

## EPC - Best Suitable for Infrastructure Development in India



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**E** PC Industry is looking for growth as the European market, US and African continent are on rebound mode. How it is going to affect the Indian EPC market?

From a global perspective, it is looking positive as the developed economies in the world are trying to gather steady impetus. The US economy though re-gaining some footing; the pace of activity still remains irregular. The US GDP growth was at 2.6% in the second quarter of 2017 against the 3% annual growth predicted by the US President.

The Eurozone economy expanded 0.6 percent on quarter ended June 2017. Among Eurozone's largest economies, GDP growth picked up in Spain; was unchanged in France and Italy; and slowed in Germany. The UK economy rebound at 0.3% in second quarter of 2017, a slight improvement from 0.2% in the first quarter of the year.

The African region is showing signs of recovery with regional growth projected to reach 2.6% this year. The largest economies of the continent; Nigeria, South Africa, and Angola are seeing a rebound from the sharp slowdown in 2016, but the recovery has been slow due to several factors including policy uncertainty.

India's economy growth slowed down to 5.7% in the first quarter of this fiscal on the GST related matters but underlying growth momentum remains strong and India may clock about 7 per cent growth this fiscal.

Infrastructure growth was 4.9% in August 2017 with power sector clocking 10.3% and 15.3% of coal. The demonetisation and GST implementation temporarily

decelerate the growth, but now these two events are on our rear view mirror, we expect the economy to re-accelerate the momentum and achieve 7 per cent growth. India has the potential to perform better and with government's focused initiatives in getting back on the saddle of infrastructure development will certainly produce good results for EPC industry. A unique weapon at the disposal of the government is its ownership of many cash-rich public sector companies, which can be persuaded to invest in infrastructure development themselves and investing in such projects.

The Indian EPC sector has come up in a big way in last one decade. The opportunity for EPC sector is massive as the government is focusing on robust growth in infrastructure development. Several initiatives such as 'Housing for All', 'Smart Cities,' and 'Atal Mission for Rejuvenation and Urban Transformation (AMRUT)'; the government has been working on reducing the bottlenecks that impede growth in the infrastructure sector. The latest budgetary outlay for infrastructure spending has been increased to INR 3.96 lakh crore for various projects including housing, railways, ports, roads, water and irrigation.

**What are your views on current scenario of EPC industry in India and opportunities for EPC companies in urban infrastructure sector?**

EPC industry has transformed from being a handful of large and complex projects to multitude of small projects and subcontracts. EPC industry has witnessed consistent changes over the past few years with increasing project size, scale and investment. In India, it is likely to see further advancement with a number of initiatives for infrastructure development with planned investment

running into billions of rupees by the government of India. The government targeting capacity addition and several policy interventions to remove various bottlenecks and impediments, the EPC sector is expected to be the largest beneficiary.

There is no dearth of high value and multifaceted projects being executed by government. The increasing size and complexity of projects has led to a growing reliance on EPC companies' capabilities and project management skills.

The Indian EPC sector is rising prominently and changing its dynamics. There are more than 100 companies and many stakeholders today. The companies have carved out a sector focus niche for themselves and have developed their reputation based on their operations. The opportunities are enormous in this sector as the focus of Indian government is shifting back from PPP to EPC again.

EPC industry is certainly going to witness tremendous growth with growing infrastructure activities under various schemes including Smart City Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Housing for All, Water Supply and Irrigation Projects, Roads & Highways, Metro Rail, Power Transmission, Distribution and Rural Electrification, Swachh Bharat Mission, Clean Ganga projects etc. The concept of EPC has been regaining ground for the past few years in India after the mixed results with PPP and BOOT projects. Today, government agencies and bankers choose to have a single-point responsibility, which was not a scenario before when contracts were divided. Today, large projects are being awarded to specialized companies having complete experience of handling engineering, procurement and construction. EPC contracting has very good potential considering the size and complexity of projects being set up in India in the power, water & sanitation, steel, oil and gas, and transportation sectors. It is estimated that EPC industry is likely to grow at the average of 35-40% in next five years.

### How do you see the business climate in India for future investments? What steps need to be taken to accelerate the pace of project execution?

