

"Going green doesn't start with doing green acts, it starts with a shift in consciousness."





#### Lumino Industries Ltd.

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#### Lumino Industries Ltd. ISO 9001:2015 Certified Company

# OUR VISITING CARD

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#### Who we are

is one of India's few integrated infrastructure Manufacturing Division and the Engineering Procurement Construction (EPC) division.



#### Where we are

Bengal. In terms of product



#### **Our management**

Managing Director, Lumino Industries



#### Manufacturing of Conductors & Cables

**Our verticals** 

- EPC
- Transmission & Distribution
- Railway Electrification
- Reconductoring with HTLS





## OUR VISION

Lumino's vision is to become a global leader in manufacturing of electrical products and an innovative infrastructure solution provider. We strive to deliver sustainable value to our customers along with a unique and collaborative work environment for the employees.







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To create holistic infrastructure solutions to empower lives for a better tomorrow.

While holding a deep respect for all individuals inside and outside the company and the community at large, the company lays down its mission statement.

To make, distribute and sell the finest quality of products and promoting business practices that respect the Earth and the Environment.

Achieve '**Customer Delight**' through innovative, cost effective and value added services and products.

Being a responsible and ethical corporate citizen with a positive impact on our industry and community at large.

## FROM THE FOUNDER'S DESK



#### Dear Reader,

A visionary, an ingenious first-generation entrepreneur, Mr. Purushottam Dass Goel, is the founder and chairman of Lumino Industries Limited. With ambition and insight, Mr. Purushottam Dass Goel nurtured his aspiration at a young age and what started off in 1969 as a small trading house in Ezra Street, Kolkata, had emerged under his leadership, as one of the leading manufacturers of overhead transmission line conductors, various types of cables and a infrastructure services company.

As an amicable pioneer he has greatly emphasized on the importance of human resource in a business and has been conducive in instilling the core principles of Reliability, Sincerity and Commitment in every employee.

Purushottam Dass Goel Chairman



## MANAGING DIRECTOR'S OVERVIEW

A true embodiment of leadership, Mr. Devendra Goel has been spearheading the entire administration with his adherence and perseverance. His leadership, which is inculcated with affection, thoughtfulness and rationality, has been instrumental in the growth of Lumino as the company not only thrived as an overhead conductor manufacturing giant but also emerged as an infra engineering organization undertaking various turnkey power distribution, railway electrification, water management and solar EPC projects across the nation and globally. Lumino, under Mr. Devendra Goel's supervision, is set to venture into the business of roads and highways construction along with distribution of oil and piped gas.

Mr. Devendra Goel's proficiency and team morale have piloted Lumino to become one of the major holistic infrastructure companies anchored on values, governance, excellence and meritocracy.

Good corporate governance is fundamental to our business ethics. We pursue the highest standards of transparency, accountability, professionalism, social responsiveness and ethical business practices as a self discipline code for corporate governance.

Devendra Goel Managing Director

### **JOINT MANAGING** DIRECTOR'S OVERVIEW

Jay Goel, at present the Jt. Managing Director of the legacy of the company. With his academic brilliance, business acumen and expertise he has marshalled Lumino to greater heights. Over the past few years, we have earned an impeccable reputation and defined the contours of the wiring we assist our customers by focusing on trust, value customer satisfaction.

Joint Managing Director

#### OUR DIFFERENTIATORS





# **S GROWTH-FOCUSED**

#### OUR **STRENGTHS**

Well-diversified across businesses and geographies: Lumino has a varied product basket and has reduced portfolio risk by avoiding excessive concentration in any one market or depending on a single geography

Capabilities to execute

projects in difficult terrains

and conditions: Armed with

team with key precision and

managing projects across

difficult topography is now

an inhouse engineering

strategic knowledge,

an easy prospect.

Strong project management and execution capabilities: Lumino's project management team comprises highly experienced and dynamic managers with strong expertise in the planning and execution of infrastructure projects on turnkey basis.



Unparalleled manufacturing,

engineering and design capabilities: Precision-led R&D, manufacturing excellence backed by

insightful management and intellectual capital makes

capabilities and know-how

unparalleled at Lumino

Products approved by all

providing seamless



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Preferred contractor for Fast Track projects: Backed by decades of experience, Lumino has today emerged as the contractor of choice for projects that require a quick turnaround without compromising quality.

