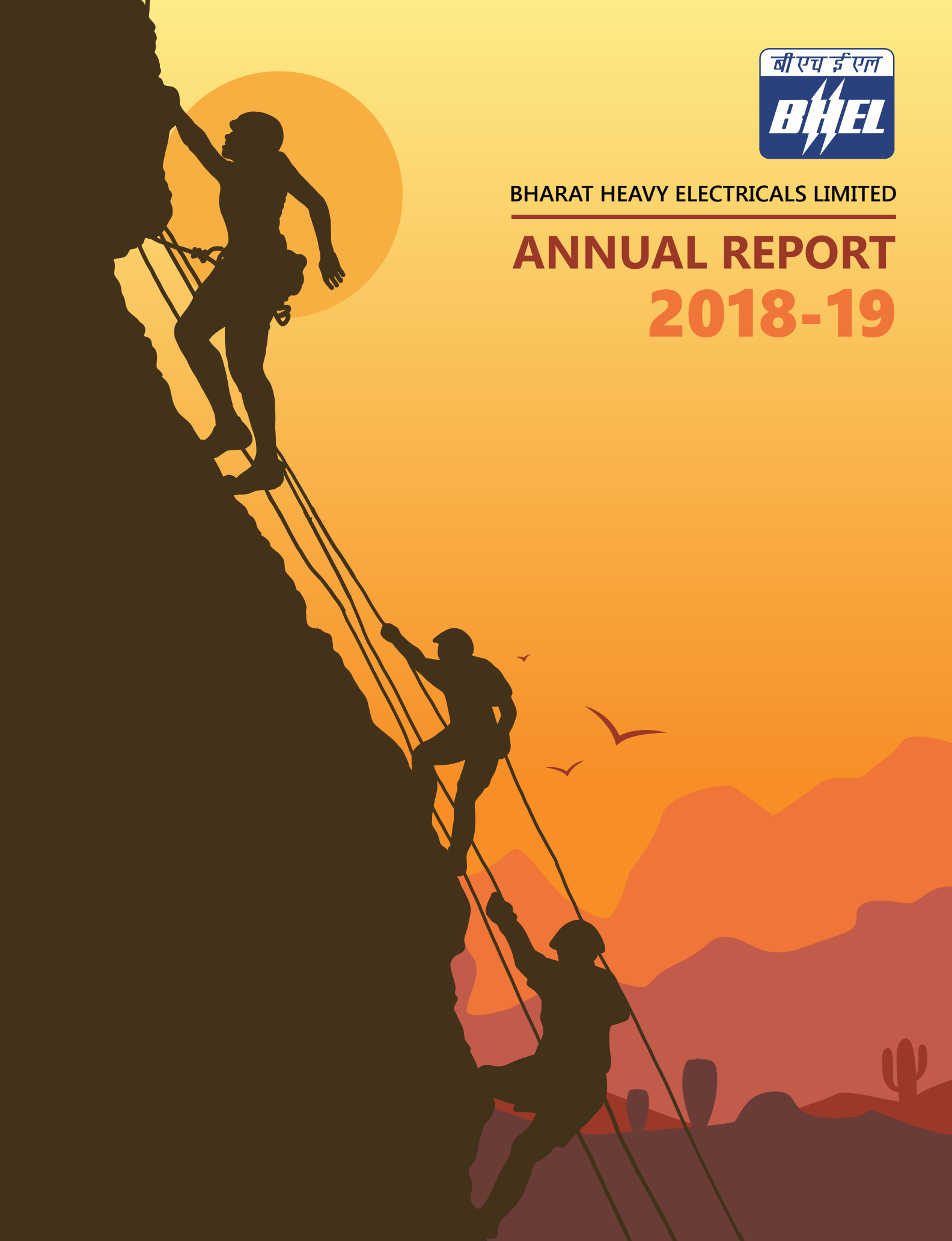




BHARAT HEAVY ELECTRICALS LIMITED

# ANNUAL REPORT 2018-19



# CREATING A NEW BHEL, A NEW INDIA

## WE ARE...



**India's largest**  
engineering and  
manufacturing  
enterprise of its kind



**The largest contributor**  
to the country's installed  
generation capacity with  
>53% share



**Present pan-India:**  
**16 manufacturing units,**  
**8 service centres**



**Second largest**  
employer in Indian  
capital goods industry

## WE SERVE...



Power



Industry



Transportation



Renewables



Transmission



Defence & Aerospace

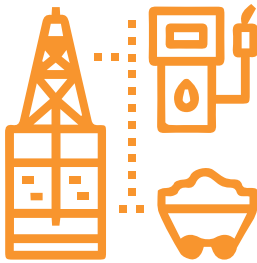


Energy Storage



Oil & Gas

## WE HAVE...



Executed **447 Coal**, **418 Hydro**, **102 Gas**, **12 Nuclear** and **40 MW-scale Grid connected Solar PV** plants distributed in **all states** and **6 union territories** of the country