The government has initiated several measures to lift the infrastructure and construction sectors from the slowdown under several schemes now announced by the government. While the smart city and roads are expected to continue being the Government's main investment focus areas, the urban infrastructure for water & sanitation and power distribution are expected to witness enhanced investment. Private investment seems difficult to come, public investment can be expected

to materialize and increase. The government needs to play a vital role in improving the pace of implementation of key projects, EPC companies are required to upgrade their project management expertise and ensure that there is adequate capacity to undertake and execute large projects on time.

There is no specific Ministry to safeguard the interest of the EPC companies and a large number of cases are at various stages of arbitration. A major portion of an EPC contract is spent on procurement of equipment and machineries. This sector also falls along with the capital goods under the Ministry of Heavy Industries. A separate cell in the ministry is crucial to handle issues related to the EPC contracting business. Anticipating tremendous growth in this field due to large scale urban infrastructure development planned by the government; a special EPC cell in the ministry is recommended.

### Project finance and equity funding for the EPC companies have been difficult to get. The banks are cautious for lending to EPC players; disbursements from banks are delayed leading to project delays.

There is no magic wand that will revive investment activity. The investment is as much a matter of concern as hard business calculations. The global economy is not in good shape amidst disappointing developmental targets of economies across the world. In the prevailing scenario, infrastructure remains a top priority for addressing developmental gaps and lifting economies out of the financial turmoil. The governments around the world are pumping money to generate demands for goods and services by creating jobs through higher spending into physical and social infrastructure. Likewise, the Indian government on its part is not lagging behind on this score and has taken concrete steps to revive the sector to regain its past glory.

The delays in payments by clients to the construction companies put tremendous pressure and results in negative cash flows from operations. The equity funding for EPC companies has become very difficult due to changing investor perceptions. As regards to debt funding, the cost of debt going up significantly has itself made it almost unviable. In the changed economic situation, the fees charged by banks for various bank guarantees would always increase due to higher risk perception.

### How can the EPC companies minimize the impact of rising raw material prices, interest rates and depreciating rupee?

The cost of raw materials remains the top concern among EPC companies. With the sliding down

of Indian currency, the raw materials market remains volatile. Companies have a hard time in correctly judging the risk of intensely fluctuating raw material costs. To minimize the impact, EPC companies are going for agreements for the entire supplies of a project with all major suppliers and also putting the price revision clauses in their contracts with the clients. Other measures are the optimum utilization of work hours and labor force, sourcing of machineries from local manufacturers or from less expensive countries and good financial engineering in implementation and execution.

### How the EPC Project Contracting Models has evolved and have these models proven to be a beneficial?

The business environment in our country has rapidly evolved over the years. Gone are the days when the scope was restricted to engineering and procurement and the construction was done by the clients themselves as the risk perceived to be too great for the contractors. Initially, there were few contractors having adequate technical knowledge and financial strength who could take the overall responsibility of large projects. Hence, large projects used to be divided into smaller EPC packages with a specific focus on the area of execution (e.g., for a water supply project, separate packages like pipeline, treatment plant, pumping station, distribution network, metering & billing etc.). Slowly with the passage of time, the developers became financially and technically competent and they gradually expanded their presence across multiple packages and the whole work being awarded as a single LSTK (Lump Sum Turn Key) contract. SPML Infra is executing a number of projects on EPC + O&M basis, a trend established in the industry where the developer is supposed to manage the operations & maintenance even after the execution and commissioning of an EPC project for a given number of years.

EPC is primarily a manpower run business; not a production but management integration. The business models are client specific, but new trends have emerged from the conventional approach. The 80s and 90s saw more of a conventional approach as clients saw merit in controlling the procurement. But as the pressure mounted on project time lines, clients started to fix total project costs at the beginning of the project thereby removing uncertainties. But recently the trend seems to be shifting to the EPC Management (EPCM) and Open Book Estimate (OBE) approach. Each mode has its own advantages and shortcomings and one has to be careful to choose the right approach. Over-The-Fence (OTF) is also a new concept which is prevalent in the west, needs serious consideration in India.



