Matrix the CRE per property tracker and data available from IGR Maharashtra as on 30th May 2021. the Mumbai Metropolitan Region (MMR) recorded property sale transactions worth Rs. 10,979 cr in May 2021 as compared to Rs. 22,507 cr in April 2021. The property sale transactions registered in MMR in March 2021, February 2021 and January 2021 were Rs. 44,167 cr, Rs. 21,696 cr and Rs. 21,484 cr respectively.

As on 30th May 2021, Mumbai had recorded property sale transactions worth Rs. 7,246 cr in May 2021 as compared to Rs. 16,250 cr in April 2021. The property sale transactions registered in Mumbai in March 2021, February 2021 and January 2021 were Rs. 28,961 cr, Rs. 12,989 cr and Rs. 12,890 cr respectively.

As per the data from IGR Maharashtra as on 30th May 2021, the stamp duty collection in MMR for the month of May 2021 was Rs 417 cr as compared to Rs. 725 cr in April 2021. Whereas the stamp duty

# MMR witnesses property sale transactions worth Rs.11,000 crore in May 2021

collection in MMR for the month of March 2021, February 2021 and January 2021 were 1365 cr, 648 cr and 570 cr respectively.

As for stamp duty collection in Mumbai, Rs 250 cr were collected in May 2021 (till 30th May) as compared to Rs. 492 cr in April 2021. Whereas the stamp duty collection in MMR for the month of March 2021, February 2021 and January 2021 were 830 cr, 348 cr and 298 cr respectively.

Source: IGR Maharashtra

STATE

Data as on May 30, 2021

Value (Rs. Cr) of property sale transactions

Month	May	April	March	February	January
	2021	2021	2021	2021	2021
MMR region	10,979	22,507	44,167	21,696	21,484
Mumbai	7,246	16,250	28,961	12,989	12,890

#### Stamp Duty Collections (Rs. Cr)

Month	May	April	March	February	January
	2021	2021	2021	2021	2021
MMR region	417	725	1365	648	570
Mumbai	250	492	830	348	298

Due to the impact of the second wave of Covid-19 and the Maharashtra Government's decision to discontinue the stamp duty waiver on property registrations from April 2021, there has been a decline in the property sales in the months of April and May 2021. Here is what real estate experts have to say:

### **Pritam Chivukula,** Co-Founder & Director, Tridhaatu Realty, Hon. Secretary, CREDAI MCHI



"Although factors such as reduction in stamp duty, all time low home loan rates, developers offering discounts and payment flexibility helped in the resurgence for real estate demand in the previous quarters; the devastating second wave of the pandemic proved to be a disaster in the decline of the property sale transactions in the last two months. The second wave which has been more deadly than the first wave made the homebuyers more cautious to save money for emergencies rather than investing in properties. Amid the sudden surge in Covid cases and the various curbs due to the lockdown in the State, the sector faced a gradual slowdown which made it extremely difficult to sustain the momentum. Looking at the record transactions in the previous quarters where the homebuyers took advantage of the stamp duty benefit before the March deadline, we urge the Government to reconsider their decision on the stamp duty waiver in interest of the homebuyers again."

## Ashok Mohanani, President, NAREDCO Maharashtra

"We have started witnessing a 50% dip in property sales after the Maharashtra government restored stamp duty back to 5% in Mumbai and 6% in the rest of Maharashtra, from April 2021. The sales registered in the month of April & May are due to the overflow of registrations from the previous quarter where many homebuyers took advantage of the stamp duty benefit before the March deadline and registered their properties later. The Maharashtra Government had allowed to pay the stamp duty and register the properties by giving an extension of four months. The buyer sentiments are down from the past two months due to the second wave of the pandemic. lockdown restrictions and a halt in the economic activities. We have already seen a positive impact of the stamp duty booster which significantly stimulated housing demand in the city in the previous quarters. We urge the government to reconsider and trim it down for another year, until March 2022. There is still demand among the homebuyers, and we believe the numbers will see a gradual uptick once the unlocking in the State happens.""

