

Smart solutions.
Strong relationships.

MAKING INDIA
THE CORE OPPORTUNITY

CROMPTON GREAVES LIMITED
78TH ANNUAL REPORT **2014-15**

AVANTHA
GROUP COMPANY

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CONSOLIDATED FINANCIAL HIGHLIGHTS

CONSOLIDATED NET SALES
of Business Units



8574
POWER SYSTEMS — IN RS CRORE



3233
CONSUMER PRODUCTS — IN RS CRORE



1841
INDUSTRIAL SYSTEMS — IN RS CRORE

NET SALES AND SERVICES

14013 IN RS CRORE

EBIDTA
(Earnings before Interest, Depreciation, Taxes & Amortisation, including Other Income)

770 IN RS CRORE

PROFIT BEFORE TAXES

428 IN RS CRORE

PROFIT / (LOSS)
After taxes, Minority Interest & Share of Associates (Net)

209 IN RS CRORE

ROCE
(Return on Capital Employed)

7.8% IN PERCENTAGE

RONW
(Return on Net worth)

5.7% IN PERCENTAGE



ALIGNED TO THE INDIA OPPORTUNITY

THE **CG EXPORT** CAPABILITY

₹9000Mn+
of export sales from India achieved by the Power and Industrial businesses.

85
countries receive CG products.

50%
of all high voltage switchgear manufactured by CG is exported.

India's growing potential to turn into an export hub is an opportunity CG identified much earlier. The demand for CG made products is showcased with the growth in our exports, such as a 47% growth in order intake for industrial exports over last year, or over INR 8000 million of export sales from India for power equipment. Our power products entered new geographies of Mexico, Ivory Coast, Rwanda, Mozambique, to name a few, while total export sales for industrial crossed INR 1000 million for the first time in FY14-15. Be it emerging markets such as Africa and the Middle East, or the mature markets of Europe and Americas, CG has dedicatedly worked towards expanding India's footprint on the export map year after year.

THE **CG TECHNOLOGY** CAPABILITY

800kV
Transformer Bushing developed indigenously conforming to IEC 60137 - 2008.

60%
of the total global product profile for rotating machines is manufactured by CG.

-50°C
the temperature at which CG made EHV ITs can function.



India's acceleration in manufacturing growth is as anticipated as it is crucial to the government's plans. A push that will see the country sharpen its focus on building advanced infrastructure, and the potential rise of India as a global manufacturing hub. A one of its kind Industrial Corridor, which is the largest infrastructure project undertaken by India; a power transmission grid that could put India ahead of most nations; a hundred smart cities that will need smart infrastructure. And an 8% growth rate that's among the world's best.

WE AT CG LIKE TO SAY: THERE'S OPPORTUNITY AT THE CORE.

US$1trillion

India's investment reserved for infrastructure during the 12th Five Year Plan (2012–17).

₹16,000cr

estimated investment in Ultra Mega Power Projects. These are very large sized projects, approximately 4000 MW each.

₹185bn

approved outlay by the Government for creation of trunk infrastructure under DMIC projects.

5

National Industrial Corridors identified and planned.

CG's business growth strategy pivots on providing innovative and high-end technology solutions for customers across industries. We have not only built one of the world's largest indoor high voltage laboratories in Nashik, but also the Global Design Centre for the Industrial BU in Bhopal - strategic investments that are in line with leveraging our technological edge for the opportunities of tomorrow. From our compelling suite of smart grid solutions, to the indigenous development of UHV equipment upto 1200kV, the compact GIS range from 66kV to 300kV, IE2 & IE3 range of motors and the soon to be commercially launched IE4 motors, or developing technology on electronics signalling and IGBT based propulsion systems for Railways – CG's technology focus is all about making our customers future ready.

