

अनिल कपूर

निदेशक (मानव संसाधन) एवं
निदेशक (पावर)-अतिरिक्त प्रभार

ANIL KAPOOR

Director (Human Resources) &
Director (Power)—Addl. Charge

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited



H.E. António Guterres
Secretary-General
United Nations
New York, NY 10017 USA

Dear Sir,

I am pleased to reaffirm Bharat Heavy Electricals Limited's support for Ten Principles of the United Nations Global Compact on human rights, labour, environment and anti-corruption. With this communication, we reiterate our commitment towards implementing these principles. We stand committed to making the United Nations Global Compact and its ten principles part of the strategy, culture and day-to-day operations of our company. We shall engage in collaborative efforts towards advancing the broader development goals of the United Nations, particularly the Sustainable Development Goals.

It may please be noted that Bharat Heavy Electricals Limited has been one of the founding member of United Nation Global Compact India network. However, the annual contribution for the year 2020 of United Nations Global Compact got delayed due to disruptions in functioning of our offices on account of COVID19 pandemic which has resulted in delisting of our company from United Nation Global Compact. Our offices have resumed normal function and United Nation Global Compact 2020 annual contribution has been paid.

We recognize that a key requirement for participation in the UN Global Compact is the annual submission of a Communication on Progress (COP) that describes our company's efforts to implement the Ten Principles. We support public accountability and transparency, and therefore, we are submitting the Communication on Progress for the year 2020-21 and will continue to submit the Communication on Progress annually as per the United Nation Global Compact Policy.

Sincerely yours,


(Anil Kapoor)

New Delhi
30th July, 2021

BHEL Performance 2020-21 – Global Compact Principles

Human Rights

Principle 1): Business should support and respect the protection of internationally proclaimed human rights

BHEL policies are in line with the principles of Human Rights, the Constitution of India, various Labour Laws, etc. Special provisions have been made in BHEL to safeguard women employees at the workplace. Internal Committee (IC) has also been formed to look into cases of Sexual Harassment of female employees at workplace. The Principles of Natural Justice are scrupulously followed in “The BHEL Conduct, Discipline and Appeal Rules” applicable to all its employees except workers who are governed by the Standing Orders.

Principle 2): Make sure they are not complicit in Human Rights abuse

There is no reported instance of Human Rights abuse in the Company.

Labour Standards

Principle 3): Businesses should uphold the freedom of association and the effective recognition of right to collective bargaining

The Government of India has enacted various labour laws to adequately protect the interests of the working class. These laws are strictly followed in BHEL. Further, all BHEL Units/Divisions are required to submit quarterly reports on compliances of different laws to the Board of Directors, so as to ensure that the interests of the workers are protected.

Apart from this, BHEL has various bi-partite fora for workers, where the issues / problems pertaining to the workers are discussed and settled. Towards this end, BHEL has an apex level bipartite forum namely “The Joint Committee for BHEL” wherein the elected representatives of all units of BHEL, along with the Central Trade Union Organizations, to which the Unions are affiliated, are represented from the workers’ side whereas the Management is represented by Chairman & Managing Director and Functional Directors along with the Heads of Units.

Continuing its thrust on taking the participative culture to higher pedestal, there are Plant Council & Shop Council(s) operating at the unit level, which meet regularly and discuss issues related to production in financial and physical terms, productivity, order book, cash collection, despatch, general administration and discipline etc. The Plant Council as well as the Shop Councils have representation from representative unions besides Supervisory & Executive Associations. Suggestions on cost reduction, meeting the production targets, sequential deliveries and quality of goods are accepted which are evaluated for implementation. Besides, both structured and unstructured meetings between the Management and employee

representatives as well as cross section of employees are also held from time to time in a congenial atmosphere.

Principle 4): The Elimination of all forms of forced and compulsory labour

The Company neither subscribes to nor indulges in such coercive practices. Towards this, it never asks its employees to deposit their original documents pertaining to their education qualifications or date of birth.

Principle 5): The Effective Abolition of Child Labour

As per BHEL's Recruitment Policy, the minimum age for employment in the Company is 18 years. It is not permissible to employ any person below this age in BHEL. As such, child labour is not employed in BHEL and hence the issue of its abolition does not arise.

Principle 6): Eliminate discrimination in respect of employment and occupation

Uniform set of rules are mentioned in "The Human Resource Manual" of BHEL, which apply equally to all employees, irrespective of factors such as gender, caste, religion, race etc. BHEL has always been an equal opportunity employer. Hence, all recruitments are conducted in a transparent and impartial manner, thereby, giving equal opportunity to all eligible candidates, without any discrimination whatsoever.