The EPC-LSTK (Lump Sum Turn Key) mode is common in the western countries and now Indian clients are also experimenting with it. The EPC-LSTK mode has its own merits as the contract for Engineering, Supplies and Construction for the complete project is signed in the initial stage itself, thereby transferring the risks for project, cost fluctuations, delays in schedule and quality issues entirely to the company. More and more clients are realizing the advantages for EPC-LSTK mode which ensures single point responsibility in the hands of the EPC contractor and are increasingly opting for EPC-LSTK mode for timely completion of projects.

Other model is EPC Management (EPCM) contracts, wherein one single company having the knowledge of integration requirement of the entire project, takes the charge for the complete execution. It in turns engages separate EPC contractors to execute the projects on package basis. In such cases, EPCM companies take the obligation of the projects integration and have an overall management control of the project; though directly not responsible for the project cost and schedule, which remains with the client. The traditional contracting models of Built, Operate and Transfer (BOT), Built, Own, Operate (BOO) and Built Own, Operate and Transfer (BOOT) are still in use. In the BOOT model, the EPC contractors not only execute and commission the projects but also earn revenue by operating the same for a specified period of time before handing it over to the clients. There are a lot of projects awarded in this mode for road & highways and airports. SPML Infra has earlier executed a few BOOT projects but our focus is currently on EPC mode of projects only.

### What kind of technological advancements is available for EPC companies for project execution and control?

The technology has advanced in all segment of life and there are new technologies available for EPC companies as well. The design engineering

have transformed from being a flat to become 3-dimensional format, minimizing errors and improving productivity during the entire implementation period. The advanced technology for material transport focuses on intelligent logistics, infrastructure, and mobility and makes project execution more efficient.

EPC tracker is another technological advancement that incorporates the use of smart phones and tablets in project execution, the real time information between work teams and the company management helps in taking swift remedial steps by improving several areas that hamper the work due to avoidable reasons.

There is software available for collection and dissemination of data during the construction phase of an EPC project to help an updated planning and to determine the degree of actual progress of the project as compared with planned progress to detect deviations and to act in a timely manner. During a construction phase mistakes are more expensive that delays the project and loss of control over the progress impacts the profitability and cost overruns.

The current trends suggest that the EPC sector is expected to generate better opportunities in the next few years with sound funding by government and international monetary organizations. Indian EPC companies are competent and cost-effective as compared to their foreign counterparts but we need to do some fine tuning and adopt modern construction management techniques to remain relevant in increasing competitive environment. From our own experience as a developer, good project developers are those who are creative in their thinking, innovative in their planning and execution and are daring enough to take the risks.

### Can you throw light on the growth of the company and also on the company's order book?

SPML Infra has a legacy of more than three decades

of managing and implementing 600 projects; in water, wastewater, power, roads, and sanitation sectors and created significant value 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.

SPML Infra reported 14.5% growth in revenues and 9.95% increase in profit after tax during the last financial year. It also strengthened its business competitiveness through an increase in the pre-qualification limit for water infrastructure business by achieving revenue of Rs. 1,000 crore. Some of the important projects completed this year include the Phase 1 of Sauni Irrigation project in Gujarat, which was inaugurated by Hon'ble Prime Minister, Shri Narendra Modi in April 2017. The Phase 1 of Bangalore Metro Project was inaugurated by Shri Pranab Mukherjee, the President of India in June 2017 where SPML Infra completed the electro-mechanical works. The 200 MLD Water Treatment Plant in Surajpura, Rajasthan was completed last year to augment the drinking water supply to Jaipur city; 42 MLD Sewage Treatment Plant and sewerage network was completed this year in Kanpur, Uttar Pradesh that will help in cleaning the holy river Ganga. SPML Infra also completed technologically advanced 220 kV GIS Substations in Alipurduar, West Bengal and 500 MVA Autotransformer in Mainpuri, Uttar Pradesh for quality power supply and distribution in the designated areas.

SPML Infra has an order book of approximately Rs. 6000 crore which will help us in steady top line and improved bottom-line growth and we are expecting to add more new projects in our account in the remaining part of this fiscal.

