

# PIONEER IN LARGE CONSTRUCTION WORK















# LCC PROJECTS PVT. LTD.

Formerly known as Laxmi Construction Company (LCC), has been established in 2004. On Dec 2017, Laxmi Construction Company has converted into LCC Projects Pvt. Ltd headed by visionary leaders Mr. Arjanbhai Rabari & Mr. Laljibhai Ahir. It has now one of the fastest growing company in the infrastructure sector. Over the years, LCC has successfully executed a wide range of construction projects including Dams, Barrages, Weirs, Hydraulic structures, Metro rail projects, Industrial buildings, infrastructure development, Canals (including syphon structures), Pipe distribution networks, Lift irrigation works, Water supply schemes (including electromechanical elements), Road works, Building works, Mining and other infrastructure development projects. With our expertise and experience, we stand among the few highly skilled constructions artisans available in India.

# Initiative Towards making net zero carbon emission:

In order to contribute towards India's plan for countering climate change by planning to have 500 GW of non-fossil-based electricity installed capacity by 2030, LCC Projects have formed a subsidiary "LCC Engineering Pvt. Ltd (LCCEPL)". Under the leadership of Mr. Rajkumar Jayswal, LCCEPL is dedicatedly strategizing and working towards a sustainable future by starting to work in Green Renewable Energy sectors like EPC Solar Projects, Pumped Storage Projects & Green Hydrogen.

#### **OUR MISSION:**

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

#### **OUR VISION:**

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

#### **OUR VALUE:**

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.

#### **OUR STRENGTH & SUCCESS STORIES:**

Our motto, "Many Hands, One Vision" is the driving force behind our magnificent management team, professionals, and team leaders who possess dynamic experience and versatile skills. Our highly qualified inhouse design & Implementation Unit comprises of talented engineers and multi-tasking skillset personnel who are capable of swift implementation and accomplishment of complex projects within the given timeline.



ALWAYS DELIVER MORE THAN EXPECTED



#### List Few Of Our Success Stories.



- ❖ Construction of Asia's 2<sup>nd</sup> largest 1800-metre-long canal Syphon on Tappar Dam, Gujarat.
- Construction of Tawa Left Bank canal of 45 km long (Discharge of 89.89 Cumecs) within 3 months of available working season.
- Construction of Major and sensitive Hydraulic Structures including Dams like Parbati Dam (Capacity: 172.54 MCM), Madia Dam (Capacity: 270.1 MCM), Sitanagar Dam (Capacity: 65.88 MCM), Berkheda Dam (Capacity: 53 MCM), Hanota Dam (Capacity: 158.74 MCM), Banda Dam (Capacity: 313 MCM), Dudhi Dam (Capacity: 274.11 MCM)

# Quantity Of Work Below Are Some Key Highlights:

- Earthwork Executed: 480 Lac Cum (120 Lac in Single Project)
- Executed Concrete Work: 14.20 Lac Cum (2.5 Lac in Single Project)
- Executed Reinforcement Work: 1.25 Lac MT (37000 MT in single Project)
- Executed Pipeline Work: 25000 KM (Now Working: 17000 KM). It Includes MS Pipes, DI Pipes, HDPE Pipes.
- Executed Asia's one of the Largest barrels 2230 mtr. in Sardar Sarovar Project

#### Parbati Dam



Name & Location of Project	Parbati Project the District- Rajgarh (MP)
Type of Dam	Composite Gravity Dam
Capacity (MCM)	172.54
Max Length of Dam (Mtr.)	307.15
Max Height of Dam (Mtr.)	33.5
Details of Gate	18 nos. Vertical Gate (Size: 13.8 M x 12 M)
Hydro Mechanical Work (Gate work in MT)	3300
Earthwork (Cum)	8,25,035
Concrete Cum	2,08,916
Reinforcement Work (MT)	2863.05
Status Project	Commissioned





Madia Dam District-Rahatgarh (MP)
Composite Gravity Dam
270.1
2040
21.25
8 nos. Radial Gate (Size: 12.85 M x 10 M)
1151
8,10,768
86,580
855
Commissioned

