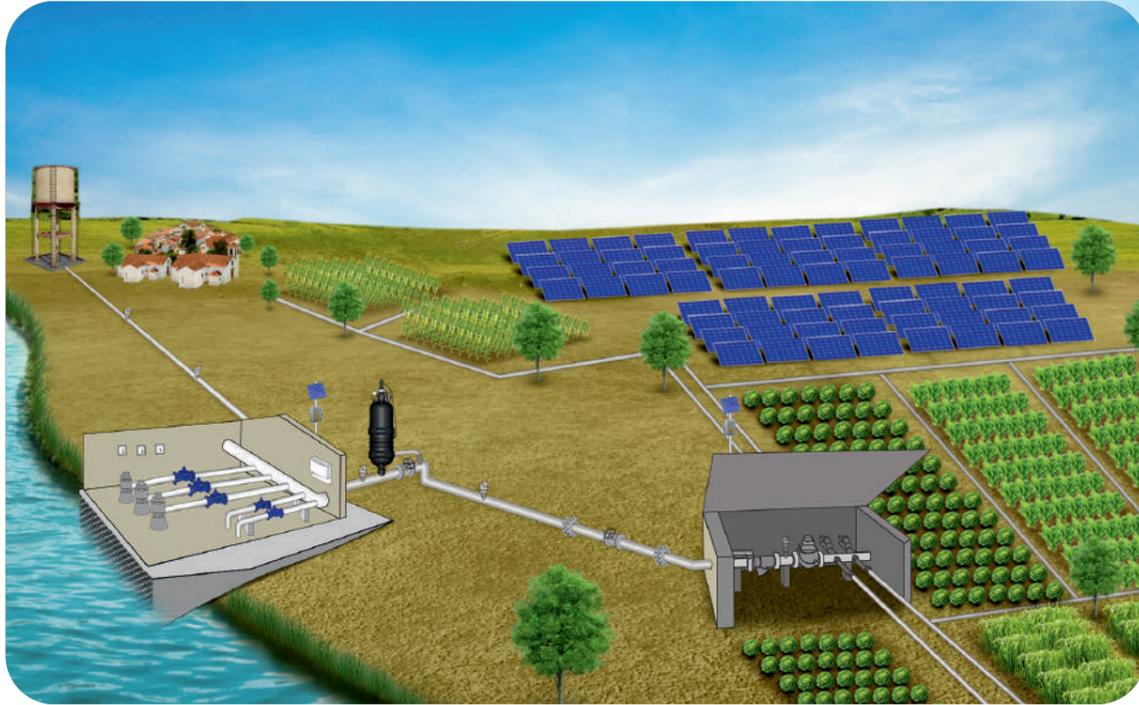
H₂ Purity
100.00%

Water Consumption
1 kg/Nm³

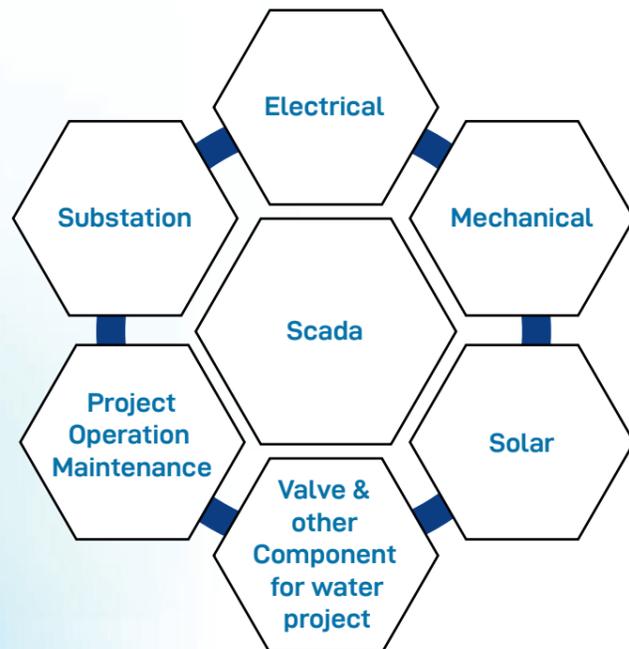
Power Consumption
4.1 to 4.3 kW/Nm³

Water Management: Irrigation

LCCEPL works towards provision of comprehensive water-control solutions for Irrigation & Water Supply projects towards the betterment of users including farmers and other beneficiaries.