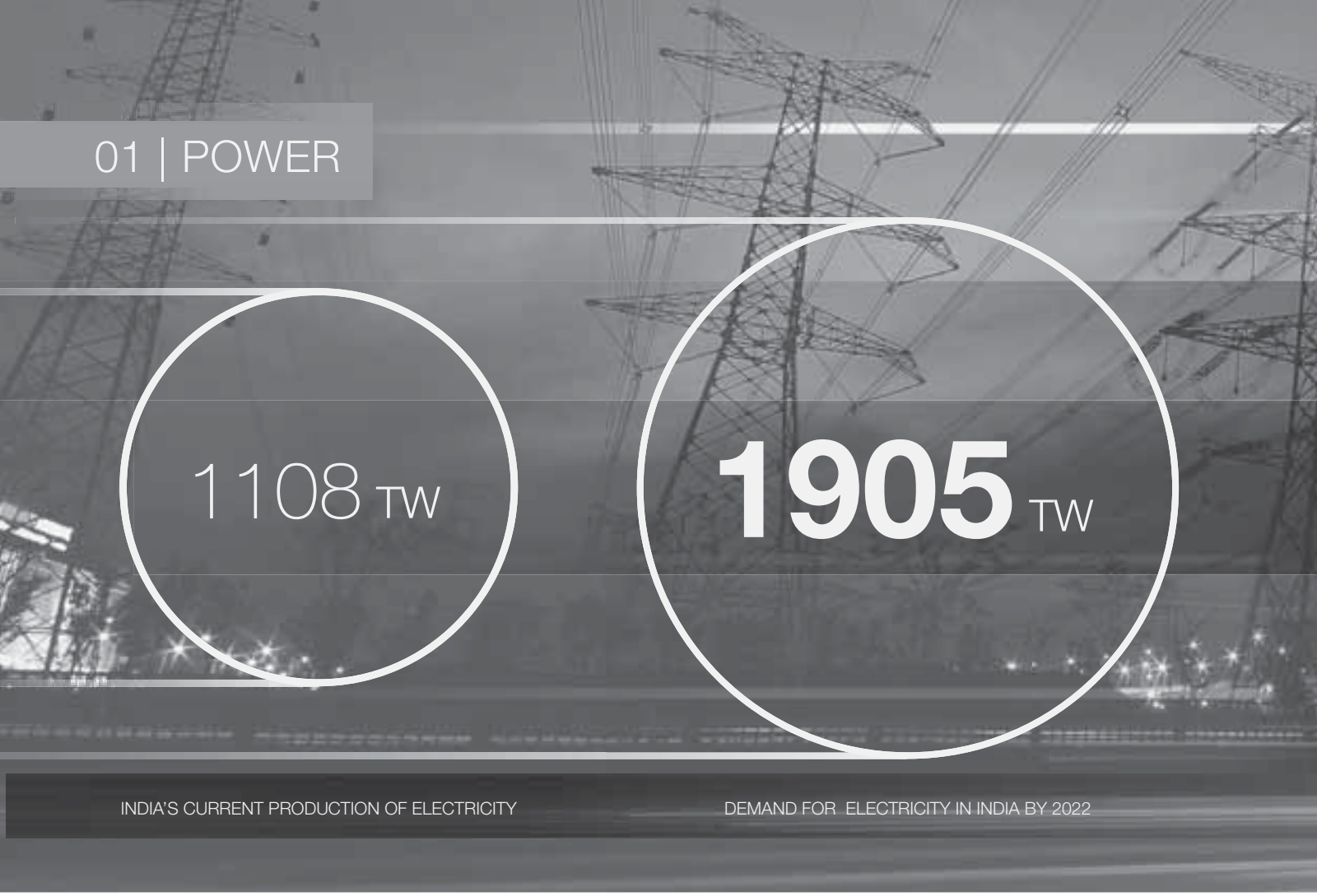
THE **CG MANUFACTURING** CAPACITY

7,00,000+
Low Voltage Rotating Machines (LVRM) manufactured annually catering to various industries.