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References in **83 countries** in all **6 inhabited continents**

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*Single source of multiple solutions for energy, industry and infrastructure segments.*

*The undisputed leader amongst Indian power plant equipment manufacturers.*

*World class technology and state-of-the-art assets.*

*Highest investment on R&D and innovation in the Indian engineering field.*

*Contributing to powering India's neighbourhood.*

*Focusing on strategic transformation for creating BHEL of tomorrow.*

# Technologies for Modern Transportation

**Made in India !**

BHEL has supplied the first in-house manufactured 6000 HP WAG 9H electric locomotives to Indian Railways and has developed 1190 KW traction motor, the highest powered traction motor made in India. BHEL has also developed regenerative braking system which has been retrofitted in 5000 HP, WAG7 electric locomotives of the Indian Railways for the first time.







Having been a long standing supplier to the Indian Railways, BHEL is now making new forays in the transportation segment with manufacturing of metro coaches, rolling stock for high speed railways, railway electrification and environmentally friendly and efficient rolling stock for Indian Railways.

With its engineering and product development capabilities, BHEL is fully geared-up to provide innovative solutions to address the upcoming requirements of rail transportation.



BHEL make 5000 HP WAG7 electric locomotive with retrofitted regenerative braking system

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# LETTER TO SHAREHOLDERS



*Dear Shareholders,*

It is an honor and a privilege to present the 55<sup>th</sup> Annual Report to our valued shareholders. While contributing to the nation-building endeavours, your company has registered profitable growth during 2018-19. This performance is remarkable in the face of continuous decline in the market for the company's traditional product lines, and the moderate performance of the domestic capital goods industry.

## Key Performance Highlights

- Recorded turnover of ₹29,349 Crore, as against ₹27,850 Crore in the previous year, an increase of 5.4%.
- Achieved Profit Before Tax (PBT) of ₹2,058 Crore compared to ₹1,585 Crore in the year before, registering an increase of 30%.
- Achieved Profit After Tax (PAT) of ₹1,215 Crore compared to ₹807 Crore in the year before, registering an increase of 51%.
- Firmly established itself as the leader in the domestic emission control equipment market with a long list of project wins.

- Took significant steps in new business areas like transportation, solar power, energy storage business, and nuclear power.

## Economic & Business Environment

Global economic growth, which has remained subdued for the past three years, is expected to continue to be moderate in the near term. In this scenario, Indian economy has become one of the fastest-growing major economies in the world. Indices of major core industries, such as steel, cement and electricity have increased consistently over the last few years. India has become the second largest producer of steel and cement and the third largest producer of electricity in the world. The government's vision of India as a US \$5 Trillion economy by 2025 is presenting new growth opportunities to engineering and manufacturing companies like BHEL. Most segments of India's manufacturing sector, which will be a key contributor towards the achievement of this vision, will require capacity expansion as well as continuous and dependable electricity supply.

The government's focus on '24x7 Power for All' is expected to unlock the dormant potential for demand for electricity. Other significant initiatives, such as implementation of emission

control norms for thermal power plants, push for augmentation of nuclear power generation capacity, optimization of use of natural resources in power plants, and modernization of transmission and distribution network are providing newer avenues of growth to the industry. For our existing product lines, which were seeing contraction for the past few years, this holds promise for improved growth.

Your company has already begun to capitalize on some of the opportunities arising out of the investments in transportation infrastructure such as rail track electrification, etc. While building further on these successes, we will also focus on other areas, such as urban metro rail and high speed rail projects. The government's thrust on indigenization of manufacturing in aerospace and defence sector also holds significant growth potential for your company with its past record as a longstanding and dependable defence supplier.

Future investments in core industries like cement, coal, petrochemical and steel, and developments in urban infrastructure such as smart-cities, waste-to-energy, sea-water desalination, sewage treatment, etc. are encouraging developments for us to chart out new areas for growth.