Environment

Principle 7): Businesses should support a precautionary approach to environmental challenges

Environment being a public good, its preservation is the fiduciary duty of any organization. Taking cue from this fact, we at BHEL has always endeavoured to act responsible in the matter of environmental protection and conservation. We have established our systems and processes in such a way that any activity which interacts or has a potential to interact with ecosystem in terms of its ecological footprint, associated environmental aspect and impacts are identified, risk analyzed and mitigation measures are put in place. It is being done as a part of our systemic approach towards environment in which the precautionary approach has been imbibed.

We have a mature Environment Management System at our manufacturing units and Power Sector regions which has been certified to ISO 14001: 2015. Our Health Safety & Environment (HSE) policy is reviewed from time to time to address the requirement of different stakeholders. The HSE policy and Management system are the bulwark on which our environmental performance is hinged. Our efforts towards environmental conservation are manifested in our activities such as generation of renewable energy, reduction of resource consumption like

water, material & energy, recycling of reusable waste generated inside our premises including treated wastewater and raw material etc.

Augmenting the global efforts towards reduction of GHG emission and mitigate Climate Change, we are not only trying to reduce the carbon footprint of our operations but also conducting our R&D activities and developing products for our industrial customers which are having larger lifespan and lesser ecological footprint through their use phase as well.

Principle 8): Undertake initiatives to promote greater environmental responsibilities

The tenets of Sustainable Development are embedded in our core values and has become a part of all our business decisions. Our mission statement “Providing Sustainable Business Solutions in the fields of Energy, Industry & Infrastructure “amply reflects our commitment to Sustainability. Looking our business issues through the lenses of Sustainability provide us an opportunity to provide better value proposition to our stakeholders. As per the triple bottom line concept, we always strive to generate value to our stakeholders in a way that minimizes the ecological footprint associated with our products & services and enhance equitable development at least in and around the area of our physical presence.

BHEL manages its environmental impact across the entire manufacturing value chain in a responsible manner. Internally, various initiatives are in place to optimally manage key aspects of materials, water, energy, emissions and biodiversity in the larger interest of society. In addition, we also facilitate our customers in managing their environmental and social impacts throughout the entire operational lifecycle of the power plants by offering them state-of-the-art engineering and technology inputs for reducing greenhouse gas emissions - as well as water consumption, better heat rate, less auxiliary power consumption with less fuel requirement resulting in lesser environmental footprint of our products and services.

For promoting inclusive growth in the society, we have Corporate Social responsibility (CSR) Policy and programme through which social infrastructure is created. Near to our physical presence, our units undertake CSR programme to ameliorate the quality of life of the poor & deprived section of society.

With a clear understanding that the organization alone can't respond to the challenges which our natural environment is facing now but engagement of society is also required to preserve our nature in its pristine state. To achieve this force multiplier effect, we at BHEL always try to engage the society to eminent environmental threats through creating awareness amongst the family of our employees, school/college students, people residing near our units through observe/celebration of World Environment Day, Environment Awareness Month, in

celebrations like World Environment Day, Environmental Awareness Month, Road Safety day, Swachhata Pakhwada etc. and conducting mass tree plantation.

Some of our activities carried out as a part of our Sustainability journey during the year 2020-21 is mentioned in the following section.

Responsible material and natural resource consumption

As an organization involved in manufacturing of plethora of products & systems, BHEL is well aware of its responsibility towards sustainable use of natural resources including raw material. Towards resource conservation activities, the principle of reduce-recycle-reuse is extensively used in our planning and operations. Activities like reuse of scrap in our manufacturing unit for instance reuse of 1200 MT of Mild Steel Scrap and 32 MT of copper scrap in the foundry shop of Bhopal, despatch of scrap to CFFP Haridwar by sister units for manufacturing of large castings and forgings, reuse of packing wood to make cupboard for storage & packaging of products, reuse of waste oil and recycling of hydraulic oil optimization of nesting plan for sheet cutting to avoid wastage, recovery of 35 MT of oil from the oil skimmer and coolant treatment plant at HEEP Haridwar, reclamation and reuse of 820 MT of sand in foundry shop of HEP Bhopal are some of the activities reflecting our efforts towards sustainable natural resource consumption in our operations during 2020-21.

