



**Complete Power Solutions** 

# Inspiration to Excellence



Punam Chand Sethi
Founder
(1929-2012)

From a small beginning in 1967, his innovative enterprise approach, invaluable lessons in business management combined with ingenuity help fuel the rise of business that prosper to become the foundation of SPML. Under his dynamic leadership, SPML emerged as a leading conglomerate with interests in infrastructure development, water, power, smart cities, roads & highways, environment, coal etc. He had deep understanding of power and water business in India, and his extensive experience and knowledge of the sector led SPML to become one of the top infrastructure development companies in the country.

He always believed in the spirit of giving and worked relentlessly for the betterment of economically weaker section of the society with his several social endeavours. In pursuance of his dream, SPML Family is driving the growth of the company.

### **VISION**

Creating with passion and innovation, world class infrastructure to make human life comfortable.

### **PHILOSOPHY**

To us at SPML, success is a measure of promises kept. It is the single most cherished dream in every project that we have decided to undertake. Commitment to the cause is what has driven us in the last three decades. And commitment is the key in times ahead.

### **MISSION**

Profitable growth through superior project management, innovation, quality and commitment.

### **VALUES**

- Customer orientation
- Wealth creation
- Employee empowerment
- Systems and processes
- Teamwork and cooperation
- Pro-activeness and innovation

### **STRENGTH**

- Execution efficiency
- In-house engineering and design capabilities
- Sector focused
- · National presence
- More than 600 projects completed
- Visionary Board and experienced Management Team
- Strong Financial profile
- Rich base of owned construction equipment and fixed assets
- Effective policies and adherence to QHSE
- Long-team support of business associates
- ISO 9001:2008, 14001:2004, and OHSAS 18001:2007 certified public listed company

### **Board of Director**

#### Promoters



#### Subhash Sethi - Chairman

Chairman of SPML Infra board and group companies, leads the company towards growth with his visionary approach and business acumen.

He led the company to foray into energy business with several EPC and BOOT projects in renewable power generation, power transmission, distribution and supply management, coal mining etc.

His valuable contributions towards the development of infrastructure sector have been recognized widely and he has received several prestigious awards and accolades from industry bodies and Institutions.



Sushil Sethi Jain – Managing Director Responsible for the development and growth of water, wastewater and environment business, enabling the company to foray into several EPC, PPP and BOOT projects in water, wastewater and sewer rehabilitation, sewerage network, irrigation, roads & highways and other sectors.

He holds honorary & prestigious offices in various social and economic organizations and has been conferred with Infrastructure Person of the Year Award 2014 for his valuable contributions in infrastructure development in India.



#### Deepak Sethi - Director

Instrumental in development and execution of municipal solid waste management projects, airport sanitation projects, new ventures and start-ups; leads group companies towards robust IT infrastructure.

With intense zeal and highly focused approach, he is credited for establishing strong IT infrastructure in the organization, including new age business techniques. He is an MBA from Deakin University, Australia.

#### Non Executive Board



#### P. S. Rana

Former Chairman of Housing and Urban Development Corporation (HUDCO); Chairman, Construction Industry Development Council and Patron, Institute of Urban Transport; Member Advisory Council of IIT, Delhi; B. Tech in Civil from IIT, Delhi and Ph.D. in Transport Engineering & Management from University of New Castle, UK



#### S. K. Roongta

Former Chairman of Steel Authority of India Ltd. (SAIL) and MD (Aluminium & Power Business) in Vedanta Ltd; Chairman, Board of Governors, IIT, Bhubaneswar and Member of Board, JKL University, Jaipur; BE (Electrical) from BITS Pilani



Sarthak Behuria

Former Chairman of Indian Oil Corporation Ltd. and Bharat Petroleum Corporation Ltd; Recipient of the SCOPE Award for Excellence & Outstanding Contribution to Public Sector Management(2007-08); B.A. (Economics) from St. Stephens College, Delhi and MBA from IIM, Ahmedabad



Dinesh K. Goyal (IAS- Retd)

IAS of 1981 batch of Rajasthan Cadre; Addl. Chief Secretary, Govt. of Rajasthan; M.Sc. from London School of Economics, UK and Ph.D. from Birla Institute of Technology & Science



Archana Capoor

Former Chairperson of Tourism Finance Corporation of India; Member Secretary and Project Advisor to Indian Trust for Rural Heritage and Development (ITRHD); MBA in Finance & Market Research from University of Allahabad

### SPML Infra

#### Making human life comfortable with world class Infrastructure

SPML Infra Limited is India's leading infrastructure development company with focus on sustainable development for power, water, sanitation, road & highway, solid waste management, smart cities and coal.