# Sitanagar Dam

Name & Location of Project	Sitanagar Project in Dist. Damoh (MP)
Type of Dam	Composite Gravity Dam
Capacity (MCM)	65.88
Max Length of Dam (Mtr.)	Spillway: 246 M   Earthen Dam: 3350 M
Max Height of Dam (Mtr.)	32
Details of Gate	11 nos. Vertical Gate (Size: 13.1 M x 12 M)
Hydro Mechanical Work (Gate work in MT)	1802
Earthwork (Cum)	4,79,970
Concrete Cum	1,44,487
Reinforcement Work (MT)	1315
Status Project	Commissioned



# Barkheda Dam





Name & Location of Project	Berkheda Dam, Dist Raisen (MP)
Type of Dam	Composite Gravity Dam
Capacity (MCM)	53
Max Length of Dam (Mtr.)	207
Max Height of Dam (Mtr.)	37.49
Details of Gate	10 nos. Radial Gate (Size: 12 M x 8.30 M)
Hydro Mechanical Work (Gate work in MT)	1508
Earthwork (Cum)	25,71,040
Concrete Cum	96,755
Reinforcement Work (MT)	724
Status Project	Commissioned

# **Hanota Dam**

Name & Location of Project	Hanota Dam (MP)
Type of Dam	Concrete Dam
Capacity (MCM)	158.74
Max Length of Dam (Mtr.)	4933
Max Height of Dam (Mtr.)	31.5
Details of Gate	11 nos. Radial Gate (Size: 12.58 M x 12.71 M)
Hydro Mechanical Work (Gate work in MT)	959
0% Completed	90%
Status Project	Work in Progress



# **Banda Dam**





	Name & Location of Project	Banda Dam (MP)
-	Type of Dam	Concrete Dam
	Capacity (MCM)	313
	Max Length of Dam (Mtr.)	920
	Max Height of Dam (Mtr.)	32.5
	Details of Gate	7 nos. Radial Gate (Size: 12 M x 11 M)
	Hydro Mechanical Work (Gate work in MT)	950
	0% Completed	60%
	Status Project	Work in Progress

# Kushbhadra Barrage

Name & Location of Project	Kushbhadra Barrage (Odihsa)
Type of Dam	Concrete
Capacity (Cumec)	3080
Max Length of Barrage (Mtr.)	198.79
Max Height of Barrage (Mtr.)	17.6
Details of Gate	Barrage Bay: 10 M x 3.4 - 9 nos. Under Sluice: 10 x 4 - 2 nos. Fish Pass bay: 1.5 x 0.5 - 1 nos.
Hydro Mechanical Work (Gate work in MT)	476 MT
0% Completed	52%
Status Project	Work in Progress



# **Dudhi Dam**



Name & Location of Project	Dudhi Dam (MP)
Type of Dam	Concrete Gravity
Capacity (MCM)	274.11
Max Length of Dam (Mtr.)	112
Max Height of Dam (Mtr.)	38
Details of Gate	7 nos. Radial Gate (Size: 12 M x 9.6 M)
Hydro Mechanical Work (Gate work in MT)	
0% Completed	LAQ and Design Work in Progress
Status Project	Work in Progress

# LIFT IRRIGATION PROJECTS



# **SONDHWA LIS**

Name & Location of Project	Sondwa Scheme (Alirajpur, MP)
CCA (HA)	50000
Electro-Mech work (MW)	70
Length o	of Pipeline (Scope)
MS Pipe (KM)	398
HDPE Pipe (KM)	3254
Status of Project	Work in Progress

## **WATER SUPPLY SCHEME**

# GANDHISAGAR WATER SUPPLY SCHEME

Name & Location of Project	Gandhisagar Water Supply Scheme	
Household Connection (Nos.)	153000	
WTP (MLD)	115	
Length o	Length of Pipeline (Scope)	
MS Pipe (KM)	80	
DI Pipe (KM)	1700	
HDPE Pipe	1740	
Status of Project	Work in Progress	

