

BHARAT HEAVY ELECTRICALS LIMITED

ANNUAL REPORT

2017-18

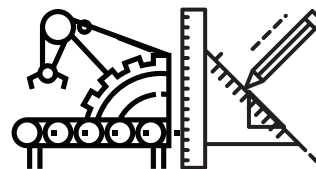
Creating  of tomorrow

Bharat Heavy Electricals Limited

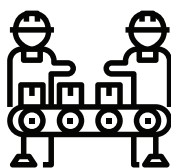
Who we are



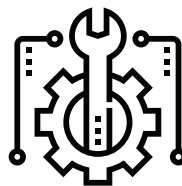
Making in India
since 1964



India's largest
engineering & manufacturing
enterprise of its kind



17
Manufacturing Units



150+
Project Sites

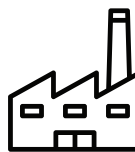


8
Service Centres

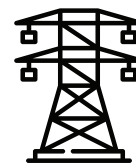
What we do



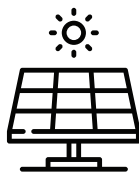
Power



Industry



Transmission



Renewables



**Defence
& Aerospace**



Oil & Gas

Our Presence

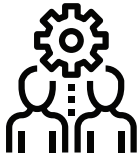


India

All states & 6 Union Territories of the country have power generating equipment installed by BHEL

443 Coal, 417 Hydro, 102 Gas, 12 Nuclear & 32 MW scale Grid-connected Solar PV plants





Second largest
employer in
Indian Capital Goods industry



5 Research Institutes
14 Centres of Excellence



Transportation



Water



**Energy
Storage**

Global Presence

References in 83 countries in
all 6 inhabited continents

Contracted power plant equipment
of around 17,000 MW

21 projects under execution



We are the undisputed leader
amongst the Indian power
plant equipment
manufacturers.

A name to reckon with in the
Indian industry.

India's industrial ambassador
to the world.

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

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

Focusing on strategic
transformation for creating
BHEL of tomorrow.



The **3x110 MW Kishanganga hydroelectric project**, located in the remote and difficult terrain of Jammu & Kashmir state, has been successfully executed by BHEL. Though the task posed formidable logistical and execution challenges, BHEL commissioned all the three units of the project within a span of 18 days in March, 2018. Shri Narendra Modi, Hon'ble Prime Minister of India, formally inaugurated and dedicated this prestigious project to the nation on May 19, 2018. The project will

generate 1,350 Million Units (MU) of clean electricity annually.

Committed to the availability of power even in the most remote and difficult areas of the country, BHEL has contributed more than 40% of the installed power generating capacity in J&K, with more than 40 commissioned sets having generation capacity of 1,652 MW.



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LETTER TO SHAREHOLDERS



Dear Shareholders

I am happy to share that your company delivered a resilient performance during 2017-18. Amidst continued challenging business environment, initiatives taken in the recent past have resulted in significant progress in enhancing profitability and productivity, reinforcing our leadership in power sector, and strengthening non-power business area. These achievements, along with the strategies in place, strengthen our preeminent position among national assets and assure our continued contribution in building a 'New India'.

Performance highlights

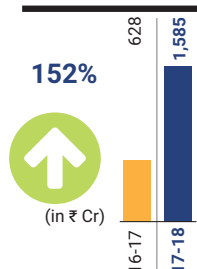
Let me share the key performance highlights for the FY 2017-18.

- The company registered a turnover of ₹27,850 crore during 2017-18 against ₹27,740 crore in the last year. With this, your company has achieved a growth of 11% during last two years, 2016-18.
- Profit Before Tax during 2017-18 was ₹1,585 crore compared to ₹628 crore in the year before, registering an increase of 152%. Net Profit (PAT) stood at ₹807 crore compared to ₹496 crore in 2016-17.
- In a shrunken and highly competitive Indian power sector market, we reinforced our leadership position by securing all orders for main packages of thermal power projects during the year. Total orders won during the

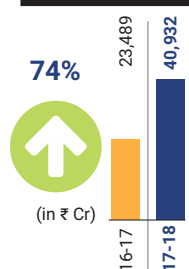
Turnover
₹27,850 Cr.



Profit Before Tax
₹1,585 Cr.

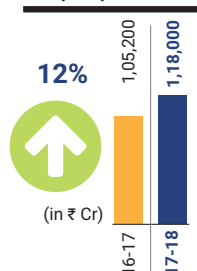


Orders Booked
₹40,932 Cr.



- 100% market share in thermal power projects
- Highest ever orders in transportation, defence, solar & water

Total Orders in Hand
₹1,18,000 Cr.