Sustainable Energy Management

Sustainable use of energy across our premises is an important element of business decision making process. We have taken numerous activities in energy conservation / efficiency which has resulted in lot of saving in our energy consumption. Some of our units which have been considered as energy intensive, have undergone through detailed energy audit process and subsequently obtained ISO 50001 certification to harness energy saving opportunities to the extent feasible. Reduction in lighting load through switching to energy efficient lighting fixtures in offices/street lighting is a regular activity in our organization. Activities like reconditioning of refractory bricks of 10 Ton Furnace leading to efficient utilization and reduction in fuel consumption at BAP Ranipet, optimization of capacity of air compressor at EDN Bengaluru and HEEP Haridwar, replacement of 538 Nos. 1 & 2 - star ACs with latest 5-star rated ACs and replacement of LPG Cylinder by PNG Gas by laying Natural Gas Line for Canteen no. 3 & 5 at HEEP Haridwar, overhauling and modification in hydraulic circuit of innocent milling column machine at HEP Bhopal, etc. are some examples of the activities carried out during 2020-21 related to energy conservation / efficiency.

Generation of Renewable Energy for captive use has gained momentum in the recent years in our organization. Now we have nearly 28 MW_p installed capacity

of solar power plant comprising of ground mounted as well as rooftop solar systems. It has resulted into lesser dependence on DG sets and achieve sustainable energy mix in our operations. During the year 2020-21, a total of 27.2 Million Units of green energy was generated across our company.

Water and biodiversity Management

Water is a very precious natural resource and managing water & wastewater sustainably and enhancing the green cover across our premises are important elements of our business activities. 12 Sewage Treatment Plants and 12 Effluent Treatment Plants installed across our premises help us in meeting the discharge norms and making most of our units Zero Liquid Discharge (ZLD) entities. Further, to maintain the green belt across our establishments, treated wastewater is reused for horticultural purpose which helps us in reducing the demand for fresh water.

At our units, superannuating employees and visiting dignitaries plant the sapling to mark the occasion. Further World Environment Day is a day of mass tree plantation across our unit. Overall nearly 35500 saplings were planted across BHEL during 2020-21 to enhance our verdant cover and will act as carbon sink in future.

Carbon Management

Our efforts in energy conservation/efficiency, increasing greenery in our premise, development of cleaner products, use of cleaner fuel in our operations, use of piped gas wherever feasible avoidance carriage of fuel through transport – all of them help us in reducing our carbon footprint also. During the year 2020-21, we have avoided nearly 26118 Metric Tons of Carbon Dioxide equivalent emission due to generation of renewable energy in our premises.

Waste Management

In our process reduction of generation of waste is taken as a very important activity and our nesting plan for cutting of metal sheet is made in such a way to take care of this aspect. However, once the scrap is generated, it is either used in the local foundry shop for making castings/forgings or sent to CFFP Haridwar / authorise recycler for melting into the furnace for avoidance of virgin material consumption.

The hazardous waste generated at units are disposed as per the regulatory requirement and necessary records for scrutiny of authority is duly maintained.

Some of the specific activities related to responsible waste management conducted during 2020-21 included installation of 50kW roof top solar using non-saleable lower wattage PV modules (from our production line), site returned cable accessories and in-house hardware at EDN & ESD Bengaluru, establishment of a 500 Kg/Day bio-gas plant to utilise kitchen waste and generate energy at HEP

Bhopal, development of hazardous waste storage area in HEEP Haridwar, wormi-composting of kitchen waste at HERP Varanasi, set up an incinerator which works using the Controlled Oxygen Rotating Technology (CORT) to incinerate the solid wastes generated inside Factory and Township premises at BAP Ranipet etc.

As a special initiative to fight plastic pollution, BHEL has taken tremendous effort to ensure that all our townships are made “Single Use Plastic Free” and got 3rd party certification for the same for these 14 townships.

These activities cited in the above sections manifest the way in which sustainability has been ingrained in our management processes.

Principle 9): Encourage the development and diffusion of environment friendly technologies

BHEL believes in creating a greener environment through development of environment friendly technologies, reduced emissions and improvement in efficiency of its equipment. Some of the steps taken in this direction are detailed below:

1. In parallel to the improvements made in carbon footprint of BHEL’s operation, company is also working towards reducing the carbon footprint of BHEL made products during its running lifecycle. BHEL in association with IGCAR, NTPC, is developing Advanced Ultra Supercritical Technology under the aegis of the National Mission on Clean Coal Technology. The technology will yield targeted efficiency of 46% against efficiency of ~38% of subcritical and ~41-42% of supercritical sets. In result, this will further reduce coal consumption and CO₂ emission by about 11% as compared to Super Critical plants and by about 20% as compared to Subcritical power plants for single unit pf power generation. Company has already introduced Super Critical Technology in India which has lower carbon footprint in comparison to previous generation of subcritical technology.
2. Further, new emission norms which have come into force for generation utilities, BHEL is ready with the solutions required to meet the stipulated norms. The company has initiated several measures like modification in boiler design, modifications in the wind box firing system of Boilers and development of SCR catalyst and systems for NO_x reduction, installation of FGD systems for SO_x capture and improvement in particulate collection efficiency of ESPs. BHEL has developed SCR technology exclusively for high ash coal fired Indian thermal power plants through its dedicated R&D efforts and the same has been demonstrated at NTPC Simhadri Super Thermal Power Station.

3. BHEL is working indigenously on development of technology for the conversion of high ash Indian coal to methanol. The technology will be demonstrated initially at pilot scale with the production of 0.25 TPD of methanol. Successful implementation of this technology will help in utilizing the vast coal reserve available and significantly curb the rising imports bill of the country due to crude oil and improve upon the energy security of India.
4. BHEL is contributing significantly to the nation's green initiatives of promoting renewable energy by manufacturing state-of-the-art solar cells and solar modules. In addition, space-grade solar panels using high efficiency cells and space-grade battery are also being manufactured. BHEL has also in-house developed PV products ranging from Solar Inverters, Solar Passive Trackers, Solar PV cells and PV modules.
5. BHEL has indigenously developed Passivated Emitter Rear Contact (PERC) technology for high efficiency c-Si solar cells. Maximum efficiency achieved in the PERC solar cells using optimized processes is 21.7% while an average efficiency achieved is 21.08%. With this development, BHEL has the know-how of PERC technology and process design. The dedicated R&D facility has developed capabilities to support migration from non-PERC manufacturing technology processes to PERC technology. R&D project on development of Passivated Silicon Heterojunction (PIHJ) Solar Cells with 21 % efficiency is also under progress.
6. In urban mobility area, Electric mobility is fast emerging as a future mode of transportation to reduce emission from vehicles. BHEL through in-house R&D efforts has developed & successfully tested at ARAI, Motors, Controllers & Charging infrastructure for E-Bus application. BHEL's 12 m E- Bus has been homologated at ICAT Manesar.
7. BHEL is also working on development of environment friendly green technology for power generation and has successfully developed 25 kW PEM (Proton Exchange Membrane) fuel cell stack for strategic applications and further working to increase the capacity. BHEL has also developed and demonstrated Proton-exchange membrane (PEM) Fuel cell powered 1.25 kW Hybrid Electric Golf cart vehicle for drive range extension of electric vehicles.
8. Phytorid based Sewage Treatment Project (STP) project implemented by BHEL at Telibandha Lake, Raipur, in partnership with National Environmental Engineering Research Institute (NEERI) has been consistently performing with parameters in line with contractual requirements.

9. BHEL is offering environment friendly technology of Air cooled condenser to ensure water saving in modern thermal power plants. Further in-house developments are also undertaken to make it more cost competitive.

ANTI-CORRUPTION

Principle 10: Businesses should work against all forms of corruption, including extortion and bribery

The Vigilance function of BHEL is headed by Chief Vigilance Officer who acts as an extended arm of Central Vigilance Commission (CVC) in the Company. Each Manufacturing Unit / Power Sector Region / Industry Sector of BHEL has a Vigilance set-up headed by a Senior Officer reporting to the Chief Vigilance Officer (CVO).

- **Preventive Vigilance** has been the focus area of BHEL as proactive vigilance is better than the re-active one and it reduces the chances of corruption. The main objective is to progressively reduce ambiguity and discretion in the process by plugging the loopholes in the system, thereby making decision making process more and more objective & transparent and also reducing the scope for engaging in malpractices. The audit reports (internal, statutory and CAG reports) relating to BHEL have been scrutinized so as to determine whether there is any vigilance angle involved in respect of the irregularities brought out in such reports.
- Random checks of the activities in the organization were conducted through routine inspections, surprise checks, system studies, CTE type inspection etc. Based on the findings of these inspections/ scrutiny's, Improvements were suggested on various provisions of BHEL Policies / Guidelines / Manuals so as to minimize discretionary powers and to bring clarity in provisions where there is scope for misinterpretation. Accordingly, Revised Reverse Auction (RA) Guidelines-2020 and Amendment to Guidelines for Suspension of Business Dealings with Suppliers/Contractors have been issued.
- Major procurement in the company i.e. above Rs.2 crores is carried out under the provisions of **Integrity Pact**. This Integrity Pact is a set of measures which both the vendor and the company undertake to ensure corruption free procurement without delay or biases. All these procurements are independently monitored by Independent External Monitors (IEMs) appointed by Central Vigilance Commission.
- The Vigilance Department of Company has as an Online Vigilance Complaint System where any person or company can report corruption issues in a confidential manner to the Vigilance Department. The system also provides the person with a mechanism to check the status of their complaint from time to time till they are finalized. Out of 200