Well-integrated global supply chain: At Lumino, every phase from procurement of raw materials to production, quality control to packaging, distribution or supply to eventual delivery is streamlined and inseparable.

Commitment to timely

Experienced professionals: The team comprises of well-qualified engineers and technocrates, mandated with the task of ensuring that product and service quality is consistently maintained and aligned with national as well as international standards and requirements.

Continual emphasis on new product development and technical collaborations



customer satisfaction, also of performance certificates.



Quality is not an act, it's a habit. At Lumino, quality has always been a journey and not a destination. At Lumino, quality control checks exist at every stage-right from procuring raw materials to the end product.

The basic framework of the Quality management system at Lumino was in the form of implementation of ISO 9001 systems across the plants with more focus on manufacturing processes and products. The next phase was



ISO 9001:2015 • ISO 14001:2015 • OHSAS 18001:2007

## QUALITY CONTROL

adoption and successful implementation of ISO14001 systems, during the journey of which the company's Supply Chain embraced various tools and techniques such as Cultural Pillar Approach, Balance Score Card & policy deployment approach that further aided quality by minimising faulty inputs, more initiatives and milestones will be further added as progression happens. The LUMINO Testing Laboratories of its Junglepore plants have received the prestigious ISO 17025:2005 accreditation certificate from National Accreditation Board for Testing & Calibration Laboratories (NABL).

## MANUFACTURING

Lumino's Conductor and Cable division has been steadily growing. This is made possible by our extensive investments in equipment innovation and our diversified and wide product range. As a highly reputed partner of choice to our customers, we cater to various speciality sectors like Transmission and Distribution, Railway, Renewable and all industrial domain.

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Our R&D consultancy services are also in demand. We provide specialist technical services, conductor and cable design and other research-oriented value added services gained from our legacy of experience over the years.

At Lumino, we're leading the innovation curve as the largest one-stop solution for design, manufacturing and testing of conductors.

## CONDUCTORS

#### ALL ALUMINUM CONDUCTOR ALLOY REINFORCED (ACAR)

#### **APPLICATION:**

Aluminium Conductors Alloy Reinforced (ACAR) are extensively used for overhead distribution and transmission lines.

These are used where ampacity, strength and low weight are the main considerations for line design.

#### THERMAL RESISTANT ALUMINIUM CONDUCTOR STEEL REINFORCED (TACSR & TACSR/AW))

High Temperature Thermal Resistant Alloy Conductor: These are high ampacity conductors with inner core composed of Galvanized steel or Aluminium clad Steel & outer layer composed of thermal resistant aluminium alloy with round or trapezoidal shaped.

#### HIGH CONDUCTIVITY ALLOY CONDUCTORS AL5, AL6, AL7, AL57, AL59, ALLOY 1120

**APPLICATION:** 

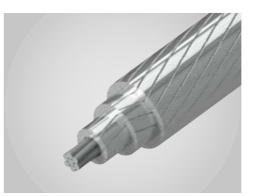
High Conductivity Alloy Conductors (AAAC) can be used in Medium, High and Extra-High voltage transmission lines. AAAC offers better sag performance due to the high strength-to-weight ratio provided by the aluminium-alloy. In addition, AAAC provides a higher corrosion resistance than ACSR conductors.





#### EXTRA HIGH STRENGTH - THERMAL RESISTANT ALUMINIUM ALLOY CONDUCTOR STEEL REINFORCED (Hi-TACSR & Hi-TACSR/AW)

High Temperature Thermal Resistant Alloy Conductor: These are high ampacity conductors with inner core composed of Galvanized steel or Aluminium clad Steel & outer layer composed of high Strength thermal resistant aluminium alloy with round or trapezoidal shaped.



#### SUPER THERMAL RESISTANT ALUMINUM ALLOY CONDUCTOR, ALUMINUM CLAD INVAR REINFORCED (STACIR & STACIR/TW)

High Temperature Thermal Resistant Alloy Conductor: These are high ampacity conductors with inner core composed of Aluminium clad Invar Wire. INVAR is a metal alloy with 36% Ni in Steel. & outer layer composed of Super Thermal Resistant Aluminium alloy with round or trapezoidal shaped wires.



