

# **Sustaining Health**

**Sustaining Future** 



SUSTAINABILITY REPORT

2023-2024

In accordance with GRI Universal Standards 2024

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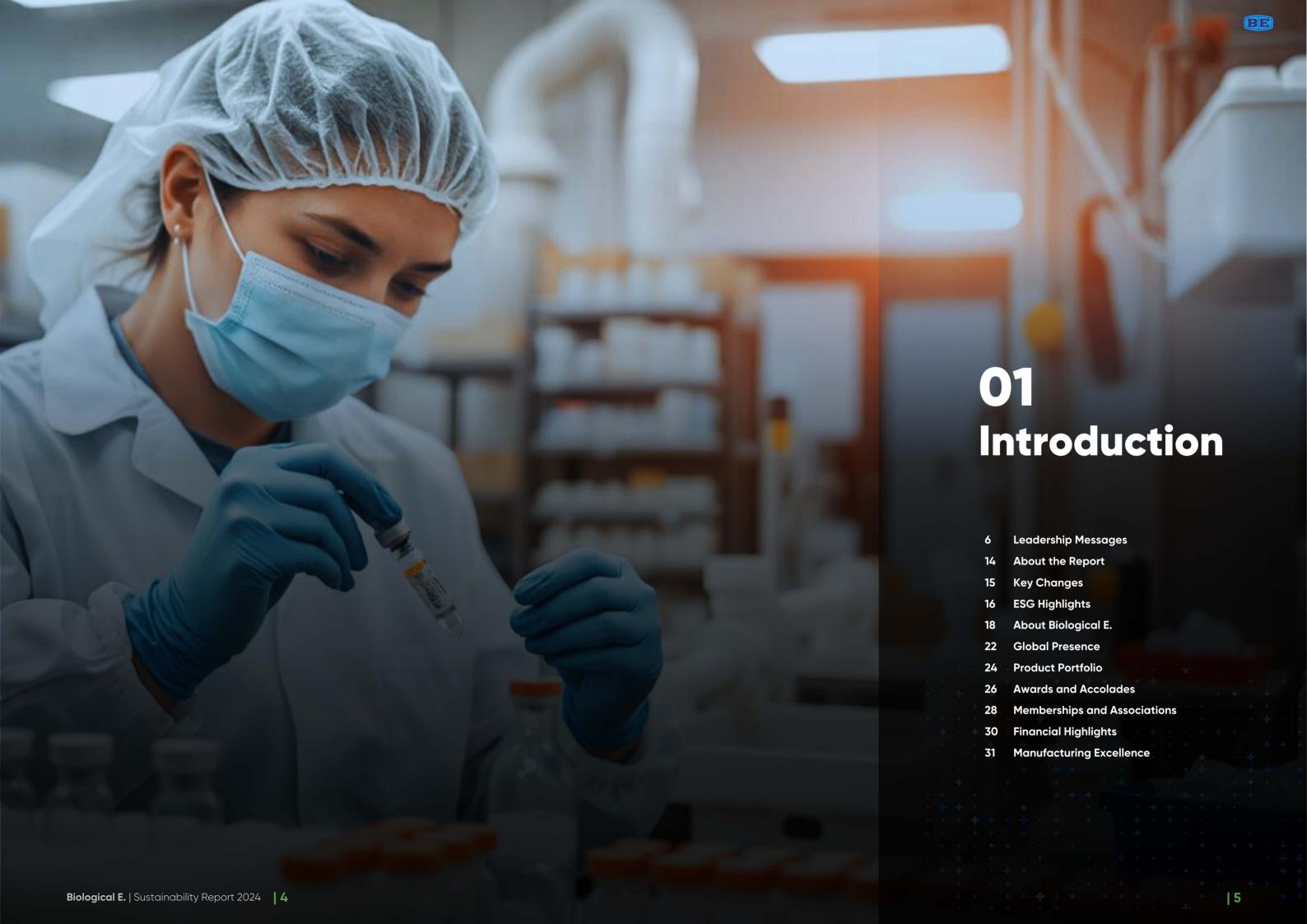
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# 1.1 Leadership Messages

# Message from Managing Director & Chief Sustainability Officer (CSO)



I am proud to present Biological E.'s sixth Sustainability Report for FY 2024, based on the theme "Sustaining Health, Sustaining Future." This milestone year marks 70 years since our inception, providing an opportunity to reflect on our journey with pride and gratitude. Our unwavering commitment to innovation and excellence in vaccines and pharmaceuticals has not only stood the test of time but has also laid the groundwork for a sustainable future. This anniversary is a testament to our dedication to improving lives through healthcare and our resolve to meet the challenges of tomorrow.

This report captures our strategic approach to sustainability and technical advancements, highlighting our commitment to ecological stewardship and social responsibility.

# **Sustaining Health, Sustaining Future**

Our sustainability initiatives target reducing our carbon footprint, conserving water, and managing waste responsibly. We have fortified our supply chain against global uncertainties to ensure the uninterrupted delivery of essential medicines.

Diversity and inclusivity remain central to our workforce strategy, fostering an environment where innovation thrives. Moreover, we are deeply invested in expanding access to medicine in underserved regions and conducting research to address unmet medical needs worldwide. This holistic approach embodies our pledge to nurture a healthier future for our planet and its inhabitants through ethical practices and a commitment to excellence.

# Goal 2030 and Pillars of Sustainability

We conducted extensive stakeholder engagement to identify key material aspects, envisioning Goal 2030—a strategic framework built on four main pillars:

- 1. Environmental Protection: Reducing our carbon footprint, transitioning to renewable energy, achieving water neutrality, and enhancing waste management practices.
- Resilient Supply Chain: Strengthening supplier compliance, conducting lifecycle assessments, and ensuring operational integrity.
- 3. Workforce Welfare: Promoting diversity, increasing training hours, and upholding robust health and safety protocols.
- 4. Responsible Products: Expanding access to affordable medicines, innovating sustainable packaging, and conducting research to meet diverse global health needs.

Each pillar is underpinned by specific, measurable targets that align with our mission to contribute positively to global health and well-being while addressing stakeholder expectations.

# Caring for Patients, People and the Planet

Sustainability is a core tenet of our business practices. This year, we began tracking key performance indicators for energy conservation, workforce diversity, and CSR initiatives in healthcare and education. Our strategic vision for 2030 adopts a forward-looking mindset, proactively identifying and addressing potential risks.

The strength of our business is rooted in the robust relationships we have built with our stakeholders and the dedication of our skilled team. We equip our employees with the training needed to align their personal growth with the organization's strategic direction. Our CSR activities support national initiatives like the Swachh Bharat Mission, ensure quality healthcare services, enhance community school infrastructure, and foster skill development.

#### **BE Sustainable**

Our sustainability efforts aim to transform communities and societies with impactful solutions, thought leadership, and collaborative efforts. We are:

- Transitioning to renewable energy sources to reduce our carbon footprint.
- Implementing water stewardship initiatives to achieve water neutrality.
- Exploring sustainable packaging and working towards Zero Waste to Landfill.
- Conducting rigorous supplier assessments to ensure compliance and operational integrity.
- Tracking Scope 3 emissions for the first time and maintaining zero data breaches and compliance infractions.

We are also broadening workforce diversity, increasing training hours, and reinforcing health and safety protocols to ensure a holistic and resilient approach to sustainability.

# **Concluding Thoughts**

Our products improve the lives of millions annually, providing affordable medicines while generating value for our stakeholders. The momentum toward a global standard for Environmental, Social, and Governance (ESG) criteria inspires us to continue striving for meaningful contributions in this direction. I extend my heartfelt gratitude to the Board and our stakeholders for their unwavering support and confidence in our capabilities. Together, we will continue our journey toward a sustainable and prosperous future.

Warm Regards,

# Mahima Datla

Managing Director & Chief Sustainability Officer (CSO)



# **Message from Head Global Strategy & CEO**

**Specialty Generics Injectables & Synthetic Biology** 



Our dedication to the efficient use of resources and the conservation of the environment is deeply woven into our operational practices and extends throughout our entire supply chain.



# **Fostering Sustainable Development**

It is with great satisfaction that I present to you our sixth Sustainability Report, an encouraging progress report on our company's ongoing commitment to sustainability during the current reporting period. Within the pages of this report, we shine a light on the considerable

advancements, achieved in addressing environmental challenges and fulfilling the global demand for essential healthcare solutions, particularly in the pivotal sectors of vaccine production and the provision of complex injectable treatments.

# **Dedication to Purpose and People**

Throughout our history, we have unwaveringly pursued our core objective of enhancing the health and longevity of populations by ensuring equitable access to high quality pharmaceuticals. Our relentless efforts have made a significant and positive impact on the lives of numerous individuals, especially within communities that are often overlooked.

# Establishing a Sustainable Foundation

In alignment with our 2030 goals the current report is a testament to our steadfast dedication to four foundational pillars. Our focus on these areas is driven by our aspiration to generate enduring value for all our stakeholders and to contribute to the creation of a more inclusive and resilient global community.

Our sustainability strategy is centred on creating meaningful change through innovative solutions, thought leadership, and partnerships. We aim to overcome substantial challenges and extend our positive impact. By collaborating with likeminded partners, we strive to establish scalable and lasting sustainable projects.

We are taking decisive steps to minimize our environmental impact by shifting towards renewable energy and practicing water conservation with the goal of achieving water neutrality. Our efforts also include employing sustainable packaging, conducting lifecycle assessments, and aiming for Zero Waste to Landfill by improving waste traceability.

In addition, we are focused on enhancing workforce diversity, increasing developmental training, and strengthening health and safety measures. We maintain a strong supply chain through thorough supplier evaluations to ensure compliance.

For the outset, we are assessing Scope 3 emissions and continue to uphold our record of zero data breaches and compliance violations, ensuring our operations remain secure and trustworthy.

We are proud to announce that our Injectable division at Shameerpet has been recognized for its global supply of critical injectables, particularly to markets in the US, Europe and beyond. This facility is equipped with the capabilities to manufacture both Drug Substance (DS) and Drug Product (DP), underscoring our commitment to delivering high-quality vaccines worldwide.

# **Setting the Course for a Greener Future**

Our approach involves a synthesis of strategic foresight and practical initiatives, with a focus on fostering sustainable growth and empowering communities. Concurrently, we are committed to elevating the standards of quality and safety in our vaccine offerings. Our dedication to the efficient use of resources and the conservation of the environment is deeply woven into our operational practices and extends throughout our entire supply chain.

I seize this moment to express my heartfelt gratitude to all our stakeholders for their unwavering trust and support in our quest to forge a more sustainable society. I am proud to present Biological E's Sustainability Report and invite you to actively participate in our journey towards sustainable business practices.

Warm Regards,

Narender Dev Mantena

Head Global Strategy & CEO



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# **Message from Chief Operating Officer**

**Vaccine & Branded Formulations** 



# **Our Dedication to Sustainable Practices**

We are delighted to present the sixth edition of Biological E. Limited's Sustainability Report, a reflection of our unwavering dedication to environmental stewardship and transparent communication of our progress to stakeholders. This report highlights our achievements, sets forth our aspirations, and reaffirms our pledge to be agents of positive global change. Our journey of growth is marked by our consistent delivery of paediatric and adult vaccines, achieved through strategic partnerships, relentless innovation, and a deep-seated commitment to research.

We have noted significant growth in revenues supported by the launch of new products like PNEUBEVAX 14. These endeavours have not only elevated BE's stature but have also positioned us as trailblazers in the development and manufacturing of generic vaccines for emerging markets.

We continue to channel investments into research and development to discover and deliver innovative vaccines for unmet medical needs.

# **Charting our Sustainable Journey**

At Biological E. Limited, we understand the critical role sustainability plays in preserving our planet and ensuring a prosperous future for all.

Our approach to sustainability transcends the delivery of life-saving vaccines by minimizing our environmental footprint and for nurturing a more sustainable world. In line with this commitment, we have embraced the integration of solar energy into our operation at our vaccine facility, a step towards clean, sustainable operations. This shift to renewable energy not only reduces our carbon footprint but also supports the environmental health.

Our global healthcare mission propels us to invest significantly in state-of-the-art technologies and pioneering research initiatives. Our R&D team is relentless in their pursuit to expand the frontiers of medical science. Collaborating with global leaders, we cultivate a culture of innovation and knowledge sharing, placing us at the vanguard of healthcare breakthroughs.

Our goal is to address healthcare challenges worldwide, ensuring equitable access to transformative treatments for all, regardless of location or economic status.

In the financial year both we have excelled in safety and operational excellence. We received award from British Safety Council and the CII EHS Excellence, in the form of Distinction, Merit, silver, and bronze awards, underscore our dedication through robust Safety, Health, and Environmental (SHE) standards.

These honours not only reflect our steadfast commitment to workplace wellbeing but also validate and propel our ongoing journey towards sustainable SHE practices. We also won four awards at a national level event National Convention on Quality Circle (NCQC) which upholds our commitment for excellence in operations.

# The Foundation of Our Sustainability Commitment

Biological E.'s strategy for a sustainable future is anchored in our ESG framework, comprising four core pillars: Environmental Protection, Resilient Supply Chain, Responsible Product, and Workforce Welfare. These pillars guide our strategic approach and highlight our potential to create value.

By melding thoughtful strategy with tangible actions, we prioritize sustainable development and community empowerment, while enhancing the quality and safety of our vaccines. Our commitment to resource efficiency and environmental preservation is integrated into our operations and permeates our entire supply chain.

In our pursuit of sustainability, we have instituted ESG-focused key performance indicators to guide our business practices. These KPIs are instrumental in tracking our progress towards a greener operational footprint, including the adoption of renewable energy, water conservation, and waste reduction. Upholding ethical standards and data security remains a cornerstone of our product responsibility.

# **Pioneering the Path Forward**

As we set sail on this voyage towards a more sustainable horizon, I extend my heartfelt thanks to all our stakeholders. United in our efforts, we will continue to lead the way in sustainable vaccine production and distribution, making a lasting contribution to the well-being of our planet and the health of future generations.

Warm Regards,

# Lakshminarayana Neti

Chief Operating Officer (COO)
Vaccine & Branded Formulations

"

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# **Message from Chief Operating Officer (COO)**

**Pharma Specialty Generic Injectable** 



# Our steps towards Sustainable Coherence

As we present sixth edition of our Sustainability Report, Biological E. Limited stands at the forefront of global health protection, acknowledging the critical role we play.

Our commitment to sustainability is deeply rooted, transcending responsibility and embodying a holistic approach that integrates social, environmental, and economic dimensions into our business model.

# Healthcare as a Universal Right

Our sustainability journey is inextricably linked to our mission to broaden global access to quality healthcare. We are driven by the conviction that healthcare is a universal right, and we strive to make our life-saving products both affordable and accessible. Through strategic alliances and concerted efforts, we aim to meet unmet medical needs and enhance the quality of life for communities in need.

# Pioneering Innovation and Accessibility

BE's commitment to healthcare advancement has been underscored by the USFDA's approval of our Enoxaparin Sodium Injection USP, Pre-filled Syringes. This approval is a testament to our robust research and development capabilities, marking the tenth ANDA approval granted by the USFDA to our company. The approved Enoxaparin Sodium Injection, available in various dosages, addresses a wide range of medical needs, including prophylaxis and treatment, further solidifying our role in global healthcare.

# **Incorporating Our ESG Strategy**

Our ESG strategy is central to our sustainable future, structured around four core pillars: Environmental Protection, Resilient Supply Chain, Responsible Product, and Workforce Welfare. These pillars are the foundation of our strategic approach, underscoring our capacity to create lasting value. By merging strategic planning with actionable measures, we prioritize sustainable development and community empowerment, while enhancing the quality and safety of our products. Our commitment to resource efficiency and environmental preservation is integrated into our operations and permeates our entire supply chain.

#### **Gratitude and Forward Momentum**

I express sincere thanks to our employees, partners, and stakeholders for their unwavering support and commitment to our sustainability objectives. Together, we advance towards a resilient and sustainable future, aspiring to make a meaningful difference for generations to come.

Warm Regards,

Dr Vishvesh Kumar Bhupathiraju

Chief Operating Officer (COO)
Pharma Specialty Generic Injectable



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# 1.2 About the Report

We, Biological E. Limited (Biological E.), are delighted to present our 6th Sustainability Report, aimed at providing our stakeholders with a comprehensive update on the advancements in our sustainability initiatives. The report showcases Biological E's unwavering dedication to sustainability, highlighting our consistent efforts and accomplishments in alignment with global standards, reflecting our commitment to a responsible future.

Our commitment to transparency and accountability is exemplified through our voluntary sustainability reporting practices. We release our comprehensive sustainability report annually, seamlessly integrated with our audited financial report.

# **Reporting Principles and Frameworks**

The narrative of our sustainability endeavours is aligned with the United Nations Sustainable Development Goals (UNSDGs) and is in accordance with the GRI Standards. The organization adheres to the eight reporting principles of GRI 1: Foundation 2021, ensuring accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness, and verifiability. The report also highlights the contributions we are making to the United Nations Sustainable Development Goals (UN SDGs)<sup>1</sup>

# **Scope and Reporting Boundary**

The ESG and financial data presented in this report encapsulate our organization's sustainability efforts and accomplishments for the fiscal year 2023–2024, from April 1, 2023, to March 31, 2024.

The specific location indicators are confined to our vaccine and pharmaceutical operations in India. The information includes standard disclosures comprising precise metrics and an in-depth picture of our performance across our various sites, as shown below. We do not include subsidiary companies in our sustainability disclosures. The organisation and reporting boundary of the report cover its seven business units-BE Vaccines & Biologics, Speciality generic Injectables and Branded formulations which are in Shameerpet, Azamabad, Gaganpahad, Patancheru and Dehradun<sup>3 4</sup>.