With 36 years of experience and pan India presence, SPML has executed more than 600 projects and created significant value for the country, thus touching the lives of millions of people with the provision of drinking water facilities, improved sewerage network, better municipal waste management, building roads and highways and lighting up homes.

### Engineering to the Core

SPML has integrated its strength in advance and in-depth engineering, integration, process technology, project management fabrication, procurement, erection, construction and commissioning to offer distinct responsibility under strict delivery agendas. Many engineering and construction projects executed by SPML have set new benchmarks in terms of scale, quality sophistication and speed.

### **International Alliances**

Strategic alliances with international technology-domain leaders' enable access to advance technical knowledge to execute projects better and faster. Specific technology tie-ups are carried out on case to case basis matching global standards.

### In-house Research & Development

SPML has in-house engineering capabilities for both project design and construction to provide integrated solution for designing and building the project to meet client's requirements. Its design, engineering, and IT enabled facilities include the modern CAD centre using various design and project management software.

## Integrated approach towards complete Power Solutions

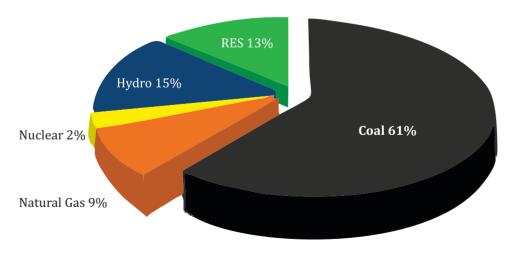
The world is increasingly getting smarter and looking for secure, intelligent and smart power solutions to improve quality of life. India is fast becoming an urbanized nation with increasing demand for uninterrupted power supply and improved services. After independence, India has only 1362 MW generation capacity, but opening up of power sector and enabling reform in policies helped it achieved remarkable growth in power generation capacities to reach 302 GW by the end of 2016.

SPML offers integrated solutions for basic and detailed engineering, system integration, and technical specification to meet power plants' requirements in terms of technology, standards, specification, and quality. The expertise includes conceptualization, detailed design, project planning, procurement, erection and commissioning of thermal (coal & gas) and hydro power projects, solar power plants, balance of plant projects, transmission & distribution, piping with electrical and instrumentation works etc. SPML also offers modernisation services for power plants that include technical audit, life assessment, performance improvement and upgrading of major equipment.

### Scope of Services

- Power Generation
- → Power Plant Construction (Thermal, Hydro, Solar, Wind)
- **FEHV & GIS Substations and Transmission Lines**
- ✓ Sub-Transmission / Distribution Lines and Substations
- ← Balance of Plant
- ★ Rural Electrification

#### Source of Electricity in India by Installed Capacity



Based on Govt. of India's Central Electrical Authority Report

# Message from Chairman

SPML Infra is a leading infrastructure development company, committed to improve the living conditions of people by design and implementation of various infrastructure projects. With successful execution of over 600 projects during last three and half decades, SPML has created significant value with provision of clean drinking water, wastewater treatment & management, improved sewerage and solid waste management facilities, building roads & highways, coal mining & production, and lighting up homes with power generation, transmission and distribution facilities.



Electricity is one of the most important innovations that have given shape to the modern world. It has revolutionized industrialization, transportation and communication system and has become a major part of our life. SPML has recognized the importance and developed a number of modern transmission and distribution system connecting thousands of villages in several states of India. We have received new orders to develop power infrastructure in Jharkhand, Tripura and West Bengal that is going to accelerate these eastern states development agenda, improve economic growth and citizen wellbeing through quality power supply. The World Bank would provide major financial support to develop and expand infrastructure in the power sector in six north-eastern states Assam, Meghalaya, Mizoram, Manipur, Nagaland and Tripura at a cost of INR 51,110 million under the scheme of 'North Eastern Region Power System Improvement Project'. Under this World Bank-aided project, over 3,488 km long high power transmission lines would be erected and many power transmission sub-stations would be set up besides modernizing the existing transmission system. The project aims to reduce transmission losses substantially and increase the quality of power supply. SPML has competently positioned itself to receive more projects in these states through a combination of structural improvements and continuing emphasis on our strengths. The execution capabilities are strong assets for the company and we are confident of delivering projects on time and as per the requirement of our clients.