## Foundations for Growth

BHEL, with its large, rich and diversified talent pool, strong engineering and manufacturing base, and technology depth, is well positioned to harness the present as well as emerging opportunities. In the coming year, the company is focusing on consolidation to strengthen foundations for future growth through:

- 1. Focus on Execution:** Your company will be focusing on reviewing and tightening up of the execution methodology for expeditious completion of projects. This has a twofold objective – on the one hand this will help the company to promptly realize the outstanding dues in projects where large proportion of work is done but dues are not realized due to some pending milestones. On the other hand, it will help the company to formulate a strategy for cost and time efficient execution in the increasingly competitive environment.
- 2. Working Capital:** Your company is making focused efforts for recovery of long due amounts to improve the working capital position and generate funds for future growth.
- 3. Quality:** World class quality and ruggedness of products and systems supplied by your company have always been a great source of competitive strength. To keep the company aligned with the increasingly stringent quality requirements in the market, a companywide *Quality First* movement is being taken up.
- 4. Investing in People:** BHEL has always believed that its employees are its biggest asset and drivers for growth of the company. In this direction, the company is taking up a major HR Excellence initiative for sharpening the skills of

its people and preparing them for the emerging market scenario.

## 5. Expansion & Diversification:

- a. Your company is working on a range of new products/systems for diversification into areas like transportation, defence, E-vehicles, water business, coal-to-methanol, etc. to build new drivers of growth.
- b. We are geared to garner maximum share in the existing portfolio of power business and are upgrading the product profile to harness new opportunities in emission control equipment/systems, development of digital technologies and optimization of natural resources like fuel and water.

- 6. Technology Development:** BHEL, along with NTPC and IGCAR is developing the world's most efficient Advanced Ultra Supercritical technology (AUSC) for coal fired power plants. Further, BHEL along with NTPC will be setting up an AUSC based 1x800 MW technology demonstration power plant. This will create a new stream of opportunities for your company.

We are confident that the above initiatives will further strengthen the base for your company and set the stage for rapid growth in years to come.

## Acknowledgement

I would like to express my deep gratitude and appreciation for the continued faith of our esteemed shareholders, customers, business associates, and all others partners in our journey. Engagement and support from each member of the BHEL family, and my fellow directors on the Board remains our source of strength. I would like to thank various ministries of the Government of India, particularly the Department of Heavy Industry, for their continuous guidance and support in our efforts.

I am confident that with your continued support, we will continue to grow and contribute towards building a 'New India'.

With best wishes,



**(Dr Nalin Shinghal)**  
Chairman & Managing Director

New Delhi  
August 9, 2019



# LEADERSHIP AT **BHEL**

Board of Directors

(As on 20.07.2019)







### Sitting from left to right

**Shri D. Bandyopadhyay**

Director (Human Resources)

**Shri Amit Varadan**

Joint Secretary, DHI : Part-time Official Director

**Dr. Nalin Shinghal**

Chairman & Managing Director

**Shri R. Swaminathan**

Independent Director

**Shri Desh Deepak Goel**

Independent Director

### Standing from left to right

**Shri Rajesh Sharma**

Independent Director

**Shri Kamalesh Das**

Director (Engineering, R&D)

**Shri Manoj Kumar Varma**

Director (Power)

**Shri Subodh Gupta**

Director (Finance)

**Shri Ranjit Rae**

Independent Director

**Shri S. Balakrishnan**

Director (Industrial Systems & Products)

# LEADERSHIP AT BHEL

Management Team

(As on 20.07.2019)



**Dr. Nalin Shinghal**  
Chairman & Managing Director



**D. Bandyopadhyay**  
Director (Human Resources)



**Subodh Gupta**  
Director (Finance)



**S. Balakrishnan**  
Director (IS&P)



**Manoj Kumar Varma**  
Director (Power)



**Kamalesh Das**  
Director (Engineering, R&D)



**S.V.N. Jithin Sundar**  
ED (Corporate R&D)  
Hyderabad



**D.K. Thakur**  
ED (HEP), Bhopal



**D.K. Dikshit**  
ED (TP), Jhansi



**A.K. Mukhopadhyay**  
ED (IO), New Delhi



**S. Chaturvedi**  
ED (TBG), Noida  
Addl. Charge (IS-CFP, IPE & IPM)



**G.K. Hedaoo**  
ED (PS-MKTG, T&G)  
PS-WR, Delhi/ Nagpur



**K.K. Khurana**  
ED (PS-PEM), Noida



**Rana Basu**  
ED (PCSG), Noida



**G. Uday Kumar**  
ED (HPEP), Hyderabad



**A.M. Gupta**  
ED (HBG), Noida



**C. Murthy**  
ED (BAP), Ranipet



**Sanjay Gulati**  
ED (HEEP), Haridwar



**Anil Kapoor**  
ED (HR&CC), New Delhi  
Addl. Charge (PSG, CLD)



**C. Ananda**  
ED (EDN), Bengaluru  
Addl. Charge (EPD)



**Ajit Kumar Sinha**  
ED (IS-CPP & PMG)  
New Delhi