39,000 MVA
capacity for Power Transformers in India.

2,50,000+
railway signalling products manufactured per annum.

Aligned to the country's vision of becoming a manufacturing hub, CG has maintained a strategic focus on India. Our 22 domestic manufacturing facilities, skilled workforce and technological edge stand as our competitive advantage. CG's commitment to India is exhibited through our strategic investments, be it the smart grid facility in Bengaluru that is well equipped to serve Indian utilities and industries ushering in efficiency and reliability to contemporary standards, or our world class facilities at Mandideep, Bhopal that employs advanced flexible manufacturing practices to make globally competitive transformers and motors. Our India manufacturing command lies in our understanding of the domestic market, lasting customer relationships and the continuous focus on quality & technology.



₹1190mn

Order for the highest rating Generator Step-Up Transformer (GSU) received from NTPC for their 2x800 MW super-critical thermal power plant at Darlipali in Odisha.

800kV

Spring-spring Breaker developed indigenously and type tested successfully has been approved by India's largest Transmission Utility, PGCIL.

MAKING INDIA GO FAR

Growing demand for electricity has driven the power equipments market. Nowhere is this truer than in the demand for UHV transformers and switchgear, which kick in when industrial and urban growth occurs far from where electricity is generated. India's recent emphasis on manufacturing, the birth of industrial corridors, new planned cities and expanding urban centres accelerate just this opportunity. Thus, the move to make power equipments of 765kV and beyond to build the national transmission backbone. It's in this class that CG has already established its leadership, playing a vital role in its upgradation with its indigenous UHV portfolio. It's a position we preserve with world class assets like the ₹400 million investment in the UHV Centre of Excellence at Nashik. These prepare us for a significant presence in 1200kV, a voltage level that will put India in the vanguard. Like in the case of 765kV, CG has indigenously developed the complete platform of 1200kV products which are in commission at Power Grid's 1200kV Test Station at Bina in Madhya Pradesh. These long strides in mega infrastructure development, the growing power transmission needs of a fast growing economy will likely secure the huge demand for power products and expertise from major utilities with whom CG enjoys a strong relationship.

upgrading the transmission backbone

US$224bn

expected investment in the power sector during the 12th Plan (2012 – 2017).

316%

expected increase in production of electrical equipment, a sharp rise from US$ 24 bn in 2013 to US$ 100 bn in 2022.

169000 MW

of power capacity addition targetted by the Ministry of Power (GoI) during the 12th and 13th five year plan.

126650 MW

Total transfer capacity of the National Grid by March 2022. The current transfer capacity stands at 40050 MW.

175th

Unit of 765kV Transformer manufactured and despatched by CG's Transfomer plant in Mandideep, Bhopal.

800kV

Current Transformer indigenously developed, type tested and fully approved by PGCIL.

100th

UHV reactor delivered to Power Grid Corporation of India Limited.

32%

CG's market share in terms of value and 20% in terms of MVA in the 765kV Transformers and Reactors market during FY 14-15.