<sup>[3] 2-2:</sup> Entities included in the organization's sustainability reporting [4] Singapore office is not within the scope and has not accounted for in the sustainability reporting.



#### Assurance

Biological E. Limited engaged BSI Group India Pvt. Limited<sup>5</sup>, an independent third party to provide assurance on the sustainability report. The independent assurance was conducted in accordance with ( AA1000 AS v3 )Assurance Standards for Type 2 moderate level assurance.

To maintain transparency, we follow a practice of seeking highest level of confidence from our stakeholders by diligently publishing reliable and externally assured sustainability reports, in alignment with our top management.

This report has been reviewed by our top management committee and relevant stakeholders of the organisation.

For detailed assurance statement, please refer page no 120.

# 1.3 Key Changes

# Significant Changes in Reporting in FY2024

Our array of Environmental, Social, and Governance (ESG) material topics are relevant and closely connected to the value generated for our stakeholders. We conducted a materiality assessment in FY 24. This report emphasizes on key ESG material issues that we have determined through extensive stakeholder engagement and a detailed materiality analysis.

# Restatement

This report restates the error in Scope 2 emissions calculation in the previous reporting period (FY 21-23) due to human error. After correction, we identified an increase in Scope 2 GHG emission by 17% for FY 22-23 and FY 21-22 respectively. No other restatements have been identified in the report.

#### Feedback

We welcome feedback, suggestions, and queries from our stakeholders, which will help us to continually improve the quality of our disclosures and sustainability performance. Please share your feedback with:

sustainability@biologicale.com

# 1.4 ESG Highlights





growth in vaccine sales, reaching 440.56 million doses, underscoring our dedication to enhancing global health.





Our vaccine division has notably reduced emission intensity by 20%, highlighting our commitment to sustainable operations.





Implemented roof top solar installation of 1 MW at Shameerpet Vaccine facility.







Achieved a 7% female representation among permanent employees, enhancing our workforce diversity.







reduced by 14% for vaccine division.





**Crores** 

invested in CSR projects in the reporting period.





Provided training to 100% employees on data privacy and cyber security.





# 34 Focussed **Improvement Projects**

are implemented yielding **8.52 crores** of savings and IDEA projects saving 1.45 crores.





"Zero" reportable incidents, LTIFR or incidents during the reporting period, showcases the commitment to safety, health and environment.





increase in water recycled and reused on total withdrawal over the last reporting period.





**685.81 metric tonnes** of hazardous waste was diverted from disposal, aligning our commitment to responsible waste disposal.





Achieved 31% and 5% reduction in water intensity for vaccine and pharma divisions respectively when compared to previous reporting period.





61%

of total procurement budget spent on local suppliers in the reporting period.





Reported **zero cases** of bribery and corruption.

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# 1.5 About Biological E.

# Organization Overview

Established in 1953 as Biological Products Private Limited by the late Dr. Vijay Kumar Datla, our organization initially focused on producing essential generic biological products, including critical anticoagulant heparin injections, primarily for the Indian market. In 1963, we reached a pivotal moment when we formed an equity partnership with the UK-based pharmaceutical and vaccine leader, Evans Medical. This partnership led to us being rebranded as Biological Evans Limited and eventually to our present-day incarnation, Biological E. Limited, privately held and based in Hyderabad, Telangana.

Biological E. is India's first private-sector bio logical products organization and has an extensive international footprint. As a trailblazer in the country's vaccine industry, we are committed to establishing new industry standards while expanding our product range, driven by our foundational values and a relentless pursuit of quality and customer satisfaction This commitment underpins our strategic investments in state-of-the-art technology and infrastructure.

Biological E. Limited presently operates through three key divisions: Branded Formulations, Specialty Generic Injectables, and Vaccines & Biologics. Our vaccine division stands out as a leading manufacturer in emerging markets, accounting for nearly 74% of our total revenue.

In India, we adopt a business-to-business (B2B) marketing model, while internationally, we employ a mix of B2B and business-to-consumer (B2C) strategies.

Biological E. is a prominent supplier of Heparin and Noscapine-based cough treatments in India, we have expanded our offerings by launching Enoxaparin with our proprietary Active Pharmaceutical Ingredient (API). Our new Specialty Generic Injectables (SGI) division is dedicated to developing and bringing to market a range of injectable products, with a focus on Non-Biological Complex Drugs as well as select standard injectables, to create a diverse portfolio encompassing both complex and routine injections. Additionally, we are recognized as the world's largest producer of Tetanus Vaccine and a leading provider of Pentavalent Vaccine, as well as being among the foremost suppliers of Polyvalent Snake Antivenom in India.

Biological E. has been instrumental in supplying vaccines and pharmaceuticals to prestigious entities, including the Indian defence forces and various national and international government agencies, as well as through direct international exports. As we forge ahead focused on innovation and growth, we stand steadfast in our resolve to provide superior healthcare solutions, that make a significant and positive impact on public health, both domestically and globally.

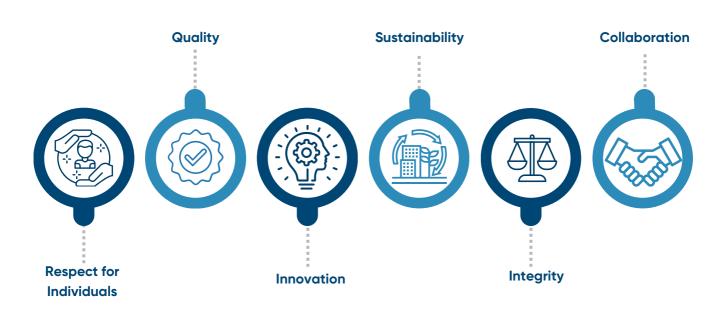


# **Our Vision, Mission and Core Values**

Biological E. Limited is guided by a corporate ethos centred on enabling individuals to embrace life daily. We are committed to creating, producing, and distributing cost-effective products that prevent and cure illnesses, with the aim of making them accessible to everyone. Our organizational endeavours are directed towards realizing this ethos, with our Mission, Vision, and Values serving as a cohesive foundation for these efforts.



# **Core Values**



#### **Our Growth Story** 1963-68 1953 1962 Started large scale Founded as Biological First Indian private productions of Sera & 1972-79 Products Pvt Ltd. company to enter vaccines vaccines First to launch Heparin Launched Anti-**Launched Tetanus** Injections in India Toxoid, DTwP tetanus serum 2005 2000-04 2019 Forayed into R&D and started in-Alliance with intercell to develop & 2009 Received 1st patent from US Patent & house production of HBV & Hib manufacture Japanese Encephalitis Trademark Office for high level expression vaccine (JEEV) Built a new Plant for bacterial, of CRM197. Measles and Rubella WHO PQ. **Tetanus Toxoid** recombinant and viral vaccines WHO pre-qualified Neostigmine and Daptomycin Injection received USFDA approval 2020 2013-14 2012 2016 2017 **Typhoid** Greenfield Launched Japanese Encephalitis Conjugate ComBE Five Measles & Injectables: plant Vaccine (TCV) (JEEV), DTwP and Td (DTwp-HepB-Hib) Rubella vaccine became operational received WHO received WHO prereceived WHO pre-qualification qualification pre-qualification Acquires Akorn India 2024 2022 2023 2021 • International Vaccine Institute (IVI Korea) starts technology transfer to Biological E. Limited to **USFDA** approves BE's Enoxaparin Sodium Corbevax vaccine: We manufacture Oral Cholera Vaccine Pantoprazole Sodium for scaled up CORBEVAX Injection receives USFDA • Takeda & Biological E. Limited collaborate to injection and Succinylcholine production to Approval accelerate access to Dengue Vaccine **Chloride Injection** approximately 1.2 billion DCGI approves BE's doses per year BE's CORBEVAX gets WHO EUL Authorization **CORBEVAX** receives EUA for 14-Valent Pneumococcal 5-11, 12-18 age group and Conjugate Vaccine • BE receives WHO's PQ for their Novel Oral **Adult Heterologous Booster** Polio Vaccine Dose

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# 1.6 Our Global Presence



# **Global Presence**

- 1. Operate across **four** strategic business units.
- 2. Extensive international footprint.



# **Vaccine Accessibility**

- 1. Provide vaccines to over 130 nations.
- 2. Reach hard-to-access areas across the globe.
- 3. Ensuring accessible & affordable vaccines for all.



# **Operational Footprint**

- Locations: India, Singapore, and San Francisco
   Distribute APIs, Finished Formulations, and Biologics.



# **Global Distribution Network**

1. Serve more than 130 nations.

Office

- 2. Meeting the high demand for the produced vaccines.3. Vaccines widely accepted across operating countries.

Countries we operate	India, Singapore and San Francisco
Head Office	Hyderabad - Azamabad
Corporate Office	Hyderabad - Jubilee Hills
Vaccine Division	Hyderabad - Shameerpet, Azamabad and Gaganpahad
Pharma Division	Hyderabad - Patancheru, Shameerpet and Azamabad; and Uttarakhand- Dehradun
	Hyderabad - Shameerpet
R&D Units	Pilot & RD - Vaccine MN Park Pharma R&D - IKP
Marketing and Sales	

Hyderabad, Delhi and Singapore

Countries where our

products are exported

The scale of our organization:

The state of tall organizations			
Parameters	2023-24	2022-23	2021-22
Net Sales (in Lakhs INR)	2,40,105.18	3,65,937.89	2,47,578.44
Equity (in Lakhs INR)	3,75,821.88	3,00,324.55	2,12,001.54
Debt (in Lakhs INR)	1,81,034.76	1,94,098.47	1,79,823.52
Contribution of sales in India (%)	40%	59%	74%
Total Quantity of Products Sold - Vaccine (in MDS)	440.56	342.09	319.70
Total Quantity of Products Sold - Pharma (in Crores)	13.68	18.12	19.41
Total Production - Vaccine (in MDS)	441.80	332.00	314.00
Total Production - Pharma (in Crores)	13.91	12.99	16.73

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# 1.7 Product Portfolios

# **Biologics**

Starting with our initial offerings in traditional biologics like Heparin, we have consistently pushed the boundaries of innovation to create cutting-edge genetically engineered biologics. Our extensive range of products now encompasses vaccines for both children and adults, which hold a substantial share of the Indian market. Our research efforts are currently directed towards the development of low molecular weight heparins (LMWH), conjugate vaccines, and a suite of flavivirus vaccines to address unmet medical needs. We are investing heavily in the development and commercialization of these new products, with a strategic focus on penetrating developed markets over the medium to long term.

# Our vaccine development pipeline is both robust and diverse, featuring the following products:

- ComBE Five (DTwP–rHepB–Hib (Liquid) Pentavalent)
- BEtt (Tetanus Toxoid Vaccine)
- BE Td ( Tetanus and diphtheria for adults and adolescents)
- Novel Oral Poliomyelitis Vaccine Type 2 – (nOPV2)
- JEEV Japanese Encephalitis Inactivated Vaccine (3 µg Pediatric)
- JEEV Japanese Encephalitis Inactivated Vaccine (6 μg)
- TRIPVAC (Diphtheria, Tetanus and Pertussis Vaccine)
- MRBEV (Measles and Rubella Vaccine)
- TYPHIBEV (Typhoid Conjugate Vaccine)
- CORBEVAX( (SARS –CoV-2 (COVID-19) Vaccine)
- PNEUBEVAX -14 (Pneumococcal Polysaccharide Conjugate Vaccine Adsorbed (PCV) (14 Valent)
- BEVAC (Hepatitis B Vaccine (rDNA) Paediatric (Hep - B)
- BEVAC (Hepatitis B Vaccine (rDNA) Adult (Hep - B))
- DT Adsorbed Diphtheria and Tetanus Vaccine

# Our anti-snake venom vaccines (SERA) include:

- Polyvalent Snake Antiveno (Asia & Africa Specific - 10 valent & 6 valent)
- Monovalent Snake Antivenom (Africa Specific)
- · Tetanus Anti Toxin
- Scorpion Venom Antiserum (Trivalent)
   Diphtheria Anti Toxin

## **Products under development:**

- Inactivated Polio Vacine (IPV)
- Hexavalent (DTwP-rHepB-Hib- IPV)
- · Hepatitis A
- Human Papilloma Virus (HPV)
- · Yellow fever vaccine
- Meningococcal Conjugate Vaccine (MCV)
- Measles, Mumps and Rubella (MMR)
- aP based Combination Vaccines
- Typhoid + paratyphoid A Conjugate Vaccine
- Oral cholera vaccine
- Covid 19 Vaccine: XBB 1.5 & JN. 1

#### **Pharmaceuticals**

Our company provides a diverse range of pharmaceutical formulations, including Active Pharmaceutical Ingredients (APIs), oral medications, and injectable. Our branded formulations cover a range of products, such as non-narcotic cough preparations, digestive enzymes and vitamins, anticoagulants, and liver extracts, anti-infective, antibiotics, and hematinic. We are currently working to establish partnerships with potential customers in both the US and the EU.

#### Our products include:

- . ASVS
- . ADS
- BE TT
- Benom
- Berab
- BEPARINE
- Bestozyme
- Bethadoxin
- Deli lauoxii
- BethoxBinex
- DILIEY

- Coscopin
- Coscorest
- Coscoril
- Enoxatil
- . G2K
- Gaspaz
- Livsure
- MegacefObvit
- ObvitOnecal
- Bipaz



- . PH4
- Raft
- Zizant
- . BETD
- ALLESTINE
- BEFER
- · GIKIT
- . MIFREX
- · TOTEL
- ALIN R
- BETHADOXIN-EVA

- NTUTI
- · STALAC
- UTSOL
- V G KIT
- VOMISET O
- BESTOFOS
- . BITOL
- COSCOGEN
- . DYSFUR
- ORIGYN

# **API Division**

The API division of BE supports the captive consumption needs of the company. Specializing in alkaloids such as Enoxaparin Sodium, Noscapine and its derivatives as well as biologics such as Heparin, Fosaprepitant, Daptomycin, Neostigmin Methyl Sulfate, Succinylcholine Chloride, and Sodium Nitroprusside. BE has committed to ensuring a sustainable quality supply to global markets.

# **WHO Prequalified Medicines**

Biological E. Limited is recognized for producing vaccines that adhere to the World Health Organization's (WHO) quality benchmarks. We are dedicated to the continual advancement of our product portfolio and undergoing WHO approval processes.

- The prequalified vaccines are:
- Pentavalent vaccine (DTwP–rHepB–Hib Liquid)) (LPV)
- Pentavalent vaccine (DTwP–rHepB–Hib lyophilized))
- · Adsorbed Tetanus Vaccine (TT)
- Diphtheria, Tetanus, wholecell Pertussis (DTwP)
- Diphtheria and Tetanus Vaccine (Adsorbed, Reduced Antigen(s) content) (Td)
- Japanese Encephalitis (JE)
- Measles and Rubella (MR)
- Typhoid Conjugate Vaccine (TCV)
- Covid-19 Vaccine (WHO EUL Authorization

Biological E. is widely recognized as a trusted supplier of the Liquid Pentavalent Vaccine (LPV) and the Japanese Encephalitis (JE) vaccine. Our organization holds the distinction of being the sole supplier of these critical vaccines within the Indian market, consistently upholding a reputation for reliability within the industry.

Furthermore, we have recently expanded our vaccine portfolio with the introduction of the Measles and Rubella (MR) vaccine, which has commenced distribution across India. Our unwavering commitment to the safety and efficacy of our products underscores our dedication to delivering vaccines of the highest quality to our esteemed clientele.

# **Health System Strengthening**

Biological E Limited is committed to fostering sustainability and enhancing societal health. Our efforts are focused on pioneering advancements in healthcare, particularly within the purview of vaccine production and pharmaceutical development.

Recognizing the critical importance of robust health systems, we are actively engaged in fortifying the infrastructure necessary for the worldwide provision of essential medical solutions. Our objective is to broaden the reach of crucial vaccines and pharmaceuticals by executing deliberate strategic actions and directing investments to where they are most needed.

Our goal is to highlight the robustness of our operations and adoption of eco-friendly practices. Through strategic collaborations and forming synergies with key players in the healthcare field, we aim to exert a lasting impact that extends well beyond our corporate boundaries. As we continue to advance in the evolving field of vaccine production and pharmaceutical development, our commitment to innovation, scientific integrity, and ethical conduct remains a core part of our sustainability efforts.



# 1.8 Awards and Accolades

In the reporting period, we reached several significant milestones, such as receiving prestigious awards, earning recognition for operational excellence, and announcing important strategic and investment initiatives. These achievements reflect our unwavering commitment to innovation and excellence, further solidifying our leadership in the industry.



Ms. Mahima Datla was recognised as one of the 20 Power Businesswomen in Asia by Forbes Asia.



BE Supply Chain Management (SCM) team received the runners up awards in 'Procurement Organisation of the Year', "'Outstanding Procurement Team' and 'Excellence in Procurement Sustainability' from Institute of Supply Management (ISM) organised on 25th November 2023.



Dr. Ramesh Mathur , Head of R&D – Vaccines received the "Excellence in R&D Leadership 2023" award in the "Exemplars of Excellence" category at the India Vaccine Leaders Conclave 2023, organised by Blue Tech Media in Mumbai on 22nd & 23rd August 2023.



BE received the "Happy Organization to Work for" award at the World HRD Congress held on 16th February 2024.





BE received "Best Corporate Social Responsibility Practices Award" at the 13th edition of the Global CSR Excellence & leadership Awards held on 18th February 2024.



BE Received Recognition of Excellence in Safety, Health, and Environment Practices: International Safety Award Winner 2024 by British Safety Council.



Ms. Lavanya Maligonda, CHRO, Biological E. Ltd received the title of "Most Iconic HR Leader" at the World HRD Congress organised by World Federation of HR Professional held on 16th February 2024.



BE received the Outstanding Export Performance Award for the Year 2021-22 from Pharmaceutical Export Promotion Council of India (Pharmexcil) held on July 5, 2023.