SIDHHI BANSAGAR PROJECT

Name & Location of Project	Sidhi Bansagar Water Supply Scheme
Project Cost (Rs. In Crore)	1386
Household Connection (Nos.)	97763
WTP (MLD)	83.33
Length o	of Pipeline (Scope)
MS Pipe (KM)	85
DI Pipe (KM)	1200
HDPE Pipe	3300
Status of Project	Work in Progress

#### SUSTAINABILITY:



LCC Projects Pvt Ltd. works to improve employee's happiness by providing high-quality & hygiene food, Safety (PPE), good working conditions, health & medical facilities. We pledge to make improvements every day in every aspect of our organization for growth and satisfaction.

As a part of CSR activity, we have formed LCC Foundation where we do activities like



**LCC FOUNDATION** have its own hospital (Multi Speciality) in Bhuj (Gujarat) with the aim to serve society in which under the government scheme "AAYUSHMAAN CARD" the patience treated and cured 100% free.

The **LCC Foundation** recognizes its responsibility towards the nation and understands that education is the key to a brighter future for the next generation. As part of this commitment, we have taken on the responsibility of managing two schools in the MP region: Darkoli School and Nava Kheda School."





LCC FOUNDATION organize Food, cloths & blankets distribution camps to the peoples in rural and slums, orphanages and old age houses like every year. We as an organization strongly feel about destitute and for us nobody should suffer the lack of clothes Plantation activity is the very important activity for serving to society. LCC foundation organises various plantation activities on regular basis to make environment green.

### **COMPANY STRENGTH'S HIGHLIGHT:**









#### **HYDRO STORAGE**



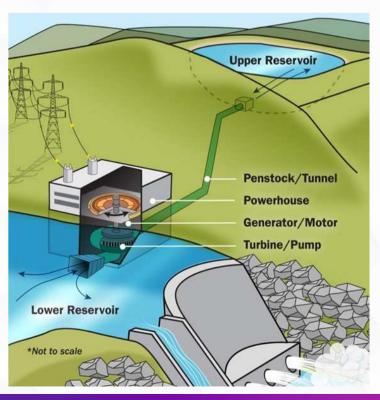
As the world accelerates its transition to renewable energy sources, one of the biggest challenges we face isn't generating clean energy—it's storing it efficiently and reliably. From cutting-edge batteries to revolutionary hydrogen solutions, energy storage technologies are rapidly evolving and hold the key to a sustainable future.

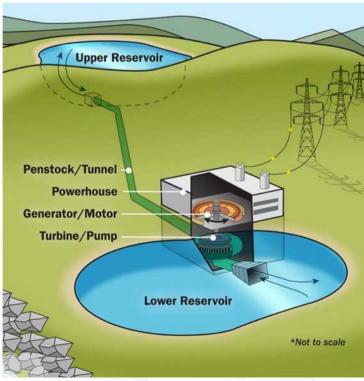
These renewables are inherently intermittent—solar power is only generated during daylight hours, and wind power fluctuates with weather conditions. Effective energy storage allows excess energy produced during peak generation times to be saved and used when demand exceeds supply or when renewable resources are not generating power.

Historically, pumped hydroelectric storage has been the dominant form of large-scale energy storage. Today's energy storage landscape includes a range of technologies suited for different applications:

# What is Pumped Hydro Storage?

- Pumped storage hydro power (PSHP) is a form of hydroelectric energy storage that utilizes two water reservoirs at different elevations.
- When electricity demand rises, the stored water is released from the upper reservoir back to the lower reservoir, flowing through turbines that produce electricity. This system functions like a large battery, storing energy and releasing it when required.
- PSH can be classified as either an open-loop or closed-loop.
- Open-loop pumped storage hydro power systems link a reservoir to a naturally flowing water source through a tunnel, utilizing a turbine/pump and generator/motor to transfer water and generate electricity.
- Closed-loop pumped storage hydro power systems, on the other hand, connect two reservoirs without natural water flow, also using a tunnel, turbine/pump, and generator/motor for water movement and electricity production.