### What is your strategy for growth in the medium to long term, in terms of industry segments, business models and

## diversification?

SPML is focusing on completing the current projects on time and looking for about 10-15% top line growth in the coming years. We have plans to further our water, wastewater, irrigation and power business across India. SPML is also looking forward to complete the smart city development in Ujjain, Madhya Pradesh; a project under the Delhi Mumbai Industrial Corridor scheme. Considering the niche position we have created for ourselves in the water segment; we intend to use it to our advantage. In essence, our business model for success would be to maximize our strengths to achieve the overall objective.

## What are the projects SPML Infra is pursuing currently?

SPML Infra is among the large EPC companies in India have successfully delivered a number of EPC projects in water and wastewater, power transmission & distribution sectors over the years. Presently, SPML Infra is executing more than 40 EPC projects for water supply and distribution management, irrigation, wastewater treatment, sewerage network, power transmission, distribution and rural electrification.

### Some of key projects under execution are:

- Phase 2 of Saurashtra-Narmada Avtaran Irrigation (SAUNI Yojana; laying of 36.6 kms MS Pipeline of 3000 mm diameter of 17.5 mm thickness with external 3LPE coating & internal food grade epoxy coating; 14.17 Cumecs Pumping Station at 49 meter head and allied works. The project envisage to irrigate 1.8 million hectare of land in Saurashtra, Kutch and north Gujarat; benefiting millions of farmers and supplying potable water to 39 million people across 132 towns and 11,456 villages in Gujarat to address the scarcity of drinking water.
- First Smart City Project at Vikram Udyogpuri, Ujjain, being developed as a global manufacturing and investment destination under the Delhi Mumbai Industrial Corridor (DMIC) scheme. This is first of its kind of a green field smart city which will have all smart utilities connected with technology for seamless services.
- SPML Infra is executing urban water supply project for improvement in water distribution networks in Delhi for Mehrauli & Vasant Vihar and adjoining areas covering about 42000 house service connections, non-revenue water management, installation of AMR & Non



AMR water meters, 24x7 consumer care centre, metering, and billing including operations & maintenance for 10 years.

- SPML Infra is also executing 6 important ADB funded 24x7 urban water supply projects in Karnataka in the cities: Bellary, Raichur, Haveri, Hospet, Gadag-Betageri, and Sindhanur to serve a combined population of about 1.3 million. The work involves rehabilitation and development of water distribution network; over 2500 kms of water supply pipelines, rehabilitation and replacement of 2,50,000 house service connections with installation of advance water meters, non-revenue water management, 24x7 consumer care centre, metering, billing including operations & maintenance in all cities for 5 years.
- SPML Infra is executing installation of 220 kV GIS substation in Faridabad, Haryana
- SPML Infra is executing a World Bank funded 16 new 132 kV substations in Tripura under North East Region (NER) Power System Improvement Project.
- Extension of 400 kV substations with 2x500 MVA autotransformers at Malda, West Bengal and other 6 locations associated with Eastern Region Strengthening Scheme.
- Extension of 400/220 kV substation with 1x500 MVA autotransformer in Mainpuri, Uttar Pradesh and Sikar, Rajasthan
- Rural Electricity Infrastructure Development project for agricultural feeder separation in Murshidabad, West Bengal among several others.

- The power supply and distribution management project in Bhagalpur, Bihar is catering to over 2,00,000 lac consumers where SPML Infra has implemented new age technology for smart metering, asset indexing on cloud, mobile application for consumption & billing information, 24x7 consumer complaint centre and other initiatives.

## Going forward, how do you view EPC as an era towards Sustainable Growth?

The long-term outlook of the industry remains optimistic due to the strong underlying industry and economy fundamentals. The economic survey also predicted the country's economic growth at 6.75% to 7.5% in 2017-18. Even on a conservative estimate, it is likely to grow at 7% over the next few years. India's focus on infrastructure growth, rising disposable income, lowering age of high income individuals, all point towards the fact that the long-term growth of the EPC industry in a steadily growing economy can be expected to be good. With Indian manufacturing companies producing quality equipment and raw materials, it is expected that input costs pressures could moderate which would be another positive for the sector.

With the economic performance, we see the consistent policies, government investment in infrastructure is stepped up, raw materials and equipment are available locally and all the required clearances being granted on time along with land for the development, and clarity in the concession agreements. With such positivity, EPC sector will see sustainable growth in the years to come in India. ■