BE wins India Packaging Award for Excellence in Packaging Design Shapes and Structure on June 21, 2023 in Mumbai.



# 1.9 Memberships and Associations

At Biological E. Limited, we recognize the importance of teamwork and strategic alliances as essential drivers of sustainable solutions and the adoption of industry-leading practices. Our ongoing involvement in groups and organizations that align with our commitment to sustainability, innovation, and ethical operations reflects our steadfast dedication. These partnerships highlight our proactive role in the shared mission to drive sustainable growth, aiming to make a lasting, positive impact on society and the environment.

Our involvement in various business and industrial groups ensures we stay updated with the latest industry trends and superior practices. These important connections provide us with exclusive insights, allowing us to shape and influence public policy and guide decisionmaking. Moreover, our engagement with these associations deepens our understanding of what stakeholders expect, fostering significant conversations and joint initiatives with respected industry groups, academic circles, and other relevant parties.

Our active participation in different forums strengthens partnerships with like-minded organizations, all dedicated to addressing industry-specific challenges together. We are keenly aware of the need for united action in today's fast-paced world, using these partnerships to enhance our own strengths and achieve sustainable results.

A clear example of our collaborative strength is our key role in developing COVID vaccines, a project that showcases our ability to achieve significant breakthroughs together.

Aligned with our passionate commitment, our sustainability efforts are closely linked with the United Nations Sustainable Development Goals (UNSDGs), clearly demonstrating our unwavering intent to make a substantial and lasting impact on society and the environment. Our active membership in various groups and organizations echoes our dedication to achieve these worldwide objectives, guiding us firmly toward a sustainable future.



By participating in these collaborative partnerships and associations, we reinforce our dedication to sustainability, responsible business practices, and active industry collaboration. Through joint efforts, sharing knowledge, and coordinating cooperative projects, we are ready to be the catalysts for transformative change, shaping a better world for future generations.





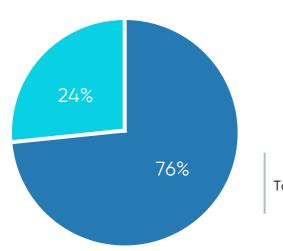


# 1.10 Financial Highlights

Since inception in 1953, Biological E. has consistently been at the forefront of the biopharmaceutical sector, experiencing business growth and transformation that are driven by a proficient team, robust partnerships. infrastructure improvements, and sound management practices. As forerunners in the field of preventive healthcare, we are committed to broadening our range of products and strengthening our collaborative efforts, with plans to carve out a significant presence in the gene therapy market.

The Government of India's 'Make in India' initiative has served to spur significant expansion in the Indian pharmaceutical industry. With our varied product range, we are prepared to address the dynamic demands of our clientele.

> During the fiscal year 2023-24, our vaccine division accounted for 74% of our total earnings, respectively, while the pharmaceutical product segment represented 26% of our revenue during the periods.



otal Earnings	Vaccine Division
in FY 23-24	Pharmaceutical Division

Parameters	2023-24	2022-23	2021-22
Economic Value Generated <sup>10</sup>	2,54,526.97	3,76,990.09	2,57,464.98
Economic Value Distributed	38,687.67	84,286.14	42,277.67
Operating costs	1,022.05	665.67	774.72
Community investments	16,139.50	23,609.47	20,875.50
Payments to Government	47,631.59	45,404.16	44,493.61
Employee Wage and Benefits	76,120.16	1,79,835.36	1,17,464.16
Depreciation, Amortization of exceptional items, Finance Cost & Other Expenses	1,79,600.97	2,86,581.86	2,25,885.66
Economic Value Retained	74,926.00	90,408.23	31,579.32

Our dedication to crafting biopharmaceuticals that are both affordable and widely accessible aims to contribute to the health and economic advancement of our country. Through strategic alliances with governmental and non-governmental entities, we remain committed to innovation and the development of new pharmaceutical solutions for societal benefit. Looking ahead, we are focused on diversifying our product line to address the immediate and long-term health needs of the population, thereby reinforcing our market standing.

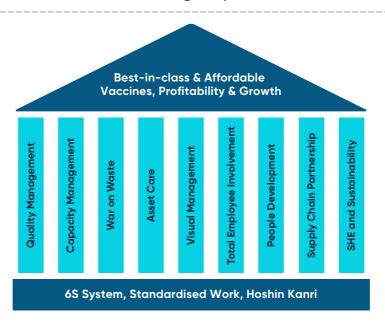


# 1.11 Manufacturing Excellence

At BE, we believe that fostering a culture of operational excellence is essential for driving continuous improvement in the organization. The Operational Excellence team, supported by all functional departments, leads the charge by implementing training programs and overseeing processes to drive enhancements across key areas: Productivity, Quality, Cost, Delivery, Safety, Morale, Environment, Maintenance, and Digitalization (PQCDSMEMD).

Our approach to operational excellence is further strengthened through the Annual Planning Cycle (APC) and Improvements like IDEA (KAIZEN and POKA YOKE) & Focus Improvements Projects, which encourage innovation and empower teams to identify and act on opportunities for improvement. For FI projects, we apply proven methodologies like PDCA (Plan-Do-Check-Act) and DMAIC (Define, Measure, Analyse, Improve, Control) to drive operational efficiency and ensure high-quality outcomes.

# **BE Manufacturing Way Framework**



For FY 2024, we have identified 83 projects, of which 48 have been initiated, 34 have been completed, and 14 are ongoing. All these initiatives align with the FI framework and focus on critical areas such as process optimization, resource utilization, waste reduction, and technological advancements.

Collaboration across teams is at the heart of our success. By working together, we uncover opportunities for improvement that positively impact various aspects of our operations. As we continue to embed a culture of innovation and continuous improvement, we remain focused on driving sustainable growth and achieving operational excellence.

To support and enhance this culture, we provide regular training through multiple methods, including Classroom Training, On-the-Job Training, and Gemba Training. In FY 2024, a total of 2,499 man-hours were dedicated to training initiatives. We also engage employees through OE-related quizzes to foster greater involvement and encourage learning at all levels. As we progress, we are committed to sharing the results and benefits of these initiatives, reinforcing our dedication to meaningful change and long-term value.

34 Focussed Improvement Projects are implemented yielding 8.52 crores of savings and IDEA projects saving 1.45 crores



# **FI Projects**

Case study: Filling Operational Efficiency Improvement – LPV Batch Processing Time Optimization

**Improvement Category:** Productivity

Over the past four years, the batch processing time for LPV filling had increased by over 15% annually, leading to a 20% reduction in line capacity. In response to this challenge, the Filling Team conducted a comprehensive analysis of time losses across various stages of the LPV filling process. The analysis identified several key areas of inefficiency, including extended preparation times, delays caused by Environmental Monitoring (EM) Sampling, and frequent breakdowns that required intervention.

To address these issues, the team implemented a series of targeted solutions:

# Spare Filling Components:

Developed to reduce downtime during filling operations.

Vision Base System (VBS)
Optimization: Downtime
was significantly reduced
through close collaboration
with the Engineering team.

with the Quality Control team, the process for Environmental

Monitoring Sampling was optimized to reduce the time spent during and after assembly.

#### Results:

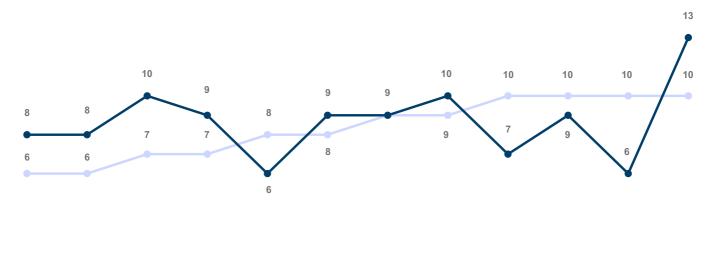
- The team achieved an impressive 9.6% reduction in batch processing time, which translated into increased capacity, allowing for one additional vial per batch.
- These optimizations not only enhanced operational efficiency but also yielded significant cost savings.
   The direct financial impact includes an annual savings of ₹12 Lakhs.
- All other similar initiatives under operational excellence FI projects underscore a total cost saving of up to ₹852 Lakhs.





# **IDEA Projects**

# **IDEA Execution Trend**



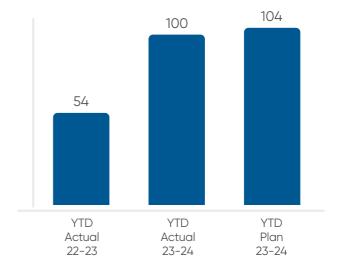




The graph above provides a detailed breakdown of our project ideation efforts over the past year, offering valuable insights into our progress in project initiation and enhancement.

As part of the IDEA projects, we have implemented a range of initiatives designed to foster innovation and drive organizational performance. Through these efforts, we have successfully achieved cost savings of ₹145.2 Lakhs, highlighting the tangible impact of our continuous drive for improvement.

# **IDEA Execution Trend**





# **Operational Excellence Awards at National Events**

At the National Convention on Quality Concepts (NCQC 2023), organized by the Quality Circle Forum of India (QCFI) in Nagpur from January 4–6, 2024, BE had the honour of presenting four of our success stories as case studies in external forum. We are proud to share that three of our teams won the Par Excellence Award — the highest accolade at the event — while a fourth team earned the Excellence Award, the second-highest honour.

These four teams, comprising of 22 dedicated employees from our Shameerpet and SEZ Plants, represented BE at the prestigious event.

Their efforts were a testament to the company's commitment to operational excellence and innovation.

The event culminated in a prize distribution ceremony attended by Hon'ble Minister Nitin Gadkari, Ministry for Road Transport and Highways. BE's teams stood out among 2,200 teams and over 11,146 attendees from more than 600 organizations, a remarkable achievement that underscores the exceptional quality of our teams' work.





# **Knowledge Management**

The Knowledge Management (KM) initiative is strategically designed to generate value for all stakeholders by leveraging both personal and institutional knowledge. Our process is meticulously structured to facilitate the collection, organization, management, and dissemination of information, ensuring that Business Enablement (BE) users have timely access to vital resources through a digital portal.

We are cultivating an ecosystem that inherently appreciates the sharing of knowledge as a natural aspect of our organizational culture. KM actively supports communities of practice and orchestrates sessions to disseminate insights from various projects among cross-functional teams. These knowledge-sharing sessions are instrumental in fostering a collaborative learning environment.

One of the hallmark practices of Knowledge Management is the provision of upskilling opportunities and knowledge enrichment through domain-specific webinars. This initiative has proven to be highly beneficial, significantly enhancing the learning trajectory of our users.

Our extensive knowledge repository is a testament to our commitment to continuous learning and information accessibility. It encompasses a wide array of knowledge assets that serve as daily reference tools and sources of intellectual nourishment for our users. The repository includes, but is not limited to, Digital Books, Learning & Training Materials, Presentations, Webinars, Podcasts, Position Papers, Guidelines, GMP Knowledge Base, Best Practices, E-Magazines, CTRI Repository, and various Functional Repositories.

Incorporating these practices into our sustainability report reflects our dedication to the sustainable development of our human capital through the empowerment of knowledge.

#### KNOWLEDGE RESOURCES EXPLORE







Biological E.'s governance framework is firmly rooted in the principles of professional conduct, ensuring that accountability, transparency, and fairness are at the heart of every transaction. Our Board of Directors, distinguished for their independence and extensive experience in diverse fields, have been instrumental in establishing a robust corporate governance structure. Our established guidelines clearly delineate the duties and accountabilities of each board and committee member, with a focus on protecting the interests of our stakeholders. The Board is thus responsible for overseeing the organization's operations, providing vital strategic insights, and making critical decisions that shape our sustainability goals and strategy.

As a privately held entity, our Board is led by the Managing Director who is the senior most executive, supported by the operational excellence team which leverages key resources and plays a crucial role in the successful execution of strategic initiatives<sup>11</sup>. During the reporting period, our Board consisted of four members.

Every member of the board, with the exception of our Managing Director, is over the age of 60. Our board includes three independent directors excluding the Managing Director who are free from any conflicts of interest. In alignment with our Conflict-of-Interest Policy, no conflicts of interest have been reported for BE.

Name	DIN	Designation	Tenure/Date of Appointment	Gender	Age/Date of Birth
Mahima Datla	00965039	Managing Director	10/04/2013	Female	16/07/1977
I.Y.R Krishna Rao	00481367	Independent Director	23/05/2017	Male	22/01/1956
M. Mahendra Reddy	07831823	Additional Director	30/05/2023	Male	03/12/1962
R. Anand Kunar	07964480	Whole-Time Director	16/10/2017	Male	21/09/1954

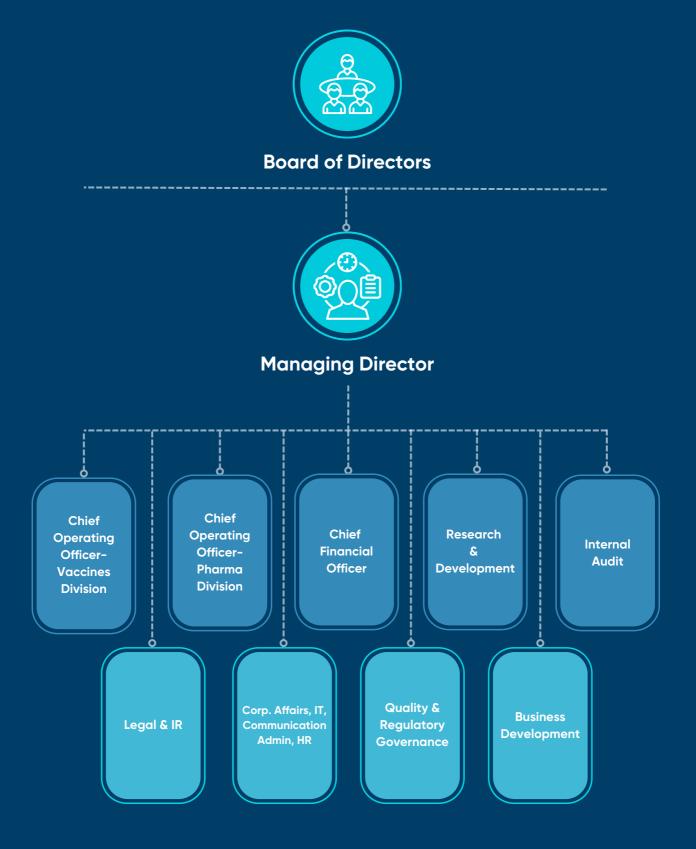
There are due diligence procedures for board nominations and appointments, mandatory disclosure process for any potential conflicts<sup>1,2</sup> The organization is committed to transparency and accountability in its operations, and as such, it ensures that all conflicts of interest are disclosed to stakeholders in a timely and clear manner. The Board is composed of eminent experts with extensive experience in science and innovation, entrepreneurship, pharmaceuticals, public health, risk and governance, human resources. Biological E.'s senior management, endowed with the autonomy to function, is tasked with achieving their designated operational targets.<sup>13</sup>

They report monthly on performance metrics to the Board through the Managing Director. These reports, along with a thorough review of our governance policies, risk management, compliance frameworks, and business strategies, are meticulously analysed by the Board and functional leaders to identify potential risks and opportunities. Additionally, the Board conducts regular evaluations of overall performance, ensuring that strategies are effectively implemented in areas such as leadership development, innovation, talent retention, and incentive programs. The Chief operating officer who is the highest governance body of the sustainability and ESG committee is responsible for reviewing the material topics and reporting sustainable matters.

<sup>1] 2-11:</sup> Chair of the highest governance body

<sup>[12] 2-15:</sup> Conflicts of interest [13] 2-12: Role of the highest governance body in overseeing the management of

# 2.1 Governance Structure





# **Scientific Advisory Board (SAB)**



Distinguished academic and industry researchers constitute our Scientific Advisory Board (SAB). They internally appraise all our Research and Development (R&D) activities.

## **Institutional Biosafety Committee (IBSC)**



This statutory committee operates from the premises of the institution. The committee includes the Head of the organization, scientists engaged in DNA work, a medical expert, and a nominee of the Department of Biotechnology.

# **Management Review Board**



The Management Review Board is chaired by the Managing Director and mainly focuses on discussing quality-related reports with heads of all departments. The board examines various assessments and metrics pertaining to the quality of products, services, and processes, leading to actions that may include implementing improvements, initiating corrective measures, or adopting new strategies to fortify the overall quality management system.

## **Integrated Business Review Committee (IBR)**



Integrated Business Review Committee (IBR) - The IBR Committee is responsible for organizing quarterly performance reviews of various functions of the management. The committee oversees strategic alignment and performance across various departments, making decisions based on comprehensive reviews to ensure the company's ESG goals are met, along with effective risk management.

#### **Audit Committee**



Chaired by an Independent Director, this committee is responsible for risk identification, strengthening internal processes to review and monitor business risk, establishing stringent internal controls, accounting, financial reporting, internal and external audit mechanisms and the organization's compliance with regulatory requirements.

#### **Institutional Animal Ethics Committee (IAEC)**



The IAEC has been constituted under the provisions of the Prevention of Cruelty to Animals Act, 1960 and Breeding of and Experiments on Animals (Control & Supervision) Rules of 1998, 2001 and 2006. The committee comprises a group of distinguished persons, for control and supervision of experiments on animals, performed in the organization.

# 2.2 Sustainability Governance

In a rapidly evolving business landscape, sustainability governance has become a critical factor for long-term success. We have a multi-tiered governance structure allows us to address complex sustainability challenges effectively and responsibly. This approach ensures that sustainability considerations are embedded at every level of the organization, from the boardroom to the laboratory, and cross the entire supply chain.



# **Multi-tiered Governance Structure**<sup>16</sup>

At the highest level, the Board of Directors holds the ultimate responsibility for setting the organization's sustainability vision and ensuring that it aligns with the overall business strategy.