#### ALUMINIUM CONDUCTORS STEEL SUPPORTED (ACSS)

ACSS Conductors with a concentric structure. The conductor is constructed of a steel core braided with one or more aluminium wire layers. ACSS Conductors are manufactured in accordance with the requirements of the latest edition of ASTM standards of the applicable B856 specification. The annealed aluminium used in the conductors makes it more flexible, thanks to which most of the loads rest on the steel core, which acts as the load-bearing function of the ACSS conductor The steel core may consist of 7, 19, 37 class A zinc-coated wires. Such a coating is usually sufficient for use under normal environmental operating conditions of conductors.



#### GAP TYPE THERMAL-RESISTANT ALUMINIUM ALLOY CONDUCTOR STEEL REINFORCED (GTACSR) GAP TYPE SUPER THERMAL-RESISTANT ALUMINIUM ALLOY CONDUCTOR STEEL REINFORCED (GZTACSR)

High Temperature Thermal Resistant Alloy Conductor: GTACSR/GZTACSR has a unique construction featuring a small GAP between the steel core and (super) thermal-resistant aluminium alloy layer. The combination of the (super) thermal resistant aluminium alloy and the "Gap construction" offers excellent sag and current-carrying characteristics.



#### ALUMINUM CONDUCTOR FIBER REINFORCED (ACFR)

Aluminum Conductor Fiber Reinforced Conductors: Carbon composite core with unique stranding technology is used as a core of innovated High-performance conductor called Aluminum Conductor Fiber Reinforced (ACFR). Due to electrical demand has been increasing rapidly ACFR will provide the best solution with more than twice the ampacity & low sag at higher operating temperature when compared with convention conductors.

When compared technically, ACFR conductors are lighter in weight, compatible in strength, have lower electrical losses compared to ACSR conductors, thus giving greater advantages in overhead transmission lines.

## CABLES



#### LV XLPE/PVC insulated power cables.

Low voltage power cables are used in electric power distribution substations, industrial applications to distribution electric panels, etc.

Power cables transfer energy from a source to equipment.



#### LV XLPE/PVC insulated control cables.

Mainly used for interconnections for control circuits, communication systems, electrical panels, machine tools as well as lighting at lower loads.

Control cables send signals to control the functioning of equipment.



#### LV aerial bunch cable

Aerial bundled cables (simply ABC) are overhead power lines using several insulated phase conductors bundled tightly together, usually with a bare neutral conductor. This contrasts with the traditional practice of using un-insulated conductors separated by air gaps. This variation of overhead power lines utilizes the same principles as bundled conductors, except that they are closer together to the point of touching but each conductor is surrounded by an insulating layer (except for the neutral line).







FLAME RETARDANT MULTI STRAND single core unsheathed flexible cables in voltage grade upto and including 1100 V.



#### **Railway Signalling Cable**

Lumino's rail signalling cable are designed to ensure the smooth running of railway network.

Signalling cable plays a vital role in the functioning of equipment's associated with railway signals, points, track circuits, block instruments etc.



#### **Concentric cable**

Concentric cables are predominantly used by Distribution Network Operators (DNO's) when providing the final service connection to domestic properties especially for the African and latin American market.

Lumino's anti-theft cables help utilities prevent electricity theft.



#### **Mining Cable**

Mining cables are utilized in various types of mining applications and intended for long-term performance in the extremely harsh environment, while providing the greatest levels of safety and productivity. These cables offer excellent flexibility, torsion and drag resistance, in addition to exceptional electrical, temperature parameters, abrasion and flame resistance.



#### Lv FR/FRLSH/FR-LSZH Fire performance cables

They are intended for use in installations where vital circuits are required to continue operation in the event of the outbreak of fire. It is particularly suited for use in public buildings and constructions. There is an important distinction between fire resistant cables and flame retardant cables.

#### Screened & Instrumentation cable

These cables find wide application in measurement, control and supervision in process instruments and equipments, various communication and data acquisition systems, computer systems, digital control & measurement systems etc. and are designed to transmit signal without interference.