#### HYDRO STORAGE



# **Benefits of Pumped Hydro Storage**

- Energy Storage and Grid Stability Energy Storage: PHS can store large amounts of energy. It helps to balance supply and demand by storing excess energy generated during low-demand periods and releasing it during peak demand times. Grid Stability: By providing rapid response capabilities, PHS helps stabilize the grid, maintaining frequency and voltage levels, which are essential for reliable power supply.
- Support for Renewable Energy Integration with Renewables: PHS is particularly beneficial for integrating variable renewable energy sources like wind and solar into the grid. Reducing Curtailment: PHS reduces the need to curtail renewable energy generation, ensuring that more clean energy is utilized rather than wasted.
- ❖ High Efficiency and Long Lifespan High Efficiency: PHS systems typically have a round-trip efficiency of 70-80%, Longevity: PHS facilities have a long operational lifespan, often exceeding 50 years,
- Scalability PSP can be scaled to store gigawatt-hours (MWh) of energy,
- Environmental and Economic Benefits Job Creation: The construction and maintenance of PHS facilities create jobs for local people. Water Resource Management: PHS reservoirs can serve additional purposes such as irrigation, flood control, and recreation.
- Energy Independence and Security Reducing Fossil Fuel Dependence AND Emergency Backup

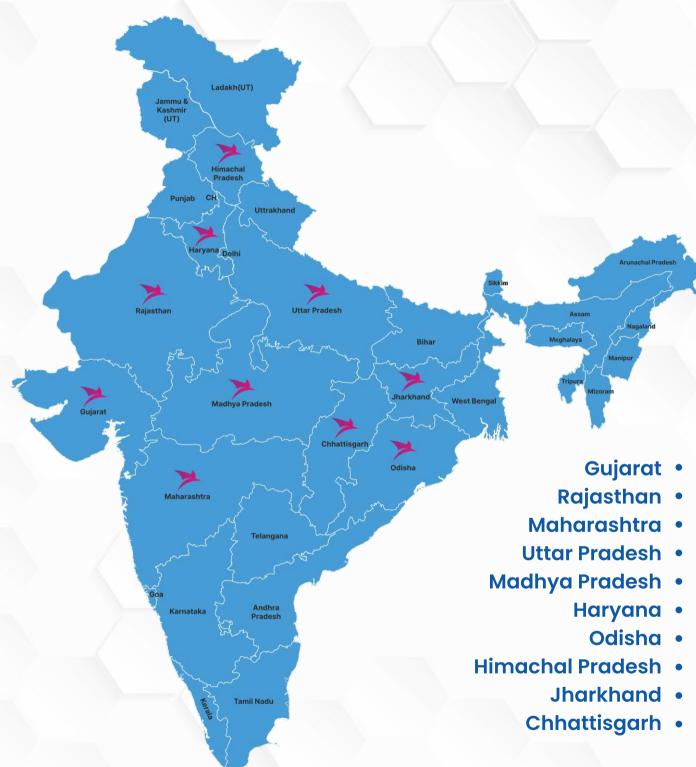
# **Key Components of PSP:**

- Upper Reservoir: Stores potential energy in the form of water.
- Lower Reservoir: Receives water after energy generation.
- Penstocks: Large pipes that channel water between reservoirs.
- Powerhouse: Contains turbines and generators.
- Transmission Lines: Connects the generated electricity to the grid.
- Surge Tanks: Absorbs pressure surges in the system.
- Control Systems: Automation, monitoring, and grid integration.

For long-term energy storage, Pumped Hydro Storage (PSP) is generally considered the best option. It has the capacity to store large amounts of energy for extended periods (days to weeks) and can provide long-duration storage at a low operating cost over decades.

### **OUR PRESENCE:**





# LCC PROJECTS PVT. LTD.

• Registered & Corporate Office

'B'Wing, 15<sup>th</sup>Floor, Privilon Building, Vikram Nagar, Ambli-Bopal Road,B/h Iskcon Temple, Ahmedabad-380058, Gujarat, India.