Mr. Ram Naik, Executive Director, The Guardians Real Estate Advisory

"For the second consecutive month in a row. the real estate sector faced a dip in sales due to the second wave of the pandemic. Even the festive occasions of Gudi Padwa and Akshaya Tritiya saw buyers shying away from auspicious purchases due to the surge in COVID-19 cases. Like the previous time, this year too, the pandemic has cast a gloom on the real estate business as people have stayed away from buying new homes. The second wave played havoc on the nation and the extension of lockdown across the state significantly marred public sentiment. With the temporary reduction in transaction costs being withdrawn, in states like Maharashtra, the expectation amongst stakeholders of the industry is that the Government should continue the relaxations, at least till such time that the economy gets back to the pre-COVID levels."

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THE MOST IMPORTANT ELEMENT OF A SUCCESSFUL EPC ORGANIZATION WITH AN EXECUTION MINDSET IS THAT PROJECT IS ALWAYS AT THE CENTRE STAGE

Pawan Parikh,

CEO, EPC Business, Shapoorji Pallonji







# What growth do you foresee of Indian EPC companies in present times and which sector will prove to be the cornerstone of progress?

Indian EPC Companies have a wider canvas now, thanks to sunrise sectors such as renewable energy, energy storage, electrical mobility, smart cities, need for clean air and water; mission like resolve to develop world class infrastructure, not to forget healthcare, defence, microchip fabrication, to name a few.

Value addition within India must keep pace with our aspirations, which means that we will have to cater

to a very different need by helping the Industry to enhance the depth of manufacturing, which must make the complete Industrial base globally competitive, especially for sectors, which have been relying on imports.

This vast potential spanning almost all sectors will be a powerful engine of growth for EPC Companies too. The EPC Companies will also have to mature to be able to provide futuristic solutions, which do not exist today.

#### How to manage turnkey engineering projects ensuring delivery of complex production plants bringing together a high order of engineering skills with intricate stages of supply chain and capital management?

Managing mega turnkey projects requires a mindset of strong execution and on-time delivery; whatever the constraints. This needs highly skilled, committed and experienced team covering all the tenets such as engineering teams equipped with world-class tools, knowledge of process and basic engineering, strong project planning and management skills coupled with a very efficient construction team. Above all, at every stage we have to consider safety of all stakeholders and environmental sustainability as most important.

Supply Chain and need for logistical solutions have now become global, especially for Indian EPC Contractors abroad. This requires an international business mindset with competencies in these areas and ability to identify risks and take actions – on time to manage them.

The most important element of a successful EPC Organization with an execution mindset is that Project is always at the Centre stage. All the functions within an organization have to come together with a missionary like zeal to ensure that project objectives are met 100%.

Over the time, how are the EPC companies transitioning from manual and legacy systems to agile, data and AI-driven ones for environment friendly, cost-effective, safer and efficient processes of technologies/ products?

With modern engineering tools we now have the

### **Cover Story**

ability to visualize the whole plant in 3D and use of Virtual Reality has started playing an exciting role. It is possible to perform a virtual tour of the facilities to ensure the layout is safe for operations and maintenance friendly. Dynamic analysis of designs is carried out to prevent costly errors later. With smart deployment of modern tools, various interfaces in a plan design and construction have become a manageable challenge. All these go a long way in reduction of rework time and cost.

Artificial Intelligence, more specifically "Narrow AI" is relatively new for the construction sector, but has immense potential in project planning, identification and resolution of schedule & constructability clashes. зD Modeling will continue to adapt from the engineering desk to actual construction on real time basis. New construction techniques such as robotics for risky construction are possible today. Robots with machine learning abilities can also take over repetitive tasks such as, plastering, painting, specialized welding and help speed up construction. Drone technology/ CCTV can also be used - subject to regulations at the sites to monitor real time progress.

One more change is adoption of Building Information Modeling System (BIMS) a 3D model-based interface platform to efficiently plan, design, construct, monitor and manage buildings, structures, and infrastructure.



## What do you have to say about Skid-mounted plants / technology?

I would call these plants "plug & play". Benefits are – excellent quality as they are assembled in a controlled environment inside a factory and then shipped to site. These need almost negligible time to install and commission. Perfect for remote sites.

#### Tell us about the investment factor in digital technology for better collaboration and more data-driven decision-making that will help to streamline the procurement process?