#### **Solar Cables**

Lumino Introduces a range of Solar Cables for the interconnection within photovoltaic systems such as solar panel rays. Suitable for fixed installations, within conduit or systems



#### **MV overhead covered conductors**

Covered conductors provide protection from flash overs caused by the clashing of conductors, bird/animal disturbance, fallen tree branches and debris, especially during severe weather and high pollution.



#### **UL 44 – Thermoset Insulated wire**

These cables are used for general purpose wiring in circuits not exceeding 600 volts. Suitable for use in populated confined spaces such as auditoriums, arenas, health care facilities and public transit facilities where more stringent specifications for flame, smoke and toxicity emission levels are desired. May be used in wet or dry locations, installed in conduit, duct, desired raceways and cable trays for service, feeder and branch circuits, open air with supporting messenger







Aligned with our focus on maximizing customer value and in a bid to forward integrate operations, Lumino entered the EPC business in 2003 and is presently engaged in various EPC projects. The work portfolio includes providing Engineering Procurement & Commissioning (EPC) of Power Transmission, Distribution & Sub Station infrastructure like construction of Transmission lines, Grid Sub Station and Distribution sub-station, erection of 33/11 kV HT and LT Lines, installation and augmentation of 33/11 kV Sub Station, providing household (BPL & APL) connections under various Central and State Government Schemes. Importantly, the organization provides a one-stop solution for survey, design, engineering and construction for various T & D projects across India and abroad. We have executed over INR 2500 crore worth of projects.

Lumino's EPC project management team comprises highly experienced and dynamic technocrats with strong expertise in the planning and execution of EPC projects on turnkey basis. With a full-fledged construction division bolstered with modern equipment's and contemporary tools and testing instruments for erection, overcoming challenges becomes successful in the commissioning of such projects. Strength and confidence drawn from meeting customer commitments has enabled the skilled and dedicated team members to compete with the best names in power transmission and distribution domain.





## TRANSMISSION & DISTRIBUTION

(RURAL ELECTRIFICATION, TRANSMISSION LINES, SUBSTATION – UPTO 765KV) Lumino is a leader in the Power Transmission & Distribution EPC space.



The Company has capabilities to design, manufacture, test, supply and erect transmission lines, AIS/GIS EHV SUBSTATION on turnkey basis up to 765 KV along with end-to-end solutions for underground LV, HV and EHV cabling works. The Company also executes turnkey EPC projects that involve High Voltage Electrical Switching and Distribution Substations.

Aided by a pool of highly experienced professionals who are constantly committed to delivering projects ahead of time, Lumino has developed unmatched strength in surveying, designing and engineering of complex and large projects. Its strong design and engineering skills, execution proficiency and extensive experience has helped the Company provide optimised substation solutions for its clients. Pioneering techniques in innovation, quality and speed, have enabled successful execution of projects in harsh and remote environments and difficult topographies.

The Company has strong in-house design & engineering capabilities for electrical as well as structural and civil works, global supply chain management team and highly experienced project management team to deliver these projects as per customer's requirements. From connecting the hinterland of the nation, to developed and developing countries, Lumino has been powering infrastructure in countries such as Bhutan, Bangladesh, Nepal, SriLanka, Kenya, Nigeria, Rwanda, Ethiopia, Tanzania, Ghana, among others.