SPML is also executing power distribution franchise project in Bhagalpur, Bihar where we have implemented new age technology for smart metering, asset indexing on cloud, mobile application for consumption & billing information, round the clock consumer complaint center among many other initiatives that has helped in improving consumer services.

The efforts to promote renewable energy source with solar power to meet environmental challenges facing the world has been successful with new order of rooftop grid connected solar PV system in 4 States, Delhi, Haryana, Rajasthan, and Madhya Pradesh with  $1000 \, \mathrm{Kw}$  in each state.

Our policy incorporates social and economic development and environmental protection into the design and implementation in all our activities. SPML also focuses on other aspects that are important for the development, including initiatives in the areas of community development, corporate governance, employee training and enhancement programs, client services etc. The company's expertise is well recognised by industry associations, government policy planners with representation in national committees and task forces. SPML's excellent project execution and management works has been recognized widely and it has received several prestigious national and international awards for sustainable infrastructure development in the country.

With strong legacy and dedicated team support, we are committed to provide sustainable solutions to make human life comfortable.

Subhash Sethi Chairman

### Power Generation - Renewable

The challenge of reducing our dependence on fossil fuels and conserving the environment is paramount. Presently, India has a total renewable power generation capacity of 42,752 MW with wind power having the maximum share followed by solar and small hydro. With about 300 clear sunny days in a year, India has tremendous potential of solar power generation. Despite concentrated efforts, India is still way behind on achieving the 40 GW rooftop solar power capacity target for 2022. Even the hydro power in India has only been used to the extent of about twenty per cent of its total potential of 150,000 MW.

SPML provides a credible solution towards reliable, clean and renewable power generation. It is spearheading, executing and managing some key projects in power sector and committed to nation's power development program. With a number of ongoing projects across various states in India, SPML is a premier renewable power generation and management company focused on managing power requirements of the consumers. SPML is equipping itself for the future by way of contemporary technology, skilled workforce and technical capacity building.

#### **Scope of Services**

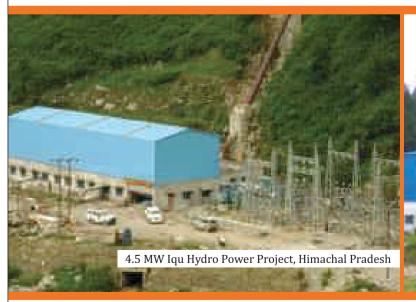
Design, planning, engineering and construction of

- Hydro Power
- Solar Power
- Wind Power

← Grid connected PV

- ★ Concentrating Solar Power (CSP)
- ★ Rooftop Solar System (Grid connected & Off Grid)
- Micro-grid PV System
- ✓ Net Metering











### **Power Plant Construction**

SPML is a leader in the design, procurement, and construction of thermal power plants and its capabilities extends across the full range of thermal power generation technologies along with renewable and alternative sources like hydro and solar power generation. It is playing a major role in building the next generation super thermal power facilities and also undertakes projects for rehabilitation and upgrading of existing power plants to prolong their life cycles and increase their generation capacity. SPML is currently spearheading, executing and managing high-value projects on Engineering Procurement Construction (EPC), Public Private Partnership (PPP), and Build-Own-Operate-Transfer (BOOT) basis by using advanced technology to ensure that new facilities are cost-efficient and meet the environmental standards. SPML has the resources, experience and necessary flexibility to meet client's needs and actively support the development of power infrastructure in India to cater the ever growing demands.

#### **Scope of Services**

Construction (design, engineering, and installation) of

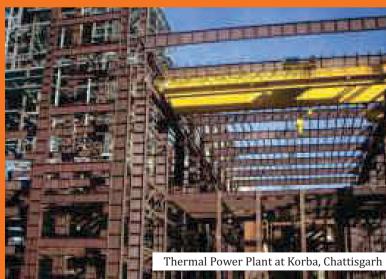
- 4 Conventional Thermal Power Stations that use oil, coal, gas, or other fuels
- ← Combined Cycle Thermal Power Stations
- ← Gas Turbine Generator Power Stations
- Diesel Thermal Power Stations
- Hydro Power Plant
- Solar Power Plant
- 4 Preventive Maintenance (modification construction, update construction, and maintenance)