- System integration of pumping station Electrical, Mechanical and Automation system.
- System integration of Scada based equitable water distribution to farmers till their field level also known as "Outlet Management system" (OMS) , "Rotation Management System" (RMS) & Air Management System (AMS) .
- Farmers Training Programs & their capacity building and formation of Water User Association (WUA)
- Water Hammer (Surge) Solution.
- Filtration system for removing of impurities from River Raw water



Control

LCC Engineering provide solutions for Pumps, valves and meters which offer the confidence of total control for system. Our products are purposely designed to accurately and effectively handle various levels of field pressures and flow rates, in a wide range of applications.

Protect

Ensure protection against water hammer and vacuum situations with our air release valves/ air vacuum valves along with surge disk and thus safeguarding pipelines and system. High inflow and outflow rates, tested operation to surge pressures seals at near zero pressure and auto roll seal mechanisms for dirty water.

Measure

Our products offer precision data recording in large-scale commercial applications for accurate usage analysis and billing purposes. We constantly strive to deliver new and innovative products that meet the ever- changing demands of flow measurement.

Automate

We have wide range of automation control system that runs with up to date technologies in the market synchronised with project application based solutions. We have best in irrigation market control system that synchronises with other SCADA, PLC's and has cloud based operation.

Integrate

We believe in providing integrated turnkey solutions to our partners to achieve application based engineered solutions, maintain high quality performance, carry out efficient operation and obtain economy with low maintenance & high product life.

Farmer's training

We also provide basic training to farmers for adapting to latest technologies in farming and irrigation by providing knowledge about various techniques and methods along with best farming practices which includes:

- Encouraging micro irrigation methods such as drips and sprinkler system.
- Crop rotation.
- Empowering them to use latest technologies such as irrigation based apps.



Pumping Solutions for Desalination



We provide services in the engineering, supply & execution of high-performance pumping systems designed for the most demanding desalination environments. Recognizing that pumps are the "heart" of any water treatment facility, we provide solutions that maximize energy efficiency while ensuring long-term structural integrity against seawater corrosion.

- **Seawater Intake Pumps:** Mainly vertical turbine pumps engineered with corrosion-resistant materials (such as super duplex stainless steel) to reliably transport large volumes of raw seawater to treatment facilities or cooling systems.
- **Electrical Components of Intake Pump House:** VFDs, HT< Panels, HT & LT Cables, Substations, etc
- **High Pressure RO Feed Pumps:** along with Centrifugal Pumps for transfer of water for Pretreatment are also used in Desalination plant..
- **Mechanical Components for Intake Pump House:** Special MOCs Valves, Piping Systems, Cranes, Stop Log Gates, Trash Racks, Travelling Water Screens, etc.
- SCADA Based Control & Automation and Instrumentation system including Levels, Pressures, Flow measurement and monitoring along with crucial parameters of high performance system's control & monitoring.

Water Works

(Bulk water supply, Water Treatment Plant, Drinking Water Supply)



- System integration of pumping station electrical, mechanical and automation system.
- System integration of water treatment plant electrical, mechanical and automation System.
- System integration of automation system for water tank.
- Water Hammer (Surge) Solution.
- SCADA Based Reservoir Management System for automatic opening and closing of water supply based on Levels in Reservoirs/Overhead Tanks etc. with Real Time Monitoring.
- EPC of Water Treatment Plant , Sewage Treatment Plant & Effluent Treatment Plants.