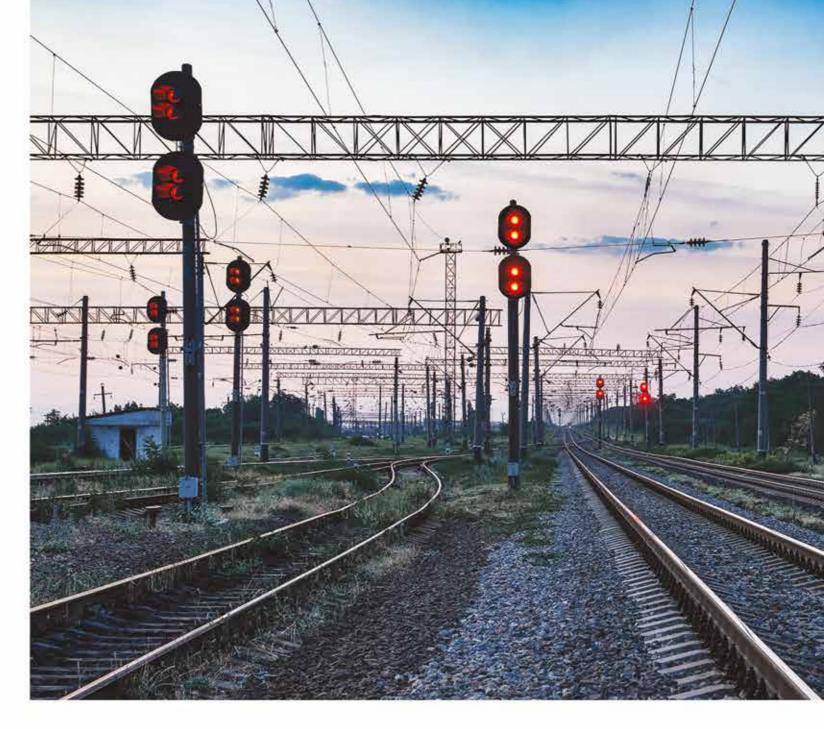
## RECONDUCTORING WITH HTLS **CONDUCTOR**





We offer end-to-end solutions by strengthening towers, replacement of HTLS conductor along with associated fittings and insulators in 33kV to 400kV transmission lines. To ensure uninterrupted power supply, we offer training, maintenance, and post-installation services. Lumino has successfully carried out over complex projects by providing double the required capacity.

We offer end-to-end solutions for effective and efficient transmission of double or more power in existing corridors of 33kV to 400kV transmission systems by strengthening the existing towers/monopoles/poles. This is done by keeping other circuit(s) of the line in live condition.



## RAILWAY **ELECTRIFICATION**





Lumino has entered railway electrification space. The Company through its strong foundation and skilled manpower is looking to cater to the evolving needs of the railway industry by fast-tracking project execution as well as adopting new technologies and mechanized construction methods.



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Lumino is a comprehensive solutions provider, deploying world class technology to design, install and commission benchmark solar projects. Our skilled and dedicated EPC team ensures the completion of each solar plant from concept to commissioning of the plant. The company, over the years, has developed an internationally accredited expertise in engineering and technology, procurement and project management, construction and commissioning with a strong command over asset management.

## WATER **MANAGEMENT**

#### (WATER TREATMENT PLANT, SEWERAGE TREATMENT PLANT & DISTRIBUTION OF WATER PIPELINE)

In the modern era of infrastructure, reliable water supply for both Portable and non-portable uses is essential and Lumino is committed for providing the same. Lumino infrastructure provides the Modern technique of water purification including the conventional WTP and water supply system to cater the rural population as per the requirement and specification of Jal Jeevan Mission of GOI. With strong foothold in the domain of Survey, design, Construction, Operation & Maintenance of complete water supply system including the Customer billing, Lumino has infrastructure and team of Engineers to implement drinking water supply system and monitoring the same through the SCADA system in order to reduce the NRW.

For Industrial clients, the emphasis is on reconditioning of the effluent water for the production purposes. Lumino can provides wide range of solutions from coagulation & flocculation, sedimentation, media filtration and disinfection through Chlorination or UV system and also by using the modern technologies such as membrane filtration and advance oxidation process (AOP) in order to provide the Zero liquid discharge plant to our clients.





## GLOBAL RECOGNITION



Ethiopia, Tanzania, Ghana, Australia, Zambia, Afghanistan and Abu Dhabi among others.