### Power Transmission & Distribution

To meet the growing power demand in India, transmission & distribution system between resource generation and bulk consumption centres are being enhanced continuously. High capacity transmission corridors comprising 765 Kv AC and ±800 Kv 6000 MW HVDC system along with 400 Kv AC and ±500 Kv/600 Kv 2500 MW/6000 MW have been planned to facilitate transfer of power from remotely located generation facilities to bulk load centres. The focus is on development of future power system with upgrading of existing transmission system, adopting technology suitable for bulk power transfer over long distances like high capacity EHV/UHV AC system, HVDC system, compact tower/substation, mitigating devices to address high short circuit level, intelligent grid etc. The capacity of transmission system of 220 Kv and above voltage levels in the country as on 31 August 2016 was 3,50,792 ckm of transmission lines and 6,86,384 MVA of transformation capacity of substations.

SPML is among the largest contributor of power transmission & distribution in India. Millions of households across the country have benefited through SPML's power transmission and distribution initiatives.

- ≠ EHV Substation upto 400 Kv
- ← Gas Insulated Substations (GIS) upto 220 Kv
- ★ Transmission Line and Towers
- ← Transformer, Switchyard
- → High capacity Multi-Circuit/Bundle Conductor Lines 
  → Metering Solutions

- ← High Surge Impedance Loading (HSIL) Line
- ≠ ±800 Kv, 6000 MW High Capacity HVDC system
- → High Temperature Low Sag (HTLS) Conductor Line
- ★ Emergency Restoration Systems (ERS)
- ← Condition Based Monitoring
- ∳ Preventive Maintenance











### Rural Electrification

Power distribution in rural areas needs to be strengthened to pace up with rise in generation and transmission capacities. The flagship schemes of Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) is under implementation in rural areas to strengthen the distribution system, availability of power supply and improve reach, thereby boosting the farm sector output and economic activity in rural areas. The main objectives of DDUGJY scheme are to provide electricity to all rural households, reduction of AT&C losses, and to achieve 24X7 power supply for non-agricultural consumers and adequate power supply for agricultural consumers.

SPML Infra has contributed towards bringing electricity to rural and remote areas. It has executed a number of rural electrification projects to provide electricity to millions of households in several states of India. In rural areas, electricity is used not only for lighting and household purposes, but it also allows for mechanization of many farming operations such as threshing, pumping water and hoisting grain for storage. In areas facing labour shortages, it allows for greater productivity at reduced cost.

#### **Scope of Services**

Design, engineering, testing, erection and commissioning of rural electrification works including:

- Substation (new and augmentation of the existing)
- Transformers
- ← LT & HT Cabling
- Lighting Systems
- Procurement and Installation of Distribution Lines
- Household Connections
- ← Metering & Billing











### Power Distribution Franchisee

Distribution Franchise (DF) is a relatively new concept of facilitating the distribution of electricity to consumers in service area on behalf of Transmission & Distribution Agency. The scope includes distribution of electricity to consumers, corrective and preventive maintenance of network, breakdown rectification, routine operation and maintenance of distribution system, attending complaints, metering, reading & billing as well as collection of energy dues from the consumers within the service area. Franchise strives to reduce the collection and distribution losses of the city. SPML is executing a distribution franchise project in Bhagalpur, Bihar and have adopted new age technology for smart metering, asset indexing on cloud, mobile application for consumption & billing information, round the clock consumer complaint centre among many other initiatives.

Name of the Project: Distribution and Supply of Electricity in Bhagalpur Town and Adjoining Areas

Client: South Bihar Power Distribution Company Limited, Patna

Project Value: INR 180 Crore annually with 15 Years concession period

**Scope of work:** This Project is implemented for distribution of electricity in Bhagalpur Electrical Urban Division (3 Subdivisions) & 2 Rural Electrical Sub-divisions besides metering, meter-reading, billing, collection, operation and maintenance. Augmenting transmission capacity matching with the growth in distribution network, metering of input points including calibration of meters and matters related to load dispatch and grid discipline.