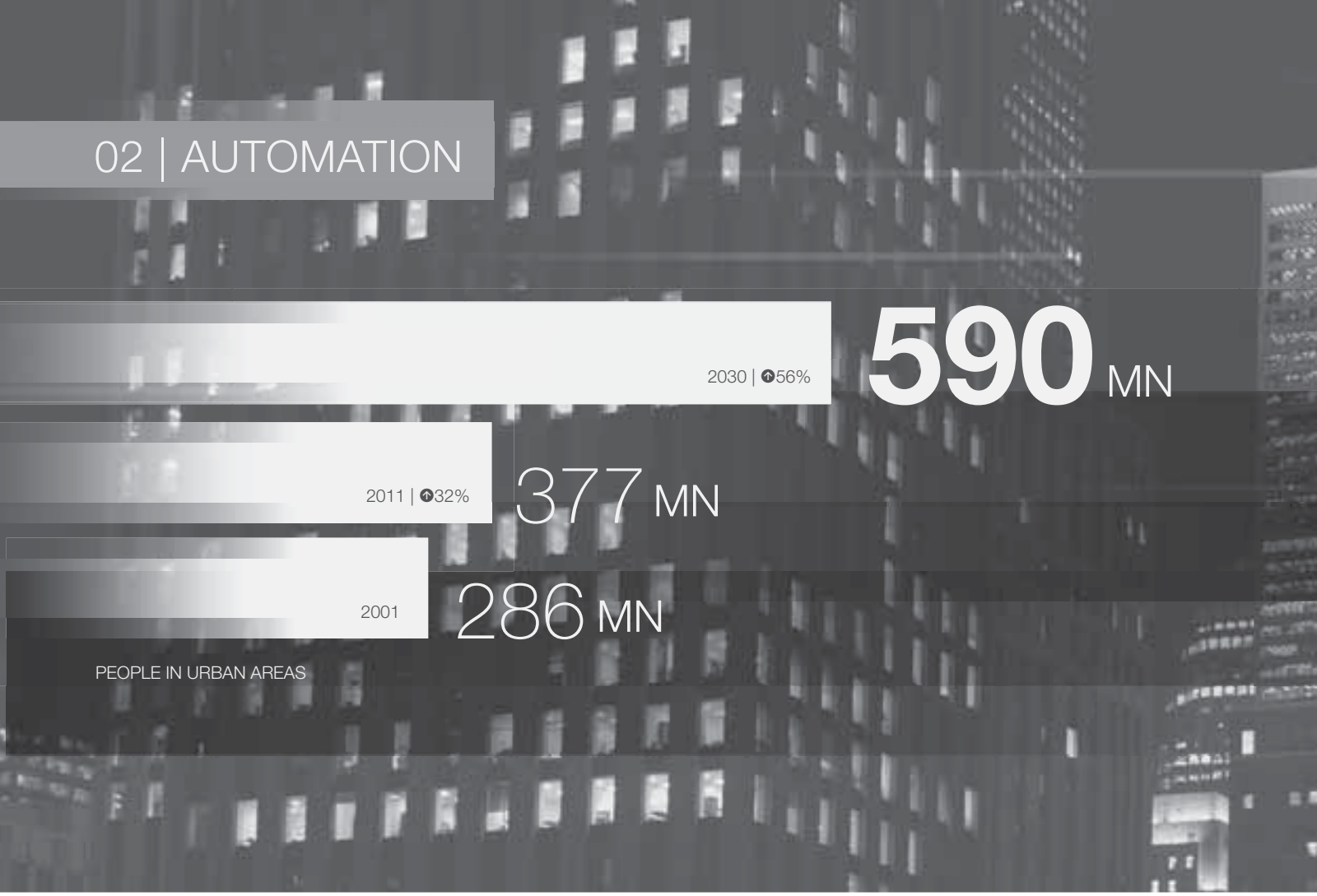
₹3600+mn

of sales achieved in FY 14-15 for 765kV Transformers and Reactors on orders from major Indian power transmission and generation utilities.

21%

of the UHV Transformers & Reactors market has been captured by CG cumulatively as a result of its consistent performance.