- NEPAL

BANGLADESH









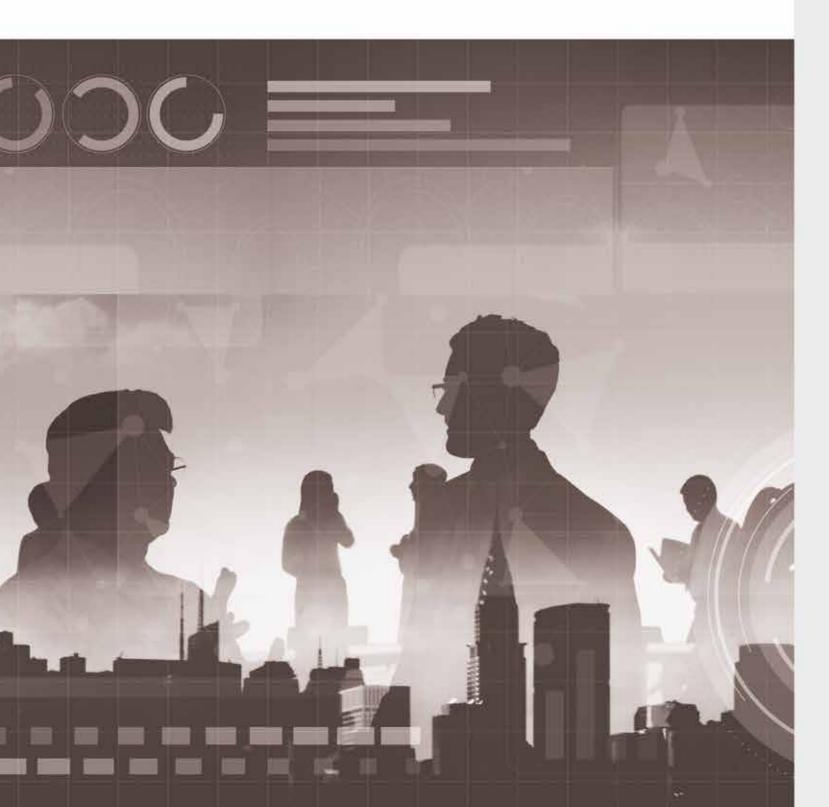




## CLIENTELE



We credit our steady growth over the years to the foundation provided by the strong connect with our clients. It is the faith placed in us by them that inspires us to strive harder and perform better. It motivates us to deliver on our promises and exceed our targets. Simply put, our clients make us better.







As a responsible corporate citizen, Lumino focuses on working in collaboration with local communities by respecting their customs and traditions. Besides garnering critical support, the company's holistic stakeholder engagements result in unlocking synergies with the local communities and administration.

As part of its CSR commitment, Lumino undertakes several initiatives to ensure overall development of the community in which it operates. The aim of these initiatives is to transform the lives of the communities and help them build a sustainable future.

## **SUSTAINABILITY**

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## GROUP ACTIVITIES SHANTI WELLNESS





#### **DIAGNOSTIC CENTRE**

#### SHANTI WELLNESS CARE: LUMINO'S HUMANE DIMENSION

Shanti Wellness Care, a new venture in health and wellness, marks Lumino's entry into the healthcare sector, an indication of the Company's zeal to serve mankind better. To bring Shanti Wellness Care at par with the already-established brands, the Company has pooled together the finest in technology and manpower resources and has left no stone unturned to provide immediate and empathetic diagnostic services to the people of Kolkata. Armed with the guiding principles of compassion, innovation and trust, the principal aim of Shanti Wellness Care is to bring the best in healthcare services.





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Lumino is committed to develop and deliver world class infrastructural projects in India. We believe that the true growth and prosperity of a nation can be marked only through development of credible infrastructure that can aid and enhance development of other sectors. A complete infrastructure solutions provider, having executed all-terrain, all-weather roads we now foray into highways with built-in structures such as tunnels, major and minor bridges, cross drainage works, and toll plazas. We have mastered the art of dealing with complex geological conditions and hope to continue our prowess in this terrain in the foreseeable future. Our second focus is our foray into an extensive gas pipeline network in the country. Natural Gas, a new age fuel is the cleanest, efficient, non-polluting, environmental friendly and relatively economical of the fossil fuel in the modern day industrial society. Gas Pipeline Infrastructure connects various gas sources to different gas markets to meet the existing/ future natural gas demand of various Powers, Fertilizer, CGD and other industries in the Country. The gas pipeline infrastructure has facilitated widespread industrialization and has brought significant socio-economic changes to different parts of the country. A big challenge lies in bridging the physical gap between demand and supply centers in an efficient, safe and eco-friendly manner. Pipeline transportation of gas offers a safe, economic and environmentally sound alternative to most other modes of energy transport. The Government recognizes the need to augment the natural gas transmission infrastructure in the country and has been driving the development of natural gas pipeline connecting all regions of the country. It is our unswerving mission now to connect the dots in India's new-age infrastructure mission.