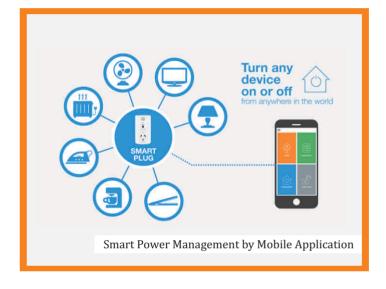
No. of Connections: 200,000 Consumers



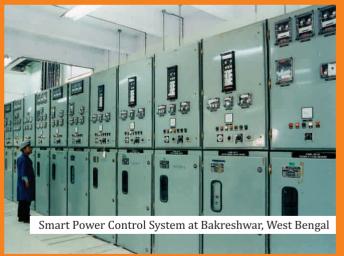
# **Smart Energy Management**

Integrated and smart energy management is the new age solution to fluctuating power with optimizing energy generation and distribution, demand side and energy efficiency management. SPML with comprehensive domain knowledge, continuous innovation and national experience is providing optimized turnkey solutions for power generation, high voltage efficient transmission, substations, and city distribution solutions to utilities and consumers. SPML also provides clean and green energy solutions by spearheading solar, wind and hydro power projects and committed to nation's power development program.

- ✓ Smart Grid
- ← Smart Transmission & Distribution Network
- City Distribution System
- Smart Metering & Billing
- Smart Lighting System
- ← Energy Storage System (ESS)
- ★ Economic Load & Dispatch Management
- → Optimization of Distributed Power







### Smart Grid

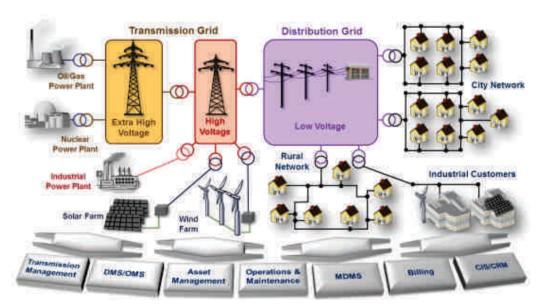
India is the fifth largest producer and consumer of electricity in the world. The transmission & distribution losses at 23.4 per cent are among the highest. Smart Grid facilitates efficient and reliable delivery system from source to user through integration of energy sources, smart transmission & distribution network and brings the efficiency and sustainability in meeting the growing electricity demand with reliability and quality.

Smart Grid also enables real time monitoring and control of power system and helps in reduction of AT&C losses, demand response and demand side management, power quality management, outage management, smart home energy system etc. Smart Grid act as a backbone infrastructure to enable new business models like smart city, electric vehicles, smart communities apart from more resilient and efficient energy system and tariff structures. SPML is taking lead for smart grid technology to improve the power supply value chain and ensure customer inclusion in utility operations, an essential element for the development of smart cities.

#### Benefits of Smart Grid

Monitoring and controlling delivery of power on real-time basis, improving efficiency and conservation

- 4 Continuous power quality monitoring, active management of all distribution system elements
- Outage identification and management
- ✓ Improved planning of infrastructure construction and maintenance schedules
- ✓ Real time, in-field management of maintenance workers and inspectors
- Carbon emissions management
- ← Customer Portals to increase customer base, awareness, and online tracking of energy usage
- ✓ Integration of alternative energy sources and co-generation programs.
- ★ Enhanced plant security
- ✓ Leverage on existing communications infrastructure such as substation and fibre network.



Real Time Smart Grid System

# **Smart Metering**

With growing urbanization and rising demand of 24x7 power supply, it has become imminent that new technology is adopted for utility meters for water, power and gas distribution in cities. Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI) are modern digital versions of the utility meters. These smart meters works on advance communication technology for automatically collecting consumption, diagnostic and status data from meters and transferring that data to a central database for analyzing, troubleshooting and billing.

The smart metering system helps utilities to get real time consumption data thus reducing the dependence on meter readers and saving on expenses of periodic trips to each physical location to read a meter. With this system, billing is based on real-time consumption than on estimates based on past or predicted consumption. The timely information coupled with qualitative analysis can help both service providers and customers' better control on their consumption and billing.

- ← AMR Meter
- ★ AMI Meter
- → Non-AMR Meter
- Digital Meter
- → Billing and Collection
- → Operation & Maintenance





# Mining

Coal is the largest source of energy for generation of electricity worldwide which is least expensive among all the fossil-fuel sources. SPML's foray into coal sector has begun in 2008 with acquiring the coal mining concession for an area admeasuring 5,000 Hectares in East Kalimantan, Indonesia having coal reserves of 166 million metric tonnes. The gross calorific value of coal is 5200 to 5600 Kcal/kg. SPML have the facilities of mining 2 million metric tonnes of coal per year with own Jetty of the capacity of 62.5 Ha having complete loading facilities and crusher plants. Internal coal handling distance is only 2 km and the distance between stockpiles to Jetty is only 500 meters with an exclusive control over the area.