02 | AUTOMATION



400kV

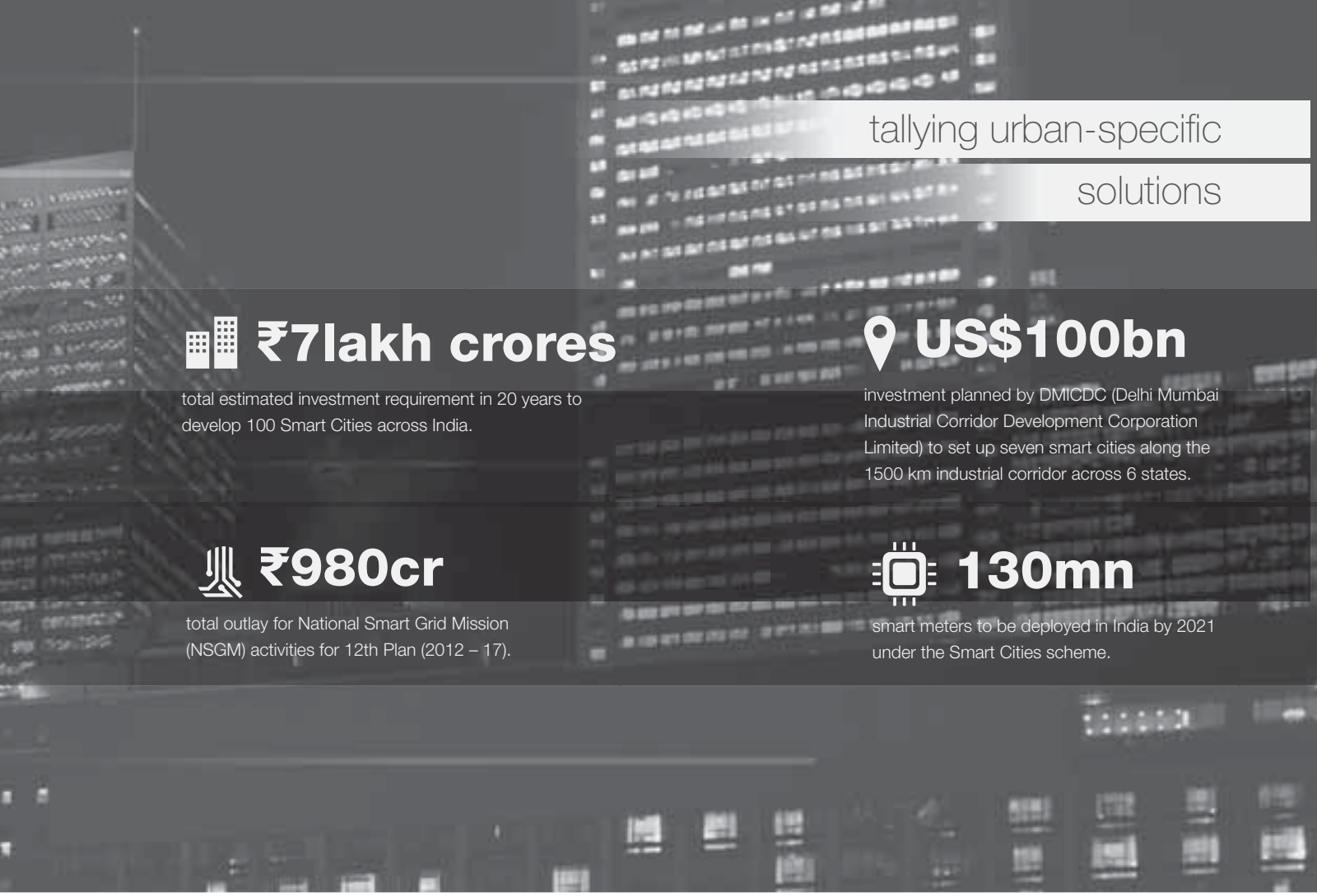
complete Substation Automation Systems delivered for the first time to the Uttar Pradesh Transmission Corporation Limited (UPPTCL).

20000+

consumers to potentially benefit from the Smart Grid deployment by Uttar Gujarat Vij Company Ltd (UGVCL) CG successfully demonstrated the proof of concept for Smart Meter deployment under the pilot project.