ESG Committee shall be the central core of the ESG Program, acting as a bridge between the strategy development, stakeholder engagement and implementation. It shall devise ESG Approaches, Initiatives, Guidelines, and reporting frameworks, while also evaluating targets and tracking progress.

> **ESG Steering Committee** (ESG framework Pillar wise)

The ESG Steering Committee will be responsible for formulating practical roadmaps tailored to each ESG pillar, establishing key performance indicators (KPIs) to measure performance, and conducting regular progress assessments.

> **Working Groups/ESG Core Committees** (ESG Frame focus area/Unit wise)

The Working Groups are responsible for executing the initiatives outlined in the roadmap, encompassing data management, reporting, and on-site assistance within the defined focus areas. The plant SPOCS across the working groups shall also act as ESG Core Committee for their respective facility.



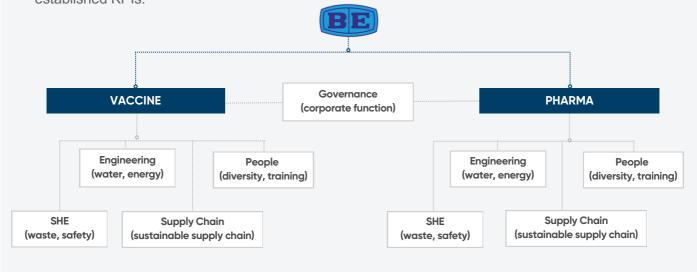
## I. ESG Committee

Reporting to the Board of Directors (BoD), is the ESG Committee, composed of Board members and is charged with oversight of the organization's Environmental, Social, and Governance (ESG) strategies, led by the Managing Director as the chair of the committee. This committee reviews and endorses sustainability policies, goals, and reports, ensuring they meet regulatory requirements and industry best practices. The ESG Committee also advises the Board on emerging sustainability trends and regulatory changes that may affect the organization.<sup>17</sup>

# **II. ESG Steering Committee**

The ESG Steering Committee is a cross-functional team that includes SPOCs (Single Point of Contact) from key areas of the organization.

This committee is responsible for developing and guiding the implementation of the ESG framework across the organization. It ensures that sustainability initiatives are aligned with each of the ESG pillars—environmental stewardship, social responsibility, and ethical governance. The ESG Steering Committee also sets priorities, allocates resources, and tracks progress against established KPIs.



# III. Working Groups / ESG Core Committees [ESG Framework Focus Area / Unit Wise]

At the operational level, Working Groups or ESG Core Committees are established for each focus area or business unit. These groups are tasked with executing sustainability strategies within their specific domains. They develop action plans, engage with stakeholders, and drive innovation in sustainability practices. These groups comprise employees with relevant expertise who are responsible for ensuring that day-to-day operations adhere to the organization's sustainability commitments. They report their progress and challenges back to the ESG Steering Committee.

This structured, multi-tiered approach to sustainability governance fosters a culture of sustainability and ensures that every level of the organization is engaged in and accountable for Biological E.'s sustainability agenda. From the strategic direction provided by the Board of Directors to the practical application by the Working Groups, this governance model enables the organization to respond effectively to sustainability challenges and opportunities, ensuring responsible operations and contributing to the global effort to create a more sustainable future.





Biological E.'s steadfast commitment to risk management is integral to the robustness of our business. We proactively scout for potential risks within our operational sphere, a responsibility we consider to be of great importance. Our skilled team assesses risks and manages the framework to mitigate them effectively. Their thorough approach focuses on the identification, surveillance, and adept mitigation of risks, ensuring adherence to the benchmarks set in our risk management strategy.

Insights into potential risks are relayed to the Board by senior leadership and their extensive reports highlight the primary risks that could sway our strategic direction. The audit team, along with its specialized committees that concentrate on risk management and internal

controls, contributes an impartial perspective. Their chief aim is to furnish the Board with robust assurance, thereby affirming the soundness of our risk management methods.

In our effort to address sector specific risks, Biological E. has implemented strategic initiatives designed to mitigate potential threats with the support of our diverse internal teams. These measures highlight our commitment to strengthening the organization's resilience and adaptability in the face of evolving challenges.

The following risks and opportunities have been identified by examining our critical business operations and analysing them in relation to industry and peers' performance.

Key Risks	Potential Risk	Mitigation Strategies				
	Strategic Risk					
Business Continuity	Maintaining uninterrupted operations within a vaccine manufacturing organization is a multifaceted endeavour, given the myriads of risks that could arise. Challenges such as supply chain interruptions, regulatory hurdles, and the dynamic progression of diseases present considerable obstacles.  As we prepared for contingencies, it is imperative to ensure smooth functioning not only to support our ongoing research and development but also to guarantee the consistent delivery of essential treatments and vaccines to individuals globally.	BE engages in comprehensive risk assessments and maintain a robust business continuity plan. Strategies include diversifying the supply chain, holding strategic inventory reserves, establishing redundant manufacturing and IT systems, and ensuring employee preparedness through training and cross-training. Regular testing of the continuity plan, coupled with investment in technology for remote operations and supply chain monitoring, further enhances our resilience against operational disruptions, safeguarding the uninterrupted supply of essential products.				
Employees	The proliferation of counterfeit medications not only endangers public health but also threatens the integrity of our reputation. The potential for legal action due to the adverse effects of such drugs on consumers is a significant concern. Moreover, the presence of counterfeit drugs in the market can erode consumer trust and confidence in the legitimate products, damaging the company's reputation and brand value.	BE maintains supply chain integrity through regular audits. Adhering to regulatory standards, educating the public on identifying genuine products, and employing advanced authentication technologies are also key strategies. Taking legal action against counterfeiters, and conducting quality control checks further strengthen the defense against counterfeit drugs, ensuring patient safety and protecting BE's integrity.				
Product Quality	The manufacturing of our products involves intricate processes and is subject to stringent oversight by regulatory bodies globally. Inability to comply with these standards could result in halting production, issuance of cautionary notices, confiscation of products, mandated product withdrawals, inability to secure product endorsements, or potentially the revocation of our license to operate. Such lapses could have dire consequences for consumer health and result in reputational damage, as well as regulatory, legal, and financial repercussions.	BE has implemented a Quality Management System (QMS) to maintain continuous oversight throughout the entire supply chain, focusing on product excellence, consistent supply, and security. This system is spearheaded by a dedicated team of quality control experts who enforce rigorous inspections and regulatory compliance.				



Evolving Regulatory Environment	Our enterprise is subject to the legal frameworks of every nation in which we conduct business or distribute our products. Navigating these rules can be intricate, and failure to adhere to them may result in harm to our reputation, financial fines, or could escalate to legal disputes or court actions. Additionally, shifts in government, societal norms, or environmental advocacy can give rise to new legislation and regulations.	We have adaptable compliance programs in place and maintain active dialogue with regulatory bodies. Regular risk assessments, investment in compliance technologies, and ongoing employee training reinforce a culture of regulatory awareness. Additionally, thorough auditing and monitoring processes, coupled with contingency planning, we promptly address regulatory challenges and sustain our market presence effectively.
IP Rights	Threat of infringement, the complexities of global IP protection, and the impact of patent expirations that open the door to generic competition. Companies must diligently defend their IP while balancing the ethical considerations of global health access. Effective IP management is crucial for maintaining competitive advantage, ensuring revenue streams, and upholding the company's reputation in the face of these challenges.	We engage in proactive IP portfolio management, vigilant market monitoring. Educating employees on IP importance, maintaining R&D confidentiality, and strategic patenting. Drafting secure licensing and collaboration agreements, combating counterfeiting with advanced technologies, and ensuring regulatory compliance across jurisdictions.
Climate Change	Our company faces tangible risks such as flooding, water shortages, extreme heat, and rising sea levels due to severe weather conditions, as well as transitional risks including carbon pricing, evolving regulatory environments, and the cost and availability of capital. The severity and consequences of these risks can differ across various regions. Physical risks may result in interruptions to our business and supply chain, elevated expenses, and potential loss of life and infrastructure, along with disturbances within healthcare systems. Meanwhile, transitional risks could cause a rise in operational costs and exert comparable pressures on our supply chain.	We are committed to lowering our carbon footprint by cutting down on Greenhouse Gas (GHG) emissions and embracing renewable energy sources such as solar power. BE is investing in resources and capital to enhance energy efficiency, optimize resource use and implement sustainable practices. A variety of sustainability efforts are being actively pursued, including strategies for water conservation, enhancing water reuse and recycling practices, and diminishing our carbon footprint.
Diversity and Inclusion	A lack of diversity can lead to a limited understanding of patient populations and a stifling of innovation, while poor inclusion practices can result in decreased employee morale, higher turnover, and increased operational costs. Additionally, failure to embrace D&I can damage BE's reputation, hinder the ability to attract top talent, and potentially lead to legal repercussions in an era where social equity is increasingly scrutinized.	We prioritize our commitment to D&I initiatives, implement targeted recruitment strategies, and foster an inclusive culture through training and the support of Employee Resource Groups. We have stablished clear metrics and accountability for D&I objectives, along with continuous communication and improvement, also promoting supplier diversity. These efforts support innovation, employee engagement, and market competitiveness while minimizing potential risks related to talent acquisition and retention, as well as reputation management.
	Operational Risks	
Supply Chain Dissonance	Although we predominantly source from local suppliers, supply chain dissonance in the industry we operate can pose risks such as drug shortages, increased costs, regulatory non-compliance, and quality control issues. Steps undertaken to mitigate such risks include diversifying suppliers, implementing robust inventory management systems, ensuring regulatory compliance through stringent quality checks, and establishing contingency plans for supply chain disruptions.	BE diligently observes global geopolitical developments and assesses their possible effects on the supply chain. In response to challenges such as extended shipping durations resulting from lengthier routes and the scarcity of containers, the Company has adjusted inventory quantities and adapt production and procurement timetables accordingly to alleviate these issues.



#### The shift to digital platforms has significantly increased our focus on information security, as any breach or failure in our IT infrastructure due to cyberattacks could lead to interruptions in business operations and substantial financial losses. Digital We have implemented a combination of antivirus and security is now a critical component of our safe anti-spyware software, along with firewalls, to guard operations, requiring us to invest in state-of-the-art **Data Privacy** against potential security breaches and establish a cybersecurity infrastructure. Furthermore, the & Cyber strong cybersecurity infrastructure. To minimize protection of confidential business data has become Security technological risks, we implement offsite data increasingly important with the rise of digital backups and ensures that the most current software communication and remote work, heightening the risk versions are used on secure computers and servers. of data privacy violations. Such breaches could have adverse effects on our business, including hefty financial penalties and reputational harm, underscoring the need for stringent data protection measures in our digitalized work environment. We ensure strict regulatory compliance, provide comprehensive training, and supply adequate personal protective equipment along with regular risk assessments, the establishment of health and safety Ensuring the health and safety of our employees, as committee. BE extends mental health support, well as upholding environmental standards, is environmental monitoring, and robust incident **Employee** essential as we develop vital medical solutions. Strict reporting systems to further safeguard employee Health and adherence to health and safety protocols is key to well-being and also maintain emergency Safety protecting our staff and the communities we operate preparedness plans and promote a culture of health and safety through ongoing campaigns and continuous policy improvement. These measures collectively create a safer work environment, essential for protecting employees and sustaining operational efficiency. Robust compliance program underpinned by regular Ethics and compliance represent significant risks for employee training, effective communication channels BE, as violations can lead to legal repercussions, for reporting issues are core part of our strategy. hefty fines, and reputational damage, undermining Conducting thorough risk assessments, rigorous public trust and business viability. These risks stem auditing, and ensuring accountability are essential, as **Fthics** and from potential issues such as improper marketing is conducting due diligence on third parties. Compliance practices, non-compliance with clinical protocols, and Protection for whistleblowers and systems for prompt corruption with consequences extending beyond corrective action reinforce a culture of integrity. immediate financial penalties to long-term brand Keeping abreast of regulatory changes ensures that erosion, challenges in workforce retention and compliance measures are always up to date, helping recruitment, and increased regulatory scrutiny. to maintain the company's reputation and avoid legal and financial repercussions. We offer competitive compensation and benefits, Attracting and retaining a highly skilled workforce provide career development opportunities and have adept in specialized areas such as R&D and initiatives to attract diverse talent, coupled with efforts regulatory affairs. Challenges include competing for **Talent** to foster employee engagement and an inclusive top talent, bridging potential skills gaps due to Management culture. Flexible work arrangements and effective technological advancements, developing future performance management systems and managing leaders, ensuring regulatory compliance, and talent on a global scale with sensitivity to local fostering a diverse and inclusive culture. practices are key aspects of our strategy. **Financial Risks** We engage in comprehensive market research and adopt value-based pricing strategies. Effective cost Implementing a dynamic pricing model is key to management and pricing agility are essential to strengthening our margins. We face pricing risks from remain competitive and profitable. We have **Product** regulatory controls, market access barriers, developed global pricing strategies that respect Pricing diverse economic and regulatory landscapes, competitive pricing, reputation concerns, and the need to recoup R&D investments. maintain transparency to foster trust. Adherence to pricing regulations is critical to avoid legal repercussions and ensure sustained market access.



# 3.1 Stakeholder Engagement and Materiality

# **Stakeholder Engagement Framework**

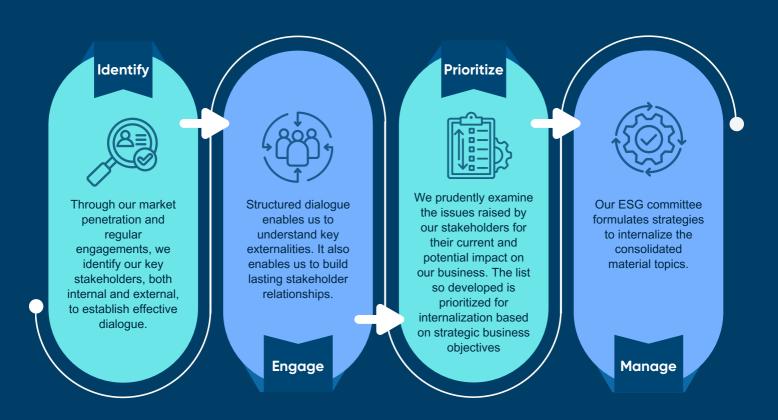
At Biological E., we recognize the critical role that stakeholder engagement plays in the success of our sustainability endeavours, particularly within our pharmaceutical and vaccine operations. Therefore, open dialogue and partnership with our stakeholders (internal and external) are pivotal to realizing our ambition of enhanced sustainability outcomes through positive contributions to societal wellbeing and environmental health.

We interact with a diverse array of stakeholders, such as our workforce, labour unions, clientele, business affiliates, community members, regulatory bodies, and the press.

These interactions provide us with essential opportunities, insights, and viewpoints that inform our sustainability approach and actions. Through proactive engagement and consideration of stakeholder input, we are able to resolve concerns and enhance our commitment to responsible and ethical conduct. In turn, by ensuring our operations resonate with the expectations and requirements of these varied stakeholder constituencies, we foster mutual trust and generate shared value.

# Biological E.'s Approach to Stakeholder Engagement

Our approach to stakeholder engagement comprises four fundamental elements as depicted below:





## Stakeholder Engagement 18

Stakeholders	Priority	Engagement Method	Engagement Frequency	Key topics and concerns
Customers	High	Customer satisfaction surveys	On-going	Competitive pricing, quality, and timely supply.
Investors	High	One-to-one meetings and surveys	Need-based	Profitability and growth, business ethics.
Regulatory Authorities	High	One-to-one meetings	Need-based	Statutory compliance.
Employees	High	Employee satisfaction surveys	On-going	Ethics, good labour practices, and growth opportunities.
Business Partners/Suppliers	High	Vendor and supplier meets, surveys	On-going	Business ethics and timely payment.
NGO's	High	Social/public meetings	Need-based	Environmental pollution and climate impact of business.
Local Community	High	One-to-one meetings	Need-based	Environmental pollution, image, and social impact of the business.
Media	High	Press releases	On-going	Business ethics, environmental impact, and socioeconomic impact on surrounding communities.





#### **Materiality Assessment**

In FY 2023-24 Biological E.undertook a materiality assessment to identify the essential aspects or material issues that could notably influence our environmental, social, and economic footprint, as well as directly affect value creation for our principal stakeholders.

This evaluation in translating our sustainability objectives into measurable targets from the perspective of our organization's current standpoint. By focusing on materiality, we are able to weave pivotal sustainability concerns into our business strategy, thereby enhancing our capacity to manage risks and seize opportunities that arise from these matters.

Our conclusions and perspectives are also informed by a secondary review of the industry landscape, and reference to sectoral standards such as the Global Reporting Initiative (GRI), and the Sustainability Accounting Standards Board (SASB), MSCI and the Dow Jones Sustainability Index (DJSI) as well as the requirements of the United Nations Sustainable Development Goals (SDGs).



Importantly, we have considered the feedback and views of our internal and external stakeholders, obtained through discussions and online surveys.