- Highest during the last five years

year are ₹40,932 crore – 74% higher than the last year. This includes highest ever orders won in transportation, defence, solar and water business resulting from our unflinching focus on increasing non-coal business. With this, total orders in hand are over ₹1,18,000 crore - highest during the last five years.

- Some of the major orders won were 3x800 MW Patratu – largest power project order ever placed in the country through international competitive bidding, 2x660 MW Udangudi, 1x660 MW Panki, 1x660 MW Bhusawal, Steam Generator package for 2x700 MWe Nuclear power plant Gorakhpur, and 146 sets of 25 kV AC IGBT based three phase electrics for mainline EMU trains from Indian Railways among others.
- Leveraging its capabilities in the emission control equipment business, BHEL has secured Flue Gas Desulphurization (FGD) orders for 17 thermal units till March 31, 2018.
- Diversification efforts of your company gained traction with the receiving of the highest ever orders in solar power and a breakthrough order in the municipal segment for construction of six sewage treatment plants at Raipur. Technology sharing agreements with ISRO for space grade lithium-ion cells and with Kawasaki Heavy Industries Ltd., Japan for stainless-steel coaches and bogies for metro trains will help your company in strengthening capabilities in emerging areas.
- 4,149 MW of power generating capacity was commissioned / synchronised during the year. In addition, 170 MW of solar PV plants were also commissioned. With this, the worldwide installed base of power generating equipment supplied by BHEL has exceeded 183 GW.

- India's first ever air-conditioned AC EMU train equipped with BHEL's state-of-the-art propulsion equipment has been operating successfully in Mumbai since December, 2017 paving way for more such opportunities.
- The company invested ₹753 crore – 2.7% of its turnover on R&D. The total intellectual capital of the company has enhanced to 4,357 patents and copyrights, with filing of 530 patents and copyrights during the year.
- Your company is proposing to pay a total dividend of 91% for the year 2017-18 on the enhanced paid up share capital, post bonus issue in 2017. It would be the highest dividend paid during last four years, subject to the approval of shareholders.

The Future

India is the fastest growing major economy in the world. It is envisaged to become a US\$5 trillion economy by 2025 and US\$10 trillion by 2030 from present US\$2.6 trillion supported by demographic dividend, technology developments, and economic reforms. This catapults to humongous demand and opportunities in energy and infrastructure sector.

April 28, 2018 is the historic day in the development journey of India. This day onwards, every single village of India has access to electricity. Going forward, government is targeting to move from 100% village electrification to 100% households' electrification by end of the year. This improvement in accessibility and availability of electricity is one of the most significant changes underway in India's power sector, where your company is one of the leaders.

India... envisaged to become a US\$ 5 trillion economy by 2025 and US\$ 10 trillion by 2030... catapults to humongous demand and opportunities in energy and infrastructure sector.

In addition to above, railways, ports, urban infrastructure, environmental solutions, and basic materials like cement, coal, steel, petrochemicals are slated for massive investment in coming years to fuel India's growth aspirations.

This makes it a very exciting time. It is bringing many more opportunities for your company, particularly in the areas of clean energy, energy storage, e-mobility, emission control equipment, urban transport and infrastructure development, among others.