MAKING INDIA COUNT

Drive through India today and the metamorphosis of rural areas into urban ones is obvious— "rurbanisation" as it's called. Smaller urban centres swell into larger ones and the largest continue to grow. But urbanisation is also being driven by the need for industrial and business infrastructure. A 100 smart cities is a response to this situation, as are the numerous rejuvenation projects being funded by the centre and the states. These future cities will require smart infrastucture that will have integrated automated services like water, waste treatment, recycling, transport and most importantly, smart grids. This will in turn spur demand for power automation and distribution products, all of which adorn the CG portfolio. From developing gas insulated substations that are best suited for crammed urban spaces to the industry-leading technology of ZIV meters, CG is ahead of the curve. Add the fact that CG delivered its first indigenous 400kV Protection Control & Automation solution, for a state utility and it's easy to see how CG is poised to capture a thicker slice of the future.



tallying urban-specific solutions

₹7lakh crores

total estimated investment requirement in 20 years to develop 100 Smart Cities across India.

US$100bn

investment planned by DMICDC (Delhi Mumbai Industrial Corridor Development Corporation Limited) to set up seven smart cities along the 1500 km industrial corridor across 6 states.

₹980cr

total outlay for National Smart Grid Mission (NSGM) activities for 12th Plan (2012 – 17).

130mn

smart meters to be deployed in India by 2021 under the Smart Cities scheme.

CG's 1st

765kV PLCC (Power Line Carrier Communication System) successfully commissioned at PGCIL. This fully integrated voice/data communication system will enable PGCIL to have a communication link in far reaching areas and remotely access its operations.

2nd

year of successful performance of CG Automation India in the 1st 400kV SAS project at Korba West Power Company Limited (KWPCL). This will further strengthen the local manufacturing approvals from utilities like Power Grid.

300+

FRTU (Feeder Remote Terminal Units) commissioned in Reliance Infrastructure Mumbai that provides services like power quality management and reduces the power restoration time thus improving the efficiency of their DAS.

51%

growth in order intake by CG's Automation business in India in FY14-15. To its credit CG has its own state-of-the-art manufacturing facility for automation products in Bangalore, India to cater to the growing domestic market needs.

54%

increase in enquiry base for Automation products and solutions in FY2014-15 over the last fiscal. To precisely monitor & control the load flow, CG has introduced single and three phase Smart Meters in India for AMR (Automatic Meter Reading) /AMI (Advanced Metering Infrastructure), as well as Power Management / Demand response system.

20%

increase in CG's market share of PLCC system in FY 14 – 15. Use of PLCC in modern electrical power system is mainly for telemetry and telecontrol.



11kV, 4 MW

is the expanded range for NTPC (prev. 2.5 MW). LRM India's offering for NTPC expands with this order to supply motors up to 11kV, 4 MW for all their projects. With growth expected in power sector for FY 15-16, this range expansion approval will help LRM India bag more orders.

160kW

Apex series IE3 motors supplied for the first time. 207 LT motors supplied to Shree Cement Ltd, one of the biggest cement makers in Northern India for the Uttar Pradesh Grinding Unit project, "a green field project".

GIVING INDIA MOMENTUM

India's plan to rank among the world's top growth economies and manufacturing destinations by 2020 will be fed by new energy capacity, large innovative infrastructure projects and the need for energy efficient solutions for a wide range of industries. Each of these creates significant opportunity for CG's businesses. Among the new blue-sky infrastructure projects, the most ambitious is the Delhi-Mumbai Industrial Corridor (DMIC), the largest infrastructure project in India. The programme envisages development of infrastructure linkages like power plants, assured water supply, high capacity transportation and logistics facilities, areas for which CG has a wide range of offerings with proven track record. With the Indian Railways exploring the PPP mode of delivery to award projects worth $1,000 billion, CG is well positioned to grab the opportunities in this segment. A testament of our successful track record with the Indian Railways is the fact that this business alone booked cumulative orders worth Rs 450 crore this fiscal year. As India accelerates towards growth, CG's product portfolio and technology offerings, covering a wide gamut of sectors will bolster efficient production in industries.