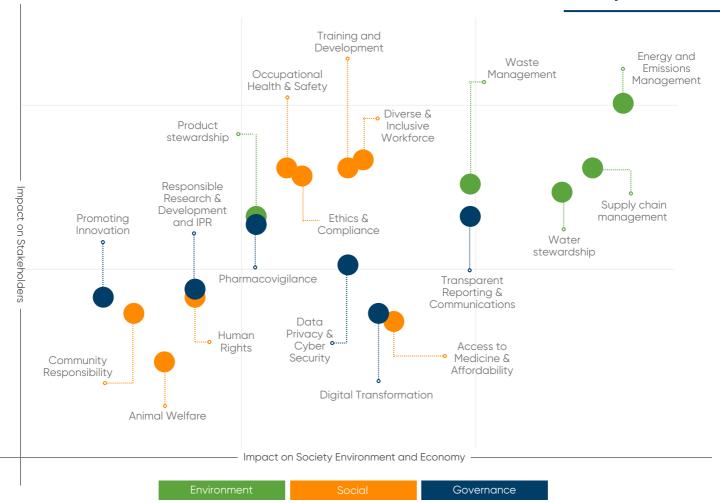
## Stakeholder Engagement for Materiality Assessment<sup>19</sup>

Stakeholder Type	Internal	Internal	External	Internal	External	External	External
Stakeholder Group	Leadership	Top Management	Investors	Employees	Suppliers	Customers	NGO/ Local Community
Engagement Mode	Discussion and Interview	Discussion and Interview	Desktop Review	Online surveys	Online surveys	Desktop Review	Online surveys

The secondary review and stakeholder interactions were bolstered by consultation with Biological E.'s senior leadership to establish the 19 topics of greatest material significance to the organization and our stakeholders.



## **Materiality Matrix**



During the current reporting period, Biological E. has revised the material topics taking into account the following considerations:

Product Responsibility	Our robust regulatory compliance framework and proactive risk management strategies have minimized the need for separate reporting on product responsibility. We maintain high standards in product stewardship and regulatory compliance, which are deeply integrated into our operational policies, thereby not constituting a distinct material topic.
Community Responsibility	Although our initiatives significantly benefit the community, our sustainability reporting is now focused on areas where we can make the most measurable impact. Our community programs continue, but they are part of our broader social responsibility efforts and do not stand alone as a primary material concern.
Access to Medicine and Affordability	While we strive to enhance access to medicine and affordability, these issues are often governed by external policy and market conditions. Our influence in these areas is part of a larger industry-wide dialogue and, as such, is not identified as a standalone material topic in our current sustainability framework.
Customer Health and Safety	The intrinsic nature of our business demands an unwavering commitment to customer health and safety. Since we operate under strict regulatory oversight and our products undergo extensive clinical trials and post market surveillance, the health and safety of customers are embedded in every aspect of the product lifecycle. Therefore, while customer health and safety are critical, they are not identified as a separate material topic because they are inherent to the company's operational processes and compliance obligations.
Customer Satisfaction	We ensure customer satisfaction through our dedication to delivering high-quality products and services. customer satisfaction is closely tied to the trust and reliability of its products, as well as the quality of customer service and support. Given that these aspects are integral to the core business operations and directly linked to the company's reputation and success, customer satisfaction is managed as part of the overall business strategy. As a result, it may not be singled out as a material topic for sustainability reporting, but it is nonetheless a critical component of the company's ongoing commitment to its customers.



#### **Material Topics**

Among the 19 issues identified as most material, 10 have been shortlisted for the organization to act on with priority. These are:



#### **Energy and Emission Management**

(GRI 302: Energy 2016, GRI 305: Emission 2016)

Effective energy and emission management is crucial for reducing the environmental impact of production and aligning with global efforts to combat climate change, which can also lead to cost savings and improved market positioning.



#### **Water Stewardship**

(GRI 303: Water and Effluents 2018)

As water is a vital resource in manufacturing, responsible water use and management are essential for ensuring sustainable operations and minimizing the company's ecological footprint.



#### **Waste Management**

(GRI 306: Waste 2020)

Proper waste management practices are necessary to prevent environmental contamination, comply with regulations, and maintain community health and safety, particularly in the disposal of hazardous pharmaceutical waste.



#### **Supply Chain Management**

(GRI 204: Procurement Practices 2016, GRI 308: Supplier Environmental Assessment 2016, GRI 414: Supplier Social Assessment 2016)

A resilient and ethical supply chain is key to ensuring the uninterrupted production and distribution of pharmaceuticals, maintaining product quality, and upholding labour and environmental standards.



#### **Diverse and Inclusive Workforce**

(GRI 405: Diversity and Equal Opportunity 2016)

Embracing diversity and inclusion enhances innovation, employee satisfaction, and organization reputation, while ensuring a wide range of perspectives and skills that contribute to business success.



#### **Training and Development**

(GRI 404: Training and Education 2016)

Continuous training and development are vital for maintaining a skilled workforce capable of adapting to new technologies and regulations, thus ensuring the company's competitive edge and compliance.





#### Occupational Health and Safety

(GRI 403: Occupational Health and Safety 2018)

Prioritizing the health and safety of employees not only fulfils moral and legal obligations but also reduces absenteeism and increases productivity, directly impacting the company's bottom line.



#### **Data Privacy and Cyber Security**

(GRI 418: Customer Privacy 2016)

In an industry handling sensitive patient data, robust data privacy and cybersecurity measures are critical for protecting against breaches, maintaining patient trust, and complying with data protection laws.



#### **Ethics and Compliance**

(GRI 205: Anti-corruption 2016 GRI 206: Anti-copmetitive Behaviour 2016)

Upholding ethical practices and regulatory compliance is fundamental to avoiding legal penalties, fostering trust among stakeholders, and ensuring the integrity of pharmaceutical research and business operations.



#### **Transparent Reporting and Communication**

Transparent and honest reporting and communication build stakeholder trust, provide insight into company operations, and demonstrate accountability and commitment to corporate social responsibility.

## Materiality Impacts<sup>20</sup>

Material Topic	Type of Imapct	Imapct
Environmental Sustainability	Positive	The organization places a high value on sustainable operations, focusing on the efficient use of resources to reduce reliance on fossil fuels through integration of renewable energy sources and employing energy efficiency measures along with decrease water usage. It also prioritizes efficient waste management strategies that include appropriate sorting, processing, and disposing of both hazardous and non-hazardous waste. The company's efforts to increase green cover in its operational regions underscore its dedication to preserving the environment.
Energy and Emissions	Negative	Biological E recognizes that its production processes and operational activities are significantly powered by electricity, diesel, and coal. This reliance leads to the generation of emissions that play a role in exacerbating global warming. The creation of pharmaceuticals and vaccines involves procedures that may emit greenhouse gases and various airborne contaminants.
Diverse and Inclusive workforce	Positive	The organization is dedicated to offering equal job opportunities and strictly adheres to relevant laws and standards, which enhances its societal contribution. The company's need for a proficient workforce in areas such as research, development, manufacturing, and distribution not only satisfies its own requirements but also generates employment, thereby increasing local and national job rates and promoting broader economic growth.



Water Management	Negative	Biological E acknowledges the significant water consumption required for its manufacturing processes and notes an increasing demand for water in recent years. The company recognizes that without careful management, this extensive use of water could deplete local water supplies, especially in areas already experiencing water scarcity. This could exacerbate competition for water resources between the company, local communities, and natural ecosystems. Additionally, improper wastewater treatment can harm aquatic life and affect communities that depend on these water sources downstream.
Training and Development	Positive	Enhancing capabilities and expertise of workforce through comprehensive training and development programs . This commitment to professional growth not only leads to higher productivity and innovation within the company but also contributes to the advancement of the pharmaceutical industry. By equipping employees with the latest knowledge and skills, we are ensuring that our company remains at the forefront of medical breakthroughs and patient care.
Waste Management	Negative	Biological E recognizes that its manufacturing inefficiencies and the extensive utilization of packaging materials result in the production of considerable waste. The company is cognizant of the fact that a heavy dependence on non-biodegradable packaging contributes to environmental contamination and a rise in landfill accumulation.
Occupational Health and Safety	Positive	We are committed to fostering a culture of safety and well-being, recognizing the critical role of occupational health and safety (OHS) in our operations. We have implemented a robust OHS management system that actively identifies and mitigates workplace hazards, ensuring the safety of our dedicated workforce. Our continuous investment in employee training, health programs, and safety infrastructure not only adheres to stringent industry regulations but also demonstrates our unwavering dedication to creating a positive and secure working environment.
Ethical Concerns	Negative	Biological E is aware of the possibility of encountering ethical challenges, including disputes related to clinical trials, the openness of research outcomes, and potential conflicts of interest in partnerships. The company understands that ethical quandaries and a loss of public confidence can arise from concerns regarding patient confidentiality, data management, and the moral aspects of specific research methodologies.
Transparent Reporting and communication	Positive	Fostering a culture of transparency and open communication, which has a positive impact on all stakeholders. By regularly sharing detailed reports on our operations, financial performance, and sustainability initiatives, we are building trust and credibility in the marketplace. This transparency enables stakeholders to make informed decisions and strengthens our relationships with investors, customers, and the wider community, ultimately contributing to a more sustainable and ethical business environment.
Supply Chain	Negative	Biological E acknowledges that its supply chain has environmental implications, from the sourcing of raw materials to the delivery of finished products. The company is conscious of the potential for contributing to carbon emissions, resource depletion, and waste generation. To address these concerns, Biological E is dedicated to implementing sustainable practices, reducing its environmental footprint, and ensuring responsible stewardship of natural resources throughout its supply chain operations.
Data Privacy and Cyber Security	Positive	Creating a positive impact by prioritizing data privacy and cybersecurity across all levels of our operations. Our rigorous protection of sensitive data not only upholds the privacy and trust of our patients and partners but also secures our intellectual property and business interests. By implementing state-of-the-art security measures and adhering to best practices, we are setting industry standards for data stewardship and contributing to a safer, more secure digital healthcare ecosystem.

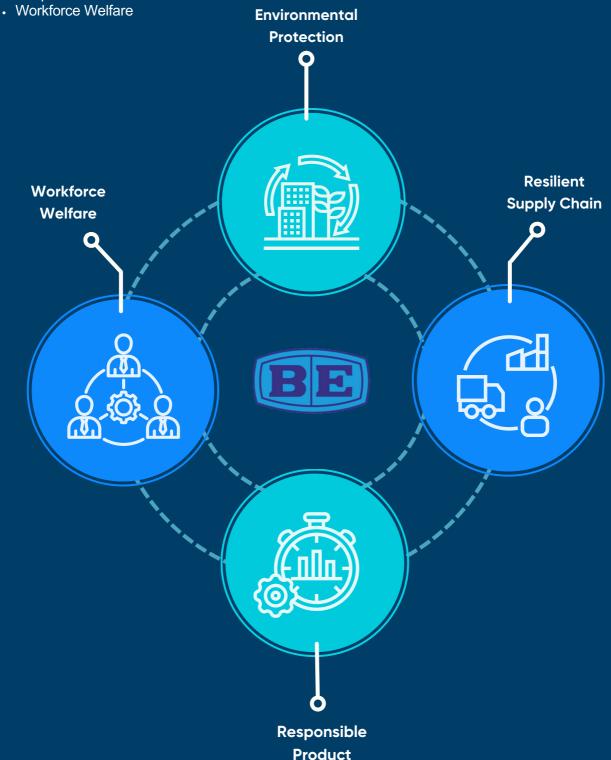




At Biological E., we combine thoughtful strategy with concrete measures to prioritize sustainable growth and to continually improve the quality and safety of our products<sup>21</sup>. Our strategy for sustainable progress is rooted in our ESG framework, which is designed around four core pillars that underpin our approach and initiatives to generate shared value.

The four key strategic pillars include:

- Environmental Protection
- Resilient Supply Chain
- Responsible Product

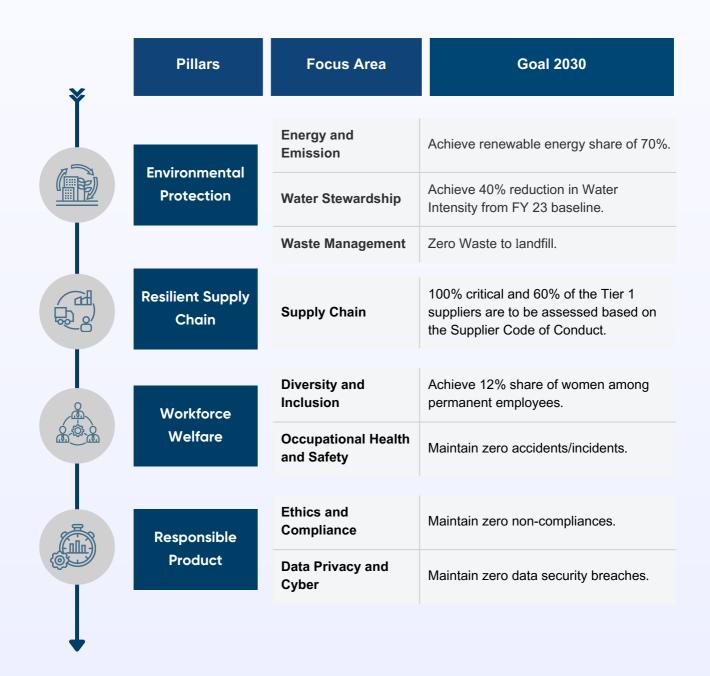




#### 4.1 Pillars Themes and Actions

Our approach to sustainability is dynamic and ever evolving, reflecting our ongoing commitment to enhancing our environmental and social impact. We are always on the lookout for innovative ways to weave sustainability into our operations, collaborating with stakeholders and leveraging new technologies. By embedding sustainability into our business activities, we aim to build a legacy that not only benefits our organization but also future generations.

To guide our efforts, we have defined clear key performance indicators (KPIs) for each segment of our business, which are subject to regular internal review. Additionally, we have established the clear benchmarks to ensure that we can systematically track our progress and strive for continual improvement in our sustainability endeavours. Our sustainability goals for 2030 are established using the data and benchmarks from the year 2023 as baseline <sup>22</sup>.



# 05 Environment Protection

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Environmental risks such as climate change, deforestation, and pollution are increasingly recognized as among the top global threats to our planet. These challenges not only threaten biodiversity and ecosystems but also the very foundations of human well-being and economic stability. In this context, the protection of natural capital the world's stock of natural resources is not just an environmental concern but a critical economic and social imperative.

By safeguarding our natural capital, we ensure the resilience and sustainability of our environment, which is inextricably linked to our own survival and prosperity.

Our commitment to environmental conservation is reflected in diverse actions, , from reducing greenhouse gas emissions and implementing energy-efficient technologies to investing in renewable energy sources and sustainable supply chain practices. We have set ambitious targets to reduce our carbon footprint, aiming to lower carbon emissions in line with international agreements such as the Paris Accord. We are also actively working to decrease water usage with clear goals to achieve significant reductions in water consumption across all our facilities. Additionally, reducing waste production is a key focus as we strive to achieve zero waste to landfill.



## 5.1 Environmental Management

Environmental compliance is an imperative in the pharmaceutical and vaccine sector, reinforced by routine audits from both clients and environmental regulatory bodies. We commend our legal team for their meticulous efforts to ensure Biological E.'s adherence to all pertinent environmental regulations at national and local levels, thereby minimizing any adverse effects on the environment. This dedication to operating in harmony with the natural world and the communities around us is further demonstrated by the prompt resolution of any environmental concerns raised by stakeholders.

Our internal evaluations have also confirmed adherence to all environmental laws and regulations. These outcomes reflect our steadfast commitment to the highest levels of environmental responsibility and ethical business practices. Through our proactive compliance with legal mandates and our responsiveness to stakeholder feedback, we are dedicated to fostering sustainable operations that yield positive outcomes for both the environment and the communities we engage with.

We are proud to disclose that there have been no incidents of environmental non-compliance or any resulting fines with respect to laws and regulations during the reporting period<sup>2</sup>.

#### **Energy and Emission Management**

Energy use is a critical component across our operations, from research and development, to manufacturing, and distribution. Electricity forms the backbone of our energy needs, powering a myriad of functions such as running equipment, managing temperature, and providing illumination. Beyond electricity, we also rely heavily on a consistent supply of diesel, coal, and liquefied petroleum gas (LPG) for energy. These energy forms are particularly vital in supporting our manufacturing activities, where processes like biological elimination and rigorous quality control are paramount.

To monitor our energy consumption, we rely on meticulous tracking of meter readings recorded in logbooks and detailed analysis of energy bills. The table below highlights our usage of different energy sources for the reporting year. The conversion factors for energy are obtained from the Bureau of Energy Efficiency and the International Energy Agency (IEA).

## **Energy Consumption by Fuel Type**

#### **Fuel Wise Energy Consumption Fuel Type** 2022-23 2021-22 Sr No. UoM 2023-24 Coal GJ 23 362 1 21.201 23.067 HSD 45,454 2 GJ34.052 31 324 3 Furnance Oil GJ493 960 394 966 339 454 4 LPG GJ 779 715 888 393,139 316,846 255,709 Electricity GJ **Total** 954,158 848,781 694,339

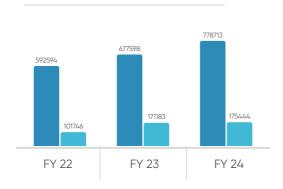
#### **Total Energy Consumption (GJ)**





### **Energy Consumption (Vaccine and Pharma Operations)**

#### Total Energy Consumption (Vaccine & Pharma)



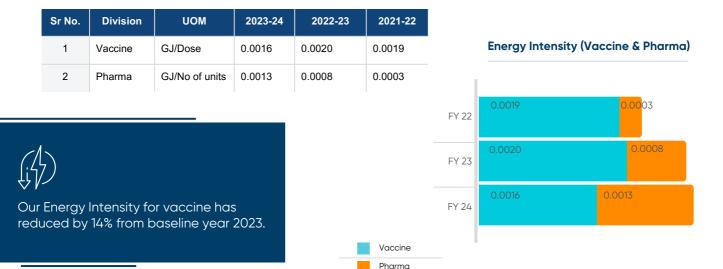
1     Vaccine     GJ     778,713     677,598     592,594       2     Pharma     GJ     175,444     171,183     101,746       Total     GJ     954,158     848,781     694,339	Sr No.	Division	UOM	2023-24	2022-23	2021-22
- 1.5,1.	1	Vaccine	GJ	778,713	677,598	592,594
Total GJ 954,158 848,781 694,339	2	Pharma	GJ	175,444	171,183	101,746
		Total	GJ	954,158	848,781	694,339

Vaccine Pharma

### **Energy Intensity**

In line with our dedication to sustainable practices, we have prioritized the assessment of energy intensity within our operations. For the fiscal year 2023-24, we have determined the energy intensity in gigajoules (GJ) per unit of vaccine and pharmaceutical product produced. This analysis provides us with a deeper understanding of our energy consumption patterns, highlighting opportunities for efficiency enhancements. The energy used in this calculation encompasses the total energy consumed by our organization, including coal, electricity, furnace oil, diesel, and LPG. This energy intensity metric acts as a barometer for our sustainability endeavours, guiding us in the execution of specific measures aimed at reducing our energy use. Our focus on measuring energy intensity is a testament to our resolve to pursue sustainable and eco-friendly operations within our organization.