#### Resources

Coal

Iron Ore

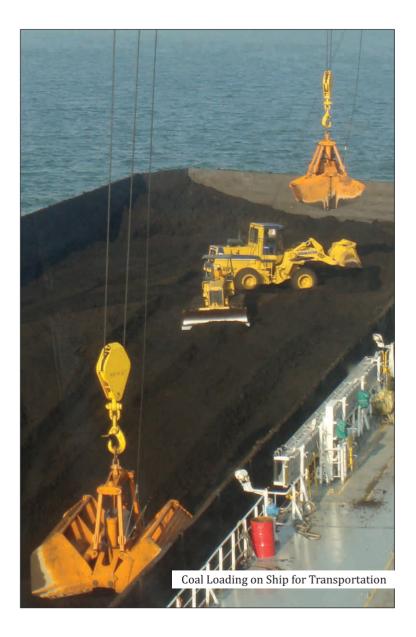
Lignite

Minerals









# Operation & Maintenance

SPML has the capability and experience in plant operations & maintenance (O&M) both on combined-cycle power plant and coal fired plants. SPML's excellent track record in operation & maintenance is supported by its technical and organizational expertise and significant operational experience to provide better value to its clients without compromising on health, safety and environment. It offers a complete range of O&M services to power plants by adopting the latest O&M tools and methodologies adaptable to business environment that ensures plant performance to the highest standards.

SPML has experience in setting up full scope O&M organizations to ensure safe and efficient operations and effective management of both planned and unplanned maintenance activities. As an EPC / O&M contractor for major power plants, SPML provides a seamless hand-over from construction to operations.

- **←** Commissioning
- ← Competency and training
- ✓ Implementation of state of art O&M tools and methodologies
- ✓ Engineering risk assessment
- → Plant performance modelling and analysis
- ← Technical due diligence
- 4 Fuel management
- ∮ Inventory management
- ∳ Asset management
- ★ Environmental issues





# Quality, Health & Safety Management

SPML strives towards excellence in all operations through compliance with world-class quality systems in specific fields of activities, ensuring continuous improvement in quality management system. SPML's quality management system is certified regularly with ISO certifications, a testimony to the commitment of high quality project management and long term customer satisfaction.

SPML recognize the management of health, safety and environmental matters as the prime responsibility of the company. It ensures that there are adequate resources available (both human and financial) to enhance health and safety management at work places. The management also actively promote and encourage the cooperation, involvement and participation of all employees and contractors. As a corporate culture, environmental care is constantly maintained at the highest standard.









### **Awards & Rocognitions**

- ► ASSOCHAM Water Management Excellence Award 2019 as 'Best Water Management Company' of the year
- CIA World Construction & Infra Award 2019 as Best Company in Water Management - EPIC Media
- Smart Water & Waste World Award 2019 for Decentralized Sewerage System in Mira Bhayander, Maharashtra
- ► The Economic Times Most Promising Business Leaders of Asia 2018 Award to SPML Infra Chairman, Mr. Subhash Sethi
- Award for Outstanding Contribution in Completion of SAUBHAGYA Scheme in Bihar - by Hon'ble Chief Minister of Bihar
- ➤ Zee Business Dare to Dream Awards 2018 for Company of the year Infrastructure
- Certificate of Appreciation for Outstanding Performance in SAUBHAGYA Scheme in Patna District, Bihar
- ► ET Now-Water Leadership Awards 2018 for Excellence in Water & Wastewater Management World CSR Day
- ➤ 50 Most Impactful Leaders in Water & Water Management Awards 2018 to SPML Infra Chairman – World CSR Day
- ▶ Best Employer Brand Awards 2017 World HRD Congress
- ► India's Most Ethical Companies Award 2017 for Infrastructure Development Energy & Water
- Aqua Foundation Excellence Award 2017 to SPML Infra Chairman for his Valuable Contribution in Infrastructure Development in India
- Construction Times Award 2017 for Best Executed Technology used for Water Management Project
- Construction Week India Award 2017 to SPML Infra Chairman as Infrastructure Person of the year
- CIA World Builders & Infra Awards 2017 for Best Water Management Company of the year – EPIC Media Group
- Technology Champion Smart City Award 2017 for IMIS Cyber Media Group
- ▶ Data Centre Green DC Initiative Award 2017 UBS Transformance





# **SAVE ENERGY SAVE EARTH**



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