complaints (185 received during the year 2020-21) 197 were disposed off and rest are under different stages of disposals. BHEL also has an extensive and well established 'Whistle Blower Policy'. Any employee of the company can report corruption matter in confidentiality to the Top Management. The policy provides for protection of 'Whistle Blower' from harassment of any kind and for protection of his identify enabling him to report issues without any fear.

- Dos & Don'ts for Finance-Works & Purchase, Civil structural Works execution, IT applications, Procurement, vendor registration and Quality & Third Party Inspections have been prepared as a ready-reckoner for dealing officials to facilitate them in discharging their work effectively and efficiently.
- As per directives of CVC, Vigilance Awareness Week (VAW) was observed from 27th October to 2nd November, 2020 on the theme 'सतर्क भारत – समृद्ध भारत (Vigilant India – Prosperous India)' in Corporate Office, Manufacturing Divisions, Power Sector Regions, offices and Project Sites of BHEL. Vigilance Department organized various programmes (approx. 230) on the theme of Vigilance Awareness Week i.e. debates, elocutions, panel discussions, essay writing, quiz, slogans/ cartoon / poster competitions etc. for employees, their wards and students of schools and colleges in various cities across India keeping in view the COVID-19 guidelines. An online quiz competition on PAN BHEL basis was organized by Corporate Vigilance Department to generate awareness about rules, regulations & policies. A total of about **900 employees** participated in the online quiz. Further, an online crossword was also organized wherein a total of about 540 employees participated. To address the grievances of vendors a **centralized Vendor Grievance Redressal System (SUVIDHA)**, where vendors can lodge as well as view and track the status of grievance(s) lodged, was developed and launched during VAW-2020. As a part of awareness series, 09 nos. animated clips (VAW Theme, policy matters, lodging of complaints, CDA Rules, password protection, Whistle Blower Policy, Medical Dependency etc.) were developed in-house and released during the VAW. These clips were shared with employees and were also uploaded on the BHEL's website / social media platforms.
- Vigilance Department publishes **quarterly e-Newsletter 'DISHA'** with a view to create awareness about procurement policy, rules and procedures etc., to disseminate the instructions/ guidelines issued by CVC and Government of India from time to time and to share best practices, case studies and articles. Four issues were published during the year and thirty-two issues have so far been published **since 2013**. The e-newsletter is given wider publicity and is sent to all employees through e-mail and also hosted on BHEL's units/ Regions Intranet webpage.

- Vigilance Department also interacts frequently with the executives of various units/ regions in structured training programmes on the issues of preventive vigilance and enable them to act in a transparent and unbiased manner. 108 number of Training programmes/ Workshops on Preventive Vigilance were organized for employees associated with decision making process across the Units/Regions.
- A session on **preventive vigilance** has been added in all the General Management Programmes / Strategic Management Programmes / Young Managers Programmes organized by BHEL's Corporate Learning & Development (CLD) Department of BHEL. However, as suggested by the Commission, now a two days training programme on 'Preventive Vigilance' has been included in the induction training and mid-career training programmes for executives from January, 2021.
- Besides preventive and **participative vigilance** measures, **punitive vigilance** has its own importance. It acts as deterrence to others and also provides for an opportunity to deviant officers to mend their ways and align their actions with Company's policies. During the year, 29 cases were taken up for detailed vigilance investigation by the Vigilance Department. Wherever lapses / irregularities were established, suitable disciplinary proceedings and systemic improvements were recommended. During the year 70 penalties and 14 warning /advisories were issued to the employees for violating company guidelines, Manuals and conduct rules. Recoveries of **Rs.482.45 lakh** (approx.) have been made from various agencies, employees, vendors and contractors, on the advice of Vigilance.
- BHEL is committed to work against all forms of corruption including extortion & bribery by laying down a framework of anti-corruption measures. The Whistle Blower Policy provides for fearless reporting of corruption by employees of company while practice of Integrity Pact, IEMs, Online Vigilance Complaint system provides for reporting of corruption related issues promptly and without fear by all stakeholders.

*****End of CoP*****