## Energy Intensity (Vaccine and Pharma Operations) 25 2





## Reduction in Energy Consumption<sup>27</sup>

In our continuous commitment to sustainability and energy efficiency, we have successfully implemented several energy-saving initiatives that have significantly reduced our energy consumption in the fiscal year 2024<sup>28</sup> These measures are particularly impactful within our vaccine and pharma production facilities, where energy demand is substantial.

Energy Saving Initiatives Implemented <sup>29</sup>	Electrical Savings	Total Electrical Savings	Total Energy Savings
Installation of occupancy sensors in rest rooms and Block III service corridor	8000 kWh/month	24000 kWh	86.4 GJ
Arranged VFD Fermentation AHU	2200 KWh /month	4400 kWh	15.84 GJ
Replaced 40TR cooling tower instead of 250TR cooling tower 2100 kWh/Month	2100 kWh/Month	2100 kWh	7.56 GJ
Installed Turbines in Pre-Treatment 550 kWh/Month	550 kWh/Month	550 kWh	1.98 GJ

### **CASE STUDY: Creating a Better Tomorrow through Sustainable Practices**

#### **Initiative Details:**

The Engineering team – Boiler Operation department have innovatively installed a Pre-Heating System that utilizes steam at Shameerpet site in March 2023 to preheat Furnace Oil (FO), enhancing the efficiency and reliability of the Boiler operations, with an annual Savings in ₹6.3 Lakh.

#### **Pre-Upgrade Challenges:**

The furnace oil's electrical preheating system lacked redundancy, causing maintenance issues, unreliable combustion, frequent burner shutdowns, and increased operating costs.

#### **Post-Upgrade Advantages:**

Introducing a steam-based Oil Pre Heat (OPH) system, while relegating the electrical heater to standby, has resolved operational interruptions, lowered preheating expenses, and reinforced system dependability.

The adoption of the steam-based OPH system has led to annual savings of ₹6.3 Lakh and eliminated the previously common electrical failures, significantly improving the system's reliability and maintenance efficiency.

## **CASE STUDY: Optimized Cooling with Cassette AC**

#### **Initiative Details:**

We have implemented an energy optimization project at our Antisera R&D block in May 2023. By installing Cassette AC units to operate during offpeak hours, they have significantly reduced energy consumption and operational costs for the Air Handling Unit (AHU). The upgradation resulted in an energy saving of 186kWh daily and Annual cost savings of ₹5.97 Lakh.

#### **Cost and Maintenance Benefits:**

This energy optimization effort has resulted in considerable annual cost savings and has concurrently decreased the maintenance demands of the AHUs due to their reduced operation.

<sup>27] 305-5:</sup> Reduction in GHG emissions

<sup>[28] 302-4:</sup> Reduction of energy consumption [29] Only electricity was considered in calculation of energy saving for the reporting



## CASE STUDY: HVAC Chiller Efficiency Enhancement (Optimizing Set Temperatures for Cost Savings

#### **Initiative Details:**

Our Site Engineering Team achieved significant power consumption reductions in the HVAC(Heat Ventilation Air Conditioner) Chiller system by optimizing the chilled water supply set temperature, resulting in notable reduction in power consumption and cost savings.

The initiative resulted in an annual Savings of 234 units daily and expected annual savings of ₹6.87 Lakh while also contributing to our sustainability objectives by reducing the carbon footprint.

#### Challenge:

The HVAC Chiller in Block D was previously set to maintain the chilled water at 7°C, resulting in a daily energy usage of 3850 units and an average room temperature of 22.3°C.

#### **Post-Implementation:**

Altering the Chiller's set temperature to 9°C allowed the room temperature to be sustained at an average of 23.9°C, adhering to regulatory standards and decreasing daily energy consumption to 3616 units.

#### **GHG Emissions**

In our commitment to reducing our carbon footprint, we are taking decisive action towards embracing renewable energy sources. As an initial step, we are in the process of installing a 1 MW capacity rooftop solar plant at two of our sites, aiming to tap into renewable energy. This move marks the commencement of our shift to more sustainable energy practices, aiming to lower our carbon emissions and make a positive impact on environmental conservation. As part of our strategy to curtail Scope 2 emissions, we have secured agreements to set up solar rooftop installations of 2MW at two of our facilities, anticipating a yearly  $CO_2$  e emission reduction of 2 to 2.5%. We are steadfast in our pursuit of emission reduction initiatives that are in line with international sustainability standards, providing benefits for both our organization and the global environment. The emission factor for Scope 1 calculation is derived from Department for Environment, Food & Rural Affairs (DEFRA) 2023 and for Scope 2 from Central Electricity Authority (CEA) Version 18.0.



Emission Intensity reduced by 20% for vaccine division compared to previous year

## Emissions (Scope 1 and Scope 2)<sup>30 31 3</sup>

Division	UOM	FY22	FY23	FY24
Scope 1 33	TonsCO <sub>2</sub> e	36,369	40,544	47,523
Scope 2 <sup>34</sup>	TonsCO <sub>2</sub> e	59,031	63,664	77,845
Total Emission	TonsCO <sub>2</sub> e	93,901	1,04,207	1,25,368

# Scope 1 Scope 2

## Total Scope 1 and Scope 2 Emissions (Tons CO<sub>2</sub>e)



<sup>[30]</sup> Emissions reported include only CO2e (CH4, N2O, HFC and CO2) for Scope 1, 2 and 3 emissions

<sup>[31]</sup> BE uses the operational control method to aggregate its Scope 1 ,Scope 2 (location based), Scope 3 emissions [32] Emissions from fire hydrant Diesel pump and sewage treatment plant have been

<sup>[32]</sup> Emissions from fire hydrant Diesel pump and sewage treatment plant have been excluded from Scope 1 GHG emission calculation due to insignificance

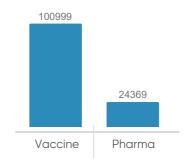
<sup>[33] 305-1:</sup> Direct (Scope 1) GHG emissions [34] 305-2: Energy indirect (Scope 2) GHG emissions



#### **Emissions (Vaccine and Pharma)**

#### Total Emissions: Vaccine and Pharma FY 24 (Tons CO<sub>2</sub>e)

Division	UOM	FY24
Vaccine	TonsCO <sub>2</sub> e	100,999
Pharma	TonsCO <sub>2</sub> e	24,369
Total Emission	TonsCO <sub>2</sub> e	125,368



In our pursuit of a more comprehensive sustainability strategy, this year marked a pivotal advancement as we meticulously tracked our Scope 3 emissions. The inclusion of Scope 3 emissions in our environmental accounting allows us to grasp the full extent of our impact across the value chain. This holistic view not only highlights potential areas for enhancement but also propels our sustainability efforts to encompass indirect operations. By effectively overseeing Scope 3 emissions, we unlock opportunities for cost reductions, spur innovation, and bolster our adaptability in the face of a dynamic business environment.

In FY24, we focused on capturing data from five categories directly linked to our operations. These categories include Purchased Goods and Services, Capital Goods, Fuel and Energy related activities, Waste Generated in Operations, Business Travel, and Employee Commute<sup>35</sup>. The emission factors are derived from the Department for Environment, Food & Rural Affairs (DEFRA) 2023 and Exiobase.

Scope 3 Categories (Vaccine Division)	Emission (MTCO₂e)
Category 1: Purchased Goods and Services	23,063
Category 2: Capital Goods	1,989
Category 3: Fuel and Energy related activities	20,564
Category 5: Waste Generated in Operations	219
Category 6: Business Travel	1,411
Category 7: Employee Commute	1,467
Total Scope 3 Emissions	48,714

GHG Emissions	UOM	FY22	FY23	FY24
Total Scope 1 emissions	TonsCO <sub>2</sub> e	36,369	40,544	47,523
Total Scope 2 emissions	TonsCO <sub>2</sub> e	59,031	63,664	77,845
Total Scope 3 emissions	TonsCO <sub>2</sub> e	-	-	48,715
Total Emission	TonsCO <sub>2</sub> e	93,901	1,04,207	1,74,082



## **Emission Intensity**<sup>36</sup>

We assess our environmental footprint by analysing emission intensity. This metric reflects the total Scope 1 and Scope 2 emissions arising from our production activities in CO<sub>2</sub> equivalent. At BE, we specifically measure these emissions in relation to our output of vaccines and pharmaceutical products. By quantifying emissions per unit of product, we can evaluate our environmental efficiency and establish significant targets for emission reduction. Such a method facilitates benchmarking against industry peers and fosters the incorporation of sustainability into our fundamental business practices, ensuring harmony between our economic objectives and our commitment to environmental care.

Division	UOM	FY22	FY23	FY24
Vaccine	Kg CO <sub>2</sub> e/ MDS	0.0002	0.0003	0.0002
Pharma	Kg CO <sub>2</sub> e/ per unit	0.0001	0.0002	0.0002



## NOx, SOx and SPM emission<sup>38</sup> (In MT)



### SOx, NOx, SPM

We actively monitor stack emissions, including SOx, NOx, and SPM, at all our sites<sup>37</sup>. In the slight increase in emission values in the table below correspond to the increase in production over time. The data below represents consolidated emissions across all our facilities.

## Ozone-depleting substances (ODS)

In line with our environmental goals, we are planning to phase out the use of High ODS refrigerants like R22 by end of 2025 in phase wise manner. Our Environmental, Health, and Safety (EHS) team, in collaboration with the Engineering team, has carefully assessed the cost of executing this plan, which started substantially investing the procuring low ODS refrigerants. The GWP for ODS emission calculation are derived from Department for Environment, Food & Rural Affairs (DEFRA) 2023.

NOx SOx

SPM emission

#### ODS (In MT)

ODS	Source	Unit	Scope 1 (FY 23-24)	Scope 1 (FY 22-23)
R22	DEFRA 2023	Tons CO <sub>2</sub>	898.86	1458.24

<sup>[36] 305-4:</sup> GHG emissions intensity [37] Data is reported on NOX, SOX, SPM and is sourced from external monitoring reports 305-7: Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions

<sup>[39] 305-6:</sup> Emissions of ozone-depleting substances (ODS)





## 5.2 Water Stewardship

At Biological E., we place a high emphasis on the judicious management and conservation of water as part of our commitment to environmental stewardship. We exclusively do not source water from sources that are shared resources, thereby minimizing our impact on local water supplies and contributing to the preservation of this essential communal resource.

### **Water Withdrawal and Consumption**

Recognizing the critical role of water in pharmaceutical manufacturing, we are dedicated to adopting water management strategies that emphasize efficiency and conservation.

We strive to ensure the sustainable utilization of this valuable resource, which we obtain mainly from municipal supplies and groundwater sources.

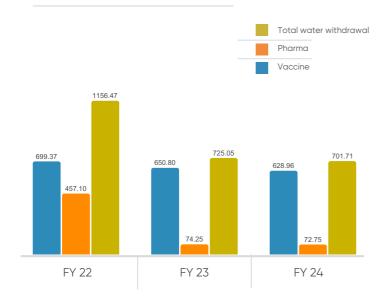
At Biological E., we monitor water-related impacts through regular audits and water balance studies, which shed light on usage patterns, potential pollution sources, and avenues for improved water efficiency. We have identified zero water related impacts as our sites are not located in water stressed areas. Furthermore, a materiality assessment conducted every three years helps to align our water management with stakeholder concerns, expectations, and priorities.

We have gathered key data on water consumption and withdrawal at our principal sites, obtaining insights into water sources and usage patterns over the last three years. This data analysis helps us understand our water footprint, discern trends, and pinpoint opportunities for sustainable water management. We acknowledge a consistent rise in water withdrawal and consumption, a trend driven by increased production.

To ascertain our water withdrawal and wastewater discharge, we compile data from various sources, including meter readings, municipal water bills, tanker delivery records, and other relevant documentation. These measures comply with regulatory requirements to ensure precision and adherence to standards. Our current methodology for measuring water withdrawal and consumption is based on the principle that consumption equals the difference between water withdrawal and discharge. Water withdrawal encompasses all water sourced from municipal pipelines, tankers, and groundwater at two sites. Water discharge is defined as the water sent to third-party treatment facilities, specifically CETPs.



#### **Total Wastewater Discharged (ML)**



Division	UOM	FY22	FY23	FY24
Vaccine	ML	699.37	650.80	628.961
Pharma	ML	457.10	74.25	72.750
Total water withdrawal	ML	1156.47	725.05	701.71

Increase in 24% water recycled and reused on total withdrawal over the last reporting period

## CASE STUDY: Enhancing Sustainability – Reuse of Purified Water and Water for Injection

#### **Initiative Details:**

The Filling & Engineering Excellence Team, innovated within the Blending and Filling process. They developed a system to repurpose Purified Water (PW) and Water for Injection (WFI) from vial washing for use as Boiler feed water and Cooling Tower make-up, significantly reducing waste and costs.

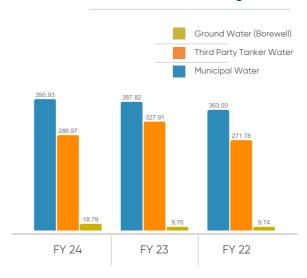
#### Results:

The implementation resulted in annual Savings ₹29.37 Lakh/annum with potential saving of water and energy savings.

## **Combined Water Withdrawal** 41

Water Source	TDS	UOM	FY24	FY23	FY22
Municipal Water	295	ML	395.93	387.82	363.50
Third Party Tanker Water	750	ML	286.97	327.91	271.78
Ground Water (Borewell)	740	ML	18.79	9.76	9.74
Total Water Withdrawal		ML	701.71	725.48	645.0

#### **Total Wastewater Discharged (ML)**





## **Water Consumption**

Division	UOM	FY22	FY23	FY24
Vaccine	ML	520.68	612.67	602.09
Pharma	ML	87.53	64.27	62.92
Total water withdrawal	ML	608.21	676.94	665.02

### **Responsible Disposal of Water**

We acknowledge that it is the imperative to mitigate water pollution stemming from our operations. Adhering to environmental regulations is a cornerstone of our commitment to environmental stewardship, ensuring that our discharge of pollutants into surface waters is kept within safe boundaries.

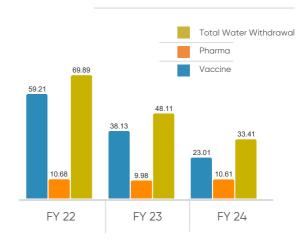
Our operational sites are equipped with wastewater treatment facilities capable of processing both industrial and domestic effluents. Water quality assessments are conducted at the site level, where we measure parameters such as -

Total Dissolved Solids (TDS), pH, Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and ammonia in wastewater. While most of our plants rely on CETPs for discharging the wastewater from our facilities we follow the regulatory norms prescribed by the CETP and local pollution control board and CPCB, where their impact is quantified 43. Two of our facilities have achieved zero liquid discharge (ZLD) status<sup>44</sup>. We are dedicated to continually refining our processes and increasing our capacity for recycling and reusing treated wastewater.

### **Water Discharged**

Division	TDS	UOM	FY22	FY23	FY24
Vaccine	<1950	ML	59.21	38.13	23.01
Pharma	<1950	ML	10.68	9.98	10.61
Total Water Withdrawal		ML	69.89	48.11	33.41

#### Total Wastewater Discharged (ML)



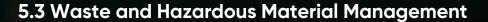
## **Water Saving Initiatives**

Description	Savings	Total Savings in FY 24
Reuse of reject water for rest room flushing's and ETP water to nursery which saved around	450 kL/Month	3150 kL
Reuse of soft water from Block II LYO condenser pump which saved around 36 kL/ Batch (Tentatively 8 Batches per month)	288 kL/Month	Depending on the production

<sup>[42] 303-5:</sup> Water consumption

<sup>[43] 303-2:</sup> Management of water discharge-related impacts [44] 303-4: Water discharge





Effective waste management is a key component of our sustainability and environmental conservation efforts. Thus, we are committed to curtailing waste production and implementing the Reduce, Reuse, and Recycle (3R) principles in managing waste responsibly.

Our sustainable efforts reflect our unwavering commitment to environmental conservation, with a strategic focus on minimizing waste generation through enhanced process efficiencies and advanced waste management strategies. Our primary objective is to significantly reduce the volume of waste directed to landfills. We have devised comprehensive waste management plans that prioritize sustainability and the efficient use of resources, incorporating composting and recycling to repurpose waste, energy recovery through incineration, and ensuring responsible waste disposal.

At BE, sustainable waste management is a key focus area. We actively control waste production by employing a holistic approach that includes the reuse and recycling of materials. Notably, we have adopted practices to increase the internal reuse of HDPE containers, thereby reducing their environmental footprint. We also collaborate with authorized PCB vendors for responsible waste handling.

In line with our sustainable practices, we incorporate recycled glass into our operations and have implemented a robust system for managing biomedical waste. Plastics, particularly Hazardous waste, are meticulously shredded and recycled to mitigate environmental harm.

Our approach to managing expired chemicals involves a specialized treatment process that converts them into valuable binders and additives, aligning with the principles of a circular economy.