Digital technology pays for itself due to speed, accuracy and better collaboration. Manual processes are replaced with digital workflows,



ensuring timely actions and transparency. Data which is collected through digital means is available for future reference on touch of a button.

Digital Procurement process covers all aspects starting with Identification of capable suppliers/ service providers, registration, RFQ, thorough techno-commercial evaluation and quick decisions. After the award it continues till all the contractual millstones have been achieved. Also provides a feedback loop for future engagements.

#### How is your experience with the clients in recent time who have always expected absolute adherence to quality standards and timelines irrespective of any back-end constraints?

We value such customers. A focus on quality and timelines makes our relationship with them collaborative and creates focus on execution. Collaboration means working with each other to constantly identify and remove constraints. This includes a proactive change management too.

Globally large EPC player's manage projects in different corners of the world with production hubs strategically located in several continents. Nationally how have EPC contractors expanded their roles and adopted the roles of project consultants?

EPC Contractors must start working with the prospective customers from the feasibility stage itself. By playing the role of a trusted advisor, the EPC contractor can play a very important part in the success of the project. Timely inputs can reduce capital costs and speed up the procurement and execution.

Having a competent EPC partner from the beginning helps in optimization of resources, reduction of wastage, clear understanding of the deliverables and finally a seamless commissioning of the project. Thus, the EPC player plays a dual role of project consultant as well.

#### What proactive role policymakers need to play to achieve their ambitious infrastructure plans and activities for big-budget turnkey projects? How will EPC contractors benefit from them?

Policy makers can make the following changes in their approach:

- Shortlisting EPC Players with the necessary capabilities, followed by early engagement in the procurement process. Allowing EPC Players to offer alternative solutions.
- Construction being capital intensive, Ensuring EPC Players
  have positive cashflows.
- Dispute resolution and contract change management must be done expeditiously.

These initiatives will certainly help EPC contractors to come forward and secure high value infrastructure projects and also focus on completion within the contractual framework.



### NUBERG EPC HAS DEVELOPED THE HABIT OF SETTING AND IMPROVING BENCHMARKS IN THE INDUSTRY

AK Tyagi,

CMD, Nuberg Engineering Limited





# What growth do you foresee of Indian EPC companies in present times and which sector will prove to be the cornerstone of progress?

India is on the verge of enormous demand for EPC in the next few years. Union Minister of Chemicals & Fertilizers Shri D.V. Sadananda Gowda recently informed that an investment of Rs 8 lakh crore is anticipated in the Indian chemicals and petrochemicals industry by 2025. 'Make in India' across sectors, and India's increased defence self-sufficiency needs, will also create urgency for corresponding chemicals infrastructure. Manufacturing of polyethylene and PVC products too will require raw materials. Hence, enormous potential exists in India to develop the chloro- chemicals industry with a focus on inorganic chemicals like trichloroethylene, poly aluminium chloride and other chlorine-based water treatment chemicals.

To promote energy-efficient and environment-friendly hydrogen fuel cell-based vehicles in the country, the Ministry of Road Transport and Highways last year notified the standards for safety evaluation of Hydrogen vehicles through an amendment to Central Motor Vehicles Rules. The Finance Minister Nirmala Sitharaman additionally announced the introduction of National Hydrogen Energy Mission in her 2021 budget speech.

We at Nuberg EPC serve Chemicals & Fertilizers, Hydrocarbon, Steel, Energy & Infrastructure, Nuclear, and Defence industries globally and in India; and now see a huge potential for growth in India. With an eye on future evolution, we are strengthening our offerings in Green products manufacturing as a new expertise area. Nuberg EPC is already building and commissioning India's first commercial scale Hydrogen Purification (fuel cell grade), Compression, Storage & Dispensing Facility.

How do you manage turnkey engineering projects ensuring delivery of complex production plants bringing together high order of engineering skills with intricate stages of supply chain and capital management?