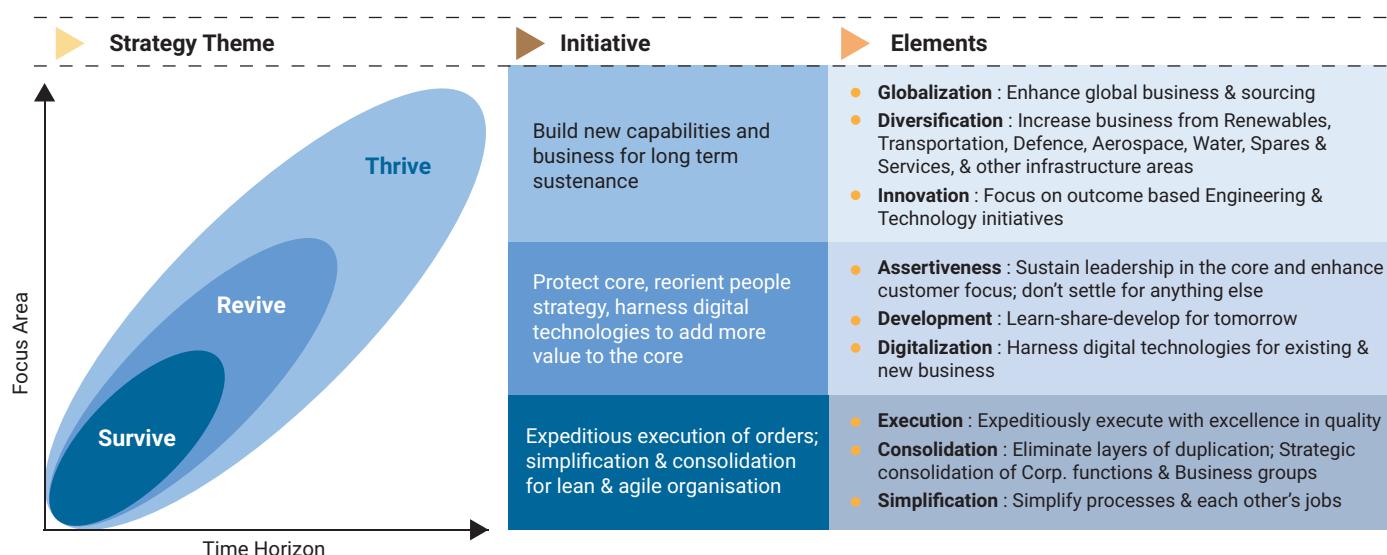
Creating BHEL of Tomorrow

This is a historic moment for your company to move to the next level of sustained performance by converting the emerging opportunities into potential success stories. Therefore, your company has embarked on a transformational journey of 'Creating BHEL of Tomorrow', with the objective of enhancing responsiveness to emerging opportunities, building new levers of robustness and laying foundation for a sustainably rising BHEL.

Our seminal strategy framework, which is the pillar of transformational journey, consists of three strategy themes spread over

concurrent time horizons: Survive, Revive, and Thrive (SRT)- a concept envisioned by your company. The three themes are targeted simultaneously and the strategies under these will address the immediate and future challenges of the company.

Survive: After witnessing a declining performance trend up to 2015-16, the first goal of your company during last two years was to regain profitability and growth. We gave utmost priority to expeditious **Execution** of orders coupled with strict cost control, efficient utilisation of resources through **Consolidation**, and enhancing speed of response through **Simplification**. Strong focus on conversion of non-executable orders into executable ones; consolidation and restructuring of corporate functions and business groups; manpower audit; simplification of policies and procedures, and greater application of IT in business processes were some of the initiatives your company successfully executed. This was our 'Survival' strategy, which enabled us to not only reverse the declining performance trends, but also pursue the momentum of improved performance.



Our seminal strategy framework... consists of three strategy themes spread over concurrent time horizons: Survive, Revive, and Thrive (SRT).

Your company... finest example of successful 'Make in India'... committed and ready to take this journey forward in building a 'New India'...

Revive: While it has been satisfying to see the company back on growth path, our strategies to build new sources of strength are imperative for sustained 'Revival' of the company. This includes building Assertiveness to protect leadership in our core business and the grit of never settling for anything less, holistic Development of our most important asset – our people, in alignment with future business requirements, and maximum harnessing of Digitalization to create new growth opportunities and improve operational excellence. Portfolio expansion in core business; policy and structural changes for giving impetus to employee development and motivation; development of IoT based solutions for utilities; and digitalization of all employee-utility services are being executed. This is the key to growth in medium term and to surpass our own benchmarks.

Thrive: To take the company to the next level, where your company aspires to 'Thrive' and move towards the vision of becoming a global engineering enterprise, we continue to focus on Globalization, and Diversification to increase business from non-coal areas, and further strengthen our Innovation capabilities. Accordingly, we have created and restructured business verticals for emerging opportunities. Development of technologies such as advanced ultra-supercritical technology for power generation, propulsion system for electric vehicles and coal to methanol have been taken up in mission mode.

The nine elements – ECS, ADD, GDI, together named as Nine Elements for Executing Vision (NEEV), are integral part of strategic plan 'The Road to 2022' of your company and are the foundation of our transformation journey 'Creating BHEL of Tomorrow'.

As demonstrated during the last two years, your company will continue to work diligently on each of these elements with similar zeal and zest in future.

Partners on the Journey

Aspirations in our journey cannot be achieved without acknowledging dedicated and committed efforts of each & every member of BHEL family. I would like to express sincere thanks and gratitude to our esteemed customers and other business partners for continued confidence in us, our employees for their passion and perseverance, members of Board for their guidance, and you, our shareholders for support and trust in the company. I would like to thank Ministries of Government of India, particularly the Department of Heavy Industry for their valuable guidance and support in all our endeavors.

Your company, BHEL's immense contribution in nation building endeavors makes it the finest example of successful 'Make in India'. We are committed and ready to take this journey forward in building a 'New India' which is prosperous, confident and happy.

I look forward to your continued support in this journey.

With warm wishes,



Atul Sobti

Chairman & Managing Director

New Delhi
August 8, 2018

LEADERSHIP AT BHEL

Board of Directors (As on 20.07.2018)