To maintain transparency and accountability in our waste management, we utilize rigorous data collection methods. We adhere to the pollution control board's guidelines for tracking hazardous waste, meticulously documenting all related activities in manual logbooks<sup>45</sup>. These records are closely monitored by site-level representatives and waste handlers, ensuring precise documentation and effective oversight of our waste management operations.

For the reporting period, we have quantified the total weight of both hazardous and non-hazardous waste by disposal method, presenting our data in metric tons. This practice not only aligns Global Reporting Initiative (GRI) but also enables us to monitor our waste reduction efforts effectively and to set targeted goals for minimizing our environmental footprint.



686 metric tonnes of hazardous waste was diverted from disposal, aligning our commitment to responsible waste disposal

#### **Waste Generated**

In the fiscal year 2024, our operations resulted in the production of 706 metric tons of hazardous waste and 1,196 metric tons of non-hazardous waste, totalling 1,902 metric tons of waste generated as a result of our operation in FY 2023-24.

## **Total Waste Directed to Disposal** 46 47

#### **Hazardous Waste**

Type of Waste	иом	FY 24
Used / Spent oil	MT	2.02
Discarded containers / barrels / Liners contaminated with hazardous wastes / chemicals	MT	0.05
Chemical sludge from wastewater treatment (ETP Sludge)	MT	13.70
Expired Chemicals	MT	2.66
Forced Evaporation Salts	MT	0.63
Used Batteries	MT	15.19
Biomedical Waste	MT	372.80
MCH	MT	0
Boiler Soot	MT	5.76
Spent Carbon	MT	1.21
Spent Solvents	MT	291.88

#### Non - Hazardous Waste

Type of Waste	UOM	FY 24
Packaging waste (Wood)	MT	26.01
Corgurated Box	MT	334.91
Cardboards	MT	2.20
Paper & Stationery /Shredding Pape(Craft)	MT	43.08
Metal Scrap(MS,GI,SS & Aluminium)	MT	228.97
Plastic Waste	MT	52.46
HDPE Containers	MT	18.39
Empty Glass Bottles	MT	32.21
Empty Corncob Bags	MT	1.66
Waste Rubber Stoppers	MT	1.72



PVC Drum/Can	MT	9.95
M.S. Drum	MT	2.94
Gatt Drums	MT	0.88
Mixed E-Waste	MT	8.24
Waste Glass Powder	MT	99.2
Nalgene Bottles	MT	3.06
Coal Ash	MT	329.75

## **Responsible Handling of Waste**

We place significant emphasis on effectively managing various types of waste, ensuring that each unit undergoes appropriate treatment and is directed towards recycling or proper disposal (offsite).

## **Total Waste Directed to Disposal**<sup>48</sup>(MT)

Most of our hazardous waste is sent for disposal (Landfilling/Incinerated) is handled by authorized vendors and non-hazardous waste is sent for recycling or repurposing.

#### **Hazardous Waste**

Type of Waste	UoM (MT)	FY 24
Chemical sludge from wastewater treatment (ETP Sludge)	MT	13.70
Forced Evaporation Salts	MT	0.63

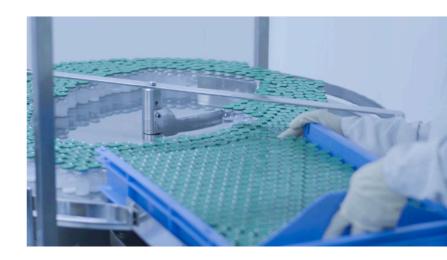


#### Non - Hazardous Waste

Type of Waste	UoM (MT)	FY 24
Packaging waste ( Wood)	MT	26.01
Empty Glass Bottles	MT	32.21
Waste Rubber Stoppers	MT	1.72
PVC Drum/Can	MT	9.95
Gatt Drums	MT	0.88
Waste Glass Powder	MT	99.2
Nalgene Bottles	MT	3.06
Coal Ash	MT	329.75

## **Total Waste Diverted from Disposal** 49

During the fiscal year, we successfully diverted 685.81 metric tons of hazardous waste and 691.03 metric tons of non-hazardous waste, totalling 1,376.84 metric tons of waste from disposal through recycling and re-purposing initiatives.



#### **Hazardous Waste**

Type of Waste	UoM (MT)	FY 24
Used / Spent oil	MT	2.02
Discarded containers / barrels / Liners contaminated with hazardous wastes / chemicals	MT	0.05
Expired chemicals	MT	2.66
Used Batteries	MT	15.19
Biomedical Waste	MT	372.80
Boiler Soot	MT	5.76
Spent Carbon	MT	1.21
Spent Solvents	MT	291.88



#### Non - Hazardous waste

Type of Waste	UoM (MT)	FY 24
Corrugated Box	MT	334.91
Cardboards	MT	2.20
Paper & Stationery /Shredding Pape(Craft)	MT	43.08
Metal Scrap(MS,GI,SS & Aluminium)	MT	228.97
Plastic Waste	MT	52.46
HDPE Containers	MT	18.39
Empty Corncob Bags	MT	1.66
M.S Drum.	MT	1.12
Mixed E-Waste	MT	8.24

We repurpose the waste diverted from disposal either through in-house reuse or by employing authorized scrap dealers and recyclers for proper disposal.

## Case Study: Advancing Towards a Zero Landfill Objective through Responsible Waste Management

**Objective:** Achieve Zero Landfill Disposal of Hazardous Waste

Waste Categories: Boiler Soot, Effluent Treatment Plant (ETP) Sludge, Expired Chemicals

Previous Approach: Prior to the implementation of our new waste management strategy, hazardous waste materials such as expired chemicals, boiler soot, and ETP sludge were disposed of through direct landfilling by a Pollution Control Board (PCB) approved vendor. This method contributed to significant carbon emissions and was not aligned with our sustainability goals.

Innovative Solution: In our pursuit of a circular economy and responsible waste handling, we transitioned to an alternative vendor accredited by the Telangana State Pollution Control Board (TSPCB). This strategic shift allowed us to divert all hazardous waste to Alternative Fuel and Raw Material (AFRM) processes. Consequently, these waste materials are now repurposed as raw materials in cement manufacturing.

Impact: The adoption of this sustainable waste management practice has led to a substantial reduction in our carbon footprint, with an estimated 15,000 kg of CO2 emissions saved. This initiative not only mitigates the environmental impact associated with hazardous waste disposal but also contributes to the conservation of natural resources by providing valuable inputs for the cement industry.



#### **3R Approach for Animal Research**

In our business periphery, Rodent animal studies remain integral to our official drug development processes, as required by regulations for chemical safety and biological quality control, as well as the efficacy of our pharmaceuticals. Additionally, our vaccine business sector utilizes animals for essential In line with our above-mentioned strategy, we align seamlessly with our high ethical standards, enabling us to meet the most stringent animal welfare criteria by reducing usage of animal with non-animal alternatives and establish a unified, transparent approach across our entire organization.

We maintain strict adherence to bioethical standards and animal welfare regulations, minimising animal usage through innovative study designs and alternative methodologies. Our commitment to responsible research practices underscores our dedication to ethical standards and scientific integrity.

BE is committed to the 3Rs (Replacement, Reduction and Refinement of animals in research) and have programmes to accelerate the development of new approach methodologies which have potential to reduce and eventually replace the need for animals. We focus on robust experimental design and analysis, to ensure the fewest animals are needed to achieve scientific objectives, with our researcher's refining procedures and applying high standards of animal care.





#### Reduction

Study design for Employing the minimum number of animals necessary



#### Refinement

Minimizing distress or discomfort before, during, and after testing



#### Replacement

Minimizing distress or discomfort before, during, and after testing. Transitioning from animal studies to non-animal systems

In our commitment to sustainability and ethical practices, we maintain a stringent policy on the sourcing of animals for research, adhering to Standard Operating Procedures (SOPs) 100303 and 103303, which ensure procurement from CCSEA-approved vendors and rigorous health and pathogen screening. During the reported period, our research and development activities involved 25,415 animals,

with a species breakdown of 19,652 mice, 3,830 guinea pigs, 1,838 rats, and 95 hamsters. The ethical treatment and welfare of these animals are paramount, upheld by IEAC-approved testing protocols and regular oversight from a CCSEA nominee. We are dedicated to minimizing animal pain and distress, implementing humane endpoints as per SOP 104559, and actively exploring pharmacopeia-compliant alternatives to animal testing.



To highlight some of our 3Rs implemented projects at Biological E Ltd for commercial licensed products

Approach	Implemented Project	FY 2023-24
REMOVAL REDUCTION	Abnormal Toxicity test remove from final bulk and lot	64.17%
REDUCTION	Diphtheria and Tetanus Specific Toxicity test removal from Final Bulk	84.20%
REPLACEMENT	of In-Vivo Hepatitis B potency in final bulk with In-Vitro potency in final lot	92.86%
REDUCTION	Single Dilution assay Implemented for Diphtheria Potency test in final bulk.	71% Guinea pigs reduction
REDUCTION	Single Dilution assay implemented for Tetanus Potency in final bulk	74% Mice usage reduction
REDUCTION	Pyrogen test removal from JEV Final Lots	91.38%
REDUCTION	Pyrogen test removal from Hepatitis B IP Final Lot	100%
REPLACEMENT	Implementation of Vero cell assay for Specific Toxicity and Irreversibility for Bulk purified Diphtheria toxoid	6 guinea pigs lives saved per test
REPLACEMENT	Implementation of Vero cell assay for Detoxification test for in process Diphtheria Samples	Total 4 guinea pigs saved per two samples test

Our facilities are audited quarterly for compliance with animal welfare standards. Environmental compliance in R&D is ensured through safety protocols and the use of personal protective equipment (PPE). Looking ahead, our long-term strategy focuses on the 3Rs method (Replacement,

Reduction, and Refinement) as per pharmacopeia guidelines, demonstrating our ongoing commitment to reducing reliance on animal testing in vaccine and biologic development, and reinforcing our dedication to responsible and sustainable research practices.





## **5.4 Biodiversity**

Our sustainability efforts are deeply rooted in our commitment to environmental conservation and the enhancement of biodiversity in the regions where we operate. We take pride in the establishment of green belts, which now span over 30% of our manufacturing site areas. Among our ecological initiatives is the herbal garden at our Shameerpet facility, which has become a sanctuary for various bird species and a vibrant ecosystem for butterflies. We actively engage in planting programs to extend our green spaces and to naturally capture carbon emissions.



Since 2016, we have partnered with the Factories department to plant saplings across our seven sites, contributing to the 'Haritha Haram' initiative now known as Mega Plantation Drive by the Telangana Government. The selection of plant species is intentional, aimed at fostering ecological variety and resilience, with species such as Silver Oak, Bauhinia blakeana, Anthocephalus cadamba, and Millingtonia hortensis.

In the FY 2023-24, we have planted more than 2410 trees and earmarked a budget of 11.59 Lakhs for plantation activities within our environmental expenditures.



We are delighted to inform you that Biological E Limited (Datla Foundation) has been honoured with the CII Mega Plantation Drive Award for FY23-24. This prestigious award is recognized by the Indian Green Building Council (IGBC). It has been achieved with the dedicated efforts of our BE volunteers, Sustainability, Horticulture, and Admin teams.





This financial commitment covers a spectrum of environmental management aspects, including treatment and disposal, equipment procurement, maintenance, and the roll-out of energy-saving measures. These investments are a testament to our unwavering dedication to responsible environmental management and stewardship.

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We proactively manage our supply chain by collaborating closely with our business associates, which include suppliers, vendors, contractors, and logistics partners. Through ongoing risk evaluations, we aim to strengthen our Supply Chain Management and gain deeper insights into potential risks, allowing us to strategically adjust our operations.

The ethical procurement of materials is paramount to us, especially in light of resource limitations. We emphasize adherence to Good Manufacturing Practices (GMP) and our Principles for Responsible supply Chain Management. We require that our vendors hold certifications and comply with all relevant national and international standards and regulations.

## Recognition for Exceptional Trade Contributions

Biological E Limited (BE) is honoured to have been presented with a "Certificate of Appreciation" by the Hyderabad Customs Commissionerate in recognition of our outstanding contributions to imports and exports during the fiscal year 2022-23. The accolade was bestowed upon us at a ceremony held on January 27, 2024. Mr. PV Raju, Senior Vice President, and Mr. Sai Srinivas, Manager, had the privilege of receiving the certificate from Mr. DP Naidu, Principal Commissioner of Customs.

This esteemed certificate of appreciation is awarded to select companies that have made significant contributions to the national exchequer in the given fiscal year. BE is proud to be among the five distinguished companies to receive this recognition.

This acknowledgment serves as a testament to BE's commitment to excellence in our trade practices and our role in bolstering the economy through robust import and export activities. We are committed to continuing our efforts in contributing positively to the nation's economic growth and maintaining high standards in our global trade operations.

The BE Supply Chain Management (SCM) team received the 'Runners-up' award in 'Procurement Organization of the Year,' the 'Outstanding Procurement Team' award, and the 'Excellence in Procurement Sustainability' award from the Institute of Supply Management (ISM), awarded on 25th November 2023.

A total of 83 distinguished companies came together to participate in the strategic forum. Among the participants were notable organizations such as Cipla, DuPont, Tata Trust, Reliance Industries, Uber, HSBC, IIFL, Infosys, and many others. The ISM-India CPO Awards, the focal point of this forum, are designed to acknowledge and honour the collective achievements and collaborative endeavours of both individuals and teams.

## Export Excellence Acknowledged by Pharmexcil

Biological E Limited (BE) is proud to announce that we have been honoured with the Outstanding Export Performance Award for the fiscal year 2021-22, a prestigious recognition from the Pharmaceutical Export Promotion Council of India (Pharmexcil), under the aegis of the Ministry of Commerce & Industry, Government of India. The award was presented during an impressive ceremony at the Hyderabad International Convention Centre on July 5, 2023. Ms. G. Kalavathy, Senior Vice President of International Marketing, graciously accepted the award on behalf of our organization.

This accolade is a testament to BE's sustained commitment to excellence in the global pharmaceutical market, marking the continuation of our recognition by Pharmexcil, with previous awards received for the years 2012-2013, 2013-2014, and 2014-2015. Our consistent performance in exports underscores our dedication to quality, innovation, and the expansion of our international footprint.

BE's recognition by Pharmexcil reflects our role as a key player in the pharmaceutical industry

### **Sustainable Packaging Innovation**

Biological E Limited's Bestozyme-SF Syrup, a natural digestive enzyme supplement, has been distinguished with the India Packaging Award for Excellence in Packaging Design, Shapes, and Structure. This honour, bestowed upon us on June 21, 2023, in Mumbai, serves as a testament to our dedication to creating packaging solutions that are both innovative and environmentally responsible.

Since its introduction to the digestive liquid market in 1962, Bestozyme has established itself as a trusted brand among medical professionals. With a rich heritage spanning six decades, it has consistently provided patients with relief and confidence, supporting healthy digestion.

In April 2023, we expanded our Bestozyme product line with the launch of Bestozyme-SF, a sugar-free variant specifically formulated to cater to the needs of diabetic patients, as well as those who are weight-conscious or managing obesity. This product introduction marked an industry-first with its unique mono-carton packaging, further demonstrating our commitment to sustainability and thoughtful design.



#### THE SAP ECC 6.0 APPLICATION

Biological E. Limited has taken a significant step forward in its commitment to sustainability and technological innovation with the successful migration of its SAP landscape from on-premises infrastructure to the Amazon Cloud, which went live in April 2023. This strategic move to cloud computing not only enhances the organization's operational efficiency but also aligns with its environmental goals by reducing the carbon footprint associated with physical data centres.

The SAP ECC 6.0 application, which has been instrumental in streamlining Biological E. Limited's day-to-day business operations since its initial implementation in 2015, includes modules for Material Management, Production Planning, Quality Management, Sales and Distribution, and Finance and Controlling. The transition to a cloud-based platform ensures that these critical functions are supported by a more flexible, scalable, and secure computing environment.

By adopting cloud technology, Biological E. Limited is poised to reap the benefits of improved performance, reduced costs, and enhanced collaboration across its operations. Moreover, this initiative demonstrates the organization's proactive approach to embracing sustainable practices in its IT infrastructure, setting a precedent for environmental responsibility in the pharmaceutical industry.

### Integration of SAP Warehouse Management System at Shameerpet Vaccine Plant

We are excited to report the successful implementation of the SAP Warehouse Management System (SAP WMS) at our Engineering Warehouse within the Vaccine Plant in Shameerpet. The cuttingedge system, developed by our in-house IT SAP team, was designed, conceived, and deployed in a remarkable two-month period.

The launch of SAP WMS marks a significant improvement in our operational efficiency and inventory management. It was made possible through the exemplary cross-functional collaboration between the Supply Chain Management (SCM), IT SAP, Quality, and Finance Teams.

#### **Key Benefits of SAP WMS Implementation**

- Enhanced tracking and traceability of over 5500 materials.
- Elimination of data loss risk, ensuring 100% accuracy in tracking.
- Performance boost in material delivery processes.
- Implementation of electronic checks for precise location management.
- Simplified identification of empty bins and floor inventories.

At the beginning of our partnerships with vendors, we establish explicit expectations for environmental and social ethics, which cover fair labour practices, human rights, health and safety, and environmental stewardship. During the reporting period, we did not identify any suppliers with negative social and environmental impacts within India. We support the use of local suppliers as a cost-effective strategy that contributes to the growth of our smaller business partners. This practice generates employment opportunities and positively influences the communities where we operate, in line with UN SDG Goal 8: Decent Work and Economic Growth, which advocates for sustainable.

We maintain a strict commitment to ethical labour practices, ensuring that no individuals under the age of 18 are employed in our organization. We have not identified any suppliers at risk of engaging in forced or compulsory labour, thanks to our suppliers' code of conduct and routine screenings.