With the execution of international projects is a herculean task because of their remote locations and logistics involved. Thus, there is a requirement for large logistics operations and coordination with global suppliers. We have honed our expertise and global experience after operating in more than 60+ turnkey projects across 32+ countries in past 25 years and dealing with laws, statutory requirements, and societal norms across geographical diversities. It is also necessary to have legal knowledge and legal reinforcement. Furthermore, knowledge of the country's operating laws and guidelines, such as the

### **Cover Story**

electricity act, water act, labour laws, pollution laws, and their safety norms to execute the projects is necessary to avoid an unnecessary setback. We are prepared with all processes and capabilities to take on these challenges, and that is a great advantage that we have in terms of strategy with global size and skills. Our execution has to be done considering the geographical conditions. For instance, in the Middle East, you are not allowed to work during the afternoon in the summers because of the heat, and that is where these small things matter.

25 years of investment in the EPC & LSTK sector, Nuberg EPC has developed the habit of setting and improving benchmarks in the industry. We are amongst the world's fastest-growing EPC organizations with a specialized team of more than three hundred engineers providing global competitiveness.

We have maintained a 100% accident-free record to date while delivering projects around the world. It is a result of a clear focus on globally leading processes and adherence to strict quality control.

We also make sure to recruit and retain the best engineering talent. Our strength of more than 300 engineers with 300,000-person hour of skills is towards the higher side of engineering strength vs revenue ratio for the EPC industry.

Our world-class manufacturing facility in Gujarat has also resulted



in significant cost efficiencies for our clients globally.

We thus have quite a few global clients in diverse sectors. We have been working with some of the leading customers which even include Al Ghaith Industries (Abu Dhabi), Inovyn (Sweden), FLUODER (Paraguay), ADDAR (Saudi Arabia), Gulf Chlorine (Qatar), Union Chlorine (Abu Dhabi), DOSTEL (Turkey), Samuda Chemical Complex (Bangladesh), AGROCHEM (Egypt), SARL SASKO (Algeria), AMASSAS Co. (Ethiopia), Aditya Birla Chemicals (India), SCE Chemicals (Morocco), NCIC(Egypt), TCI Sanmar (Egypt), Oman Chlorine (Oman). During the pandemic, we have won 500TPD Sprea Misr sulphuric acid plant project in Ramadan, Egypt.

#### Over time, how are the EPC companies transitioning from manual and legacy systems to agile, data and AI-driven ones for environment-friendly, cost-effective, safer, and efficient processes of technologies/products?

Technologies and digitisation have been the foundation of a global effort in every sector and EPC LSTK is no different. What is noteworthy is that EPC being the factory of factories operates at scales that are magnitudes larger. Overall productivity enhancement in the EPC sector in the last 2



decades had been minor compared to between 50 and 70% productivity growth for the overall economy as per McKinsey.

Now, however, digitisation, automation, AI, Big Data is serious measures creating all-around cost efficiencies. Earlier there may have been some inertia around the capital cost of such change, but the pandemic has forced rapid strides in the shift.

## What do you have to say about Skid-mounted plant/technology?

Skid-mounted plants when used in place of the traditional stick-build methodology of on-site assembly will drastically compress the time required to build plants and reduce disruptions in operation in case of expansion or up gradation.

EPC industry will be able to provide clients with

dramatic cost, timeline, mobility, protection, and modularity advantages in the plants as the machinery will be mounted on rails, pallet, or a frame at the point of manufacturing itself. Skid mounting also enables flexibility in the architectural planning of equipment location and the ability to adjust manufacturing facility size mid-project.

EPC players will be able to assemble the sub-plants including complex piping, delicate valves, and other valuable components, and ship them protected by the frame.

Testing is one of the most important phases in constructing a plant and the skid-mounted process allows for pre-testing of plant sub-systems before shipping them nearly as it is to the final location.

#### Tell us about the investment factor in digital technology for better collaboration and more data-driven decision-making that will help to streamline the procurement process?

We at Nuberg EPC are fast incorporating the latest in digital technologies and work processes. This includes IoT-enabled monitoring and maintenance of projects and commissioned plants. We are also incorporating Big Data for smarter design and inspections, AI-driven intelligent automation, AR and VR for superior safety, communication, and training, and 3D software (Catia & Solid Works) for accuracy in delivery and reduction in commissioning times.

Automation is enabling the development of the detailed initial design that is more than 95% fit as the final design thus enabling real-world estimation of engineering resources, material, and labour. Such automation also helps us to focus on construction execution and related supply chain at an earlier stage thus compressing timelines and costs.