Our Quality Assurance and Procurement department regularly reviews new and existing vendors based on their categorization, including conducting site audits for critical and major vendors after one year of collaboration.

These reviews assess the quality of deliverables, punctuality, facility operations, compliance with legal requirements, and adherence to ethical norms.

We adopt a zero-tolerance stance on non-compliance or quality issues within our supply chain, highlighting our commitment to product excellence. We strictly follow relevant regulations and standards and expect the same from our vendors. If a vendor fails to meet legal requirements and shows no signs of improvement, their partnership with us may be at risk. Vendor dismissal can occur due to various factors, including the rejection of five consecutive shipments within a year, failure to requalify, or poor annual evaluations. However, there were no vendor dismissals in the reported year.

Through regular evaluations, we identify any issues or risks in our suppliers' operations and provide technical assistance to address these challenges. We offer continuous guidance to help them develop robust internal procedures and manage identified business risks. By fostering strong relationships with our business partners and ensuring ethical conduct throughout our supply chain, we uphold our commitment to product integrity and the welfare of our stakeholders.



## **6.1 Supplier Assessment**

Our organization's performance is deeply dependent on the selection of our suppliers. Those who provide us with essential raw materials enable the production of high-quality goods, while our downstream partners, including transportation networks, ensure these products reach our patients.

To partner exclusively with reliable suppliers who uphold our commitment to excellence, we have crafted a Standard Operating Procedure (SOP) that is in harmony with our policy for sustainable procurement. This SOP encompasses steps like vendor assessment and finalization. For suppliers and manufacturers, we require a self-assessment that adheres to Good Manufacturing Practices (GMP) and the quality system elements outlined in the manufacturer's checklist. Following the quality department's approval of the self-assessment, the specific raw materials are identified.

Our Quality Assurance team has rigorous criteria for vendor selection and approval, and we proceed to establish commercial relationships only with those who meet these standards. Our Quality Assurance team also mandates that vendors submit three samples from their production batches for evaluation. Depending on the nature of the materials procured, suppliers are classified into critical, major, and minor categories based on the criteria set by our Quality Assurance department.







## **6.2 Responsible Sourcing**

Building lasting relationships is grounded in trust, a value we deeply cherish. We are dedicated to generating value throughout our entire supply chain, recognizing our suppliers as a fundamental component of our operations. Our commitment to sustainable procurement means we actively pursue partnerships with vendors who align with our ethical standards. Securing the finest suppliers is critical to delivering premium pharmaceutical products and vaccines that contribute to the health and welfare of individuals.

Throughout the challenges of lockdowns, we sustained strong communication with our business partners to ensure a steady flow of essential materials for our manufacturing processes. We extend our profound appreciation to all our partners for their role in the production of our vaccines. Our evaluation criteria are designed to ensure that our suppliers adhere to environmental and social regulations, encompassing energy efficiency, occupational safety, human rights, and labour standards.

The robustness of our supply chain is vital for sourcing raw materials and ensuring the delivery of our products to clients. Our team, along with vendors, contractors, distributors, and logistics partners, collaborates to manufacture and distribute our offerings. Every element of our supply chain contributes to the value of our products, and we diligently oversee each interaction to maintain transparency in every exchange.

We recognize that cooperation is fundamental to our achievements, and we implement our GET principles (Governance, Engagement, and Transparency) within our supply chain management practices. This approach allows us to assess our suppliers thoroughly, confirming their adherence to all legal and regulatory obligations. Our procurement encompasses a diverse array of materials, from chemicals and lab equipment to packaging, consumables, and office supplies 51 52. In our screening process, we identified zero negative environmental or social impacts in our supply chain when evaluating suppliers based on environmental and social benchmarks.

#### Suppliers Engaged

Description	FY 24	FY 23	FY 22
New Suppliers	1007	1020	1026
Number of suppliers screen basis (Environment and Social criteria) <sup>53</sup>	1007	1020	1026
Percentage of supplier's screen basis (Environment and Social criteria) <sup>54</sup>	100%	100%	100%
Total Procurement budget (in Crore INR)	1143	1573	6032
Procurement budget spent on local suppliers (in Crore INR) <sup>55</sup>	687.78	857.43	1061
Percentage spending of procurement budget on local suppliers (%) <sup>56</sup> <sup>57</sup>	60%	55%	18%
Total number of local suppliers engaged	4628	1826	1837

## Key Suppliers Engaged<sup>58</sup>

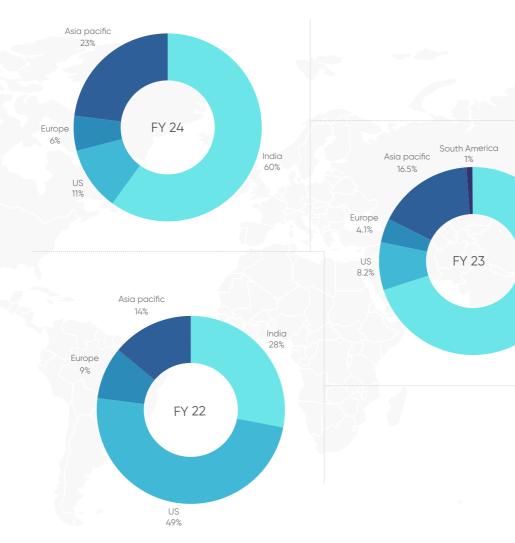
Description	FY 24	FY 23	FY 22
India	60%	68%	28%
US	11%	8%	49%
Europe	6%	4%	9%
Asia Pacific	23%	16%	15%
South America	0%	1%	0%

<sup>308-2</sup> Negative environmental impacts in the supply chain and actions taken 414-2 Negative social impacts in the supply chain and actions taken 308-1: New suppliers that were screened using environmental criteria

<sup>[54] 414-1</sup> New suppliers that were screened using social criteria
[55] 204-1 Proportion of spending on local suppliers
[56] Local suppliers are defined as those that are situated within the Indian region, while ignificant locations of operations pertain to the company's eight sites located across India [57] Percentage spending of procurement budget on local suppliers includes products and services purchased locally

<sup>[58] 2-6</sup> Activities, value chain and other business relationships





## 6.3 Supplier Diversity

At BE, we recognize the importance of diversifying our supplier base across different regions to mitigate the risk of operational interruptions. Additionally, we have made strategic investments in multiple locations, yielding products that serve the needs of both India and the international market.

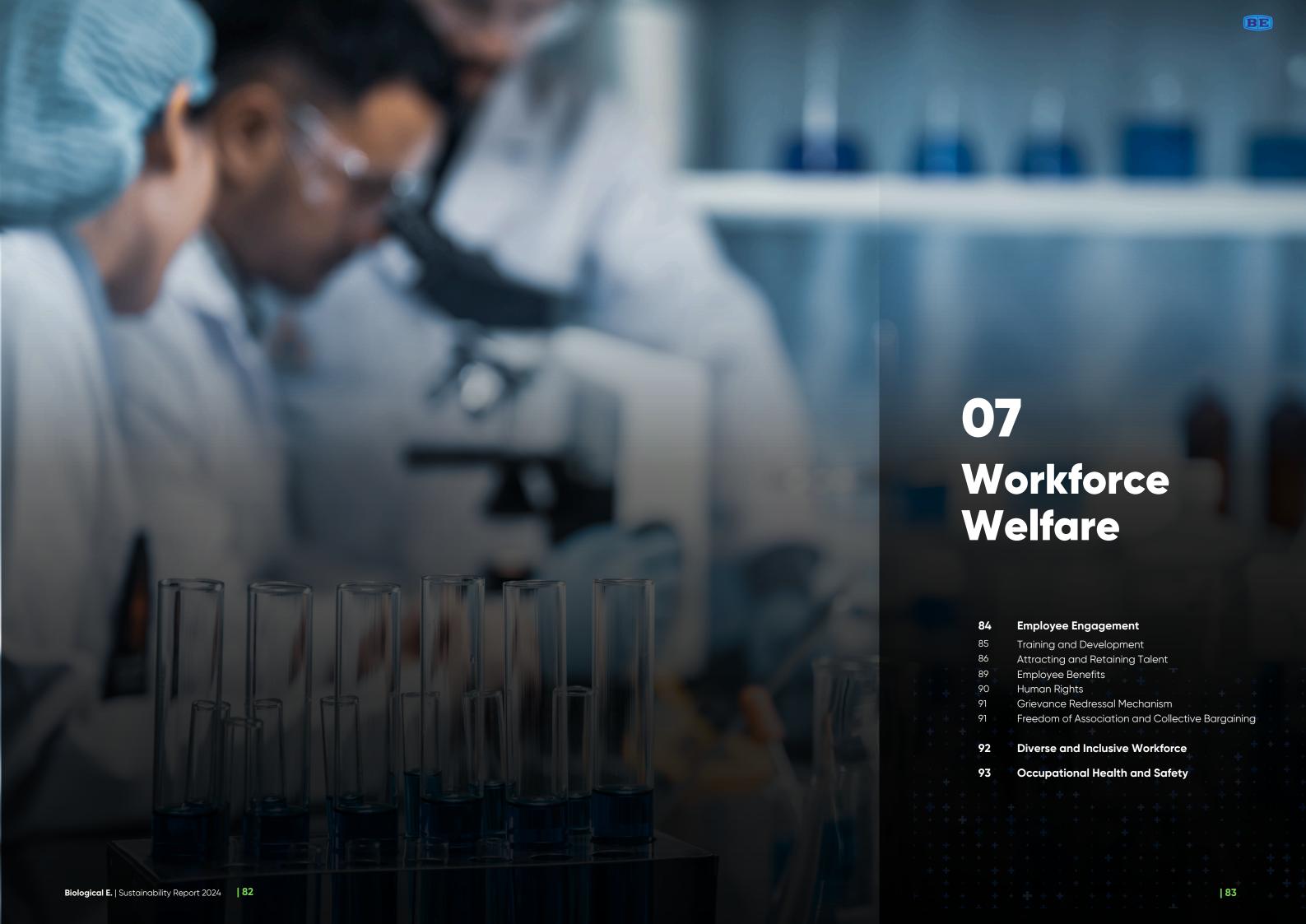


61% of total procurement budget spent on local suppliers in the reporting period

In FY 2023-24, we engaged with 1007 new suppliers, respectively. While we have key suppliers from countries such as the USA, Germany, Japan, Switzerland, and Denmark, approximately 61% of our materials are sourced domestically within India.

India

We are committed to partnering with local suppliers as it not only proves to be cost-effective but also supports the growth of smaller businesses. This strategy fosters employment opportunities and yields a beneficial impact on the local communities where we operate. Our approach is in harmony with the United Nations Sustainable Development Goal (SDG) 8, which advocates for sustainable and inclusive economic growth, full and productive employment, and decent work for all.







## 7.1 Employee Engagement

At Biological E Limited, we recognize our workforce as our most valuable resource. As a leader in the pharmaceutical sector, driven by progress and innovation, we are excited to welcome new graduates. Our approach to talent acquisition is centred on attracting the most promising individuals who are keen to drive healthcare forward with pioneering research and development.

We are proud to serve as a launchpad for emerging talent embarking on their professional journeys. Our hiring process is meticulously crafted to select candidates who possess a robust academic background, an insatiable appetite for knowledge, and a determination to effect real change within the pharmaceutical field. Our strategy for recruiting new talent is to identify those who share our core principles of innovation, teamwork, and excellence. By joining our ranks, newcomers are afforded the opportunity to receive guidance from seasoned experts, engage in innovative projects, and contribute to the creation of vital medications. Biological E is deeply committed to enhancing our Research and Development (R&D) facilities. We are convinced that innovation is the product of diverse thinkers uniting under a common goal.

As we bolster our R&D division, we are on the lookout for passionate individuals eager to extend the boundaries of scientific understanding and devise novel solutions for advancing health outcomes. Whether your expertise lies in drug discovery, formulation, process innovation, or clinical trials, you will find your niche within our growing team.



## Commitment to Learning

We are dedicated to fostering a culture of continuous learning. As part of our talent pool, you will have access to ongoing training, development programs, and mentorship opportunities to support your professional growth.



### Cutting-Edge Research

Join a team that is leading the forefront of pharmaceutical research. We offer an environment that inspires curiosity and innovation, allowing you to contribute to projects that have a meaningful impact on global healthcare.



## Collaborative Environment

Collaboration is the cornerstone of our work. Our multidisciplinary teams work together to address complex challenges, ensuring that diverse perspectives contribute to well-rounded solutions.



#### **Training and Development**

In the wake of the COVID-19 pandemic, the pharmaceutical industry has witnessed unprecedented growth, emphasizing the importance of a skilled workforce for business expansion. At BE, recognizing and nurturing talent is central to our strategy. Attracting individuals who embody our core values and ensuring their retention is critical for sustaining operational momentum.

We are proud to cultivate a workplace environment that encourages continuous professional development. By offering relevant training and opportunities for skill enhancement, we ensure that our employees are equipped to deliver their best performance, thereby boosting productivity. Our commitment to a respectful and inclusive work culture is unwavering, with a zero-tolerance stance on harassment or discrimination of any kind.

Fair and equitable compensation is a cornerstone of our employment philosophy. We ensure that all BE team members, including both permanent staff and contractual workers, receive wages that not only comply with but exceed the minimum standards mandated by the state government. This policy is a testament to our dedication to fairness and equity.

Our commitment to ongoing professional development is further demonstrated by our comprehensive training programs. These are regularly held across all levels of our organization and are focused on reinforcing best practices in manufacturing to achieve operational excellence. We have recorded detailed statistics regarding the total training hours provided and the number of employees who have benefited from these sessions across our various facilities, ensuring that our workforce remains at the forefront of industry standards.

#### Training hours by designation and gender 59 60 61

Description (Employee Categories)	Unit	FY 2023-24	FY 2022-23	FY 2021-22
Senior Management (Band G & H)	No of participants	60	12	2
(General Manager & Above)	Hours	374	71	16
Middle Management (Band E & F) (Senior	No of participants	339	256	74
Manager to Deputy General Manager)	Hours	2035	1346	567
Junior Management (Band C & D) (Assistant	No of participants	940	955	261
Manager, Deputy Manager & Manager)	Hours	4927	4947	864
Staff (Band 1 ~ 2 and Band A and B) (All	No of participants	1850	1760	491
Executives, Assistants & Trainees)	Hours	8341	5541	1174
Average Hours of Training	Hours	3.12	3.15	2.39

Gender	Hours of training by gender	FY 2023-24	FY 2023-24	FY 2021-22
	No of participants	2832	2704	738
Male	Hours	14100.5	10731	2319
	Average hours of training	4.97	3.97	3.14
	No of participants	360	279	90
Female	Hours	1577	1174	302
	Average hours of training	4.38	4.21	3.36

<sup>[59] 404-1</sup> Average hours of training per year per employee

[61] The reported figure includes both external and internal trainings

<sup>[60]</sup> OHS average training hours for permanent employees have been reported in Occupational Health and Safety section



Sr. No.	Description of the Course	FY 2023-24					
31. NO.	Description of the Course	Total nos. of hours offered	No. of person attended				
1	Internal Courses for Skill Upgradation	2133	811				
2	External Courses for Skill Upgradation	13548	2381				

We provide external training programs to our employees for skill upgradation. Trainings were provided on the following: MS Excel - Basic & Advanced , Stakeholder Management ,Managerial Skills ,Communication & Interpersonal Skills, Power BI etc. 62

The training programs are identified through feedback gathered via the Performance Management System during the Annual Performance Review Process. Based on this feedback, the Learning and Development (L&D) team assesses both recurring and unique training needs to develop a training calendar.

If there are high numbers of participants, multiple sessions are conducted to accommodate everyone.

Currently, BE does not offer specific transition assistance programs for employees who are retiring. <sup>63</sup> However, in cases of separations due to resignations or terminations, we facilitate knowledge transfer during the notice period, with the involvement of the reporting manager to ensure a smooth handover of responsibilities. We recognize the importance of supporting employees through career transitions and are exploring options for future programs.

#### **Attracting and Retaining Talent**

The vitality of our pharmaceutical organization in India is fundamentally linked to the acquisition of a proficient workforce. Our Human Resources department actively manages our talent pool, annually infusing it with a blend of fresh enthusiasm and established experience. We are dedicated to equipping our employees with the necessary skills to foster their career development and meet both corporate and industry expectations. Our focus on training and development is centered on keeping our workforce abreast of the latest advancements in the pharmaceutical sector, thereby preserving our position as a market leader. The expertise of our team members is integral to our goal of improving healthcare accessibility.

At BE, our employees are the backbone to our achievements. We emphasize the importance of attracting, retaining, and nurturing a committed workforce to enact significant progress. Our drive to cultivate an outstanding work environment is reflected in our efforts to imbue our staff with a deep sense of purpose and enable them to realize their utmost capabilities. BE does not engage apprentices, homebased workers, or self-employed individuals.

The most prevalent category of non-direct employees consists of contractual workers sourced through our suppliers, who perform a variety of tasks from janitorial duties to construction work<sup>64</sup>. Given the variability in the number of contractual workers, we have reported an average figure for the reporting period in the table below.



All individuals who undertake work for our organization are included in the employment statistics reported at the end of each reporting period. In response to growing business needs, we have acknowledged the necessity to expand our workforce across all departments. Training sessions for General Managers and higher-ranking officials incorporate specialized modules on sustainability, designed specifically for Vice Presidents and those holding more senior positions within the organization. The table below provides a detailed breakdown of our employees by employment type and gender across various divisions.

## Total number of employees by division, gender, permanent and contract employees <sup>65</sup>

		FY 23-24			FY 22-23			FY 21-22					
Employee Category	иом	· ·	manent oloyees		ntract oloyees		manent oloyees		ntract oloyees		nanent oloyees		ntract loyees
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Corporate Office	Nos	124	32	103	61	126	28	0	0	123	30	0	0
Pharma Division	Nos	2135	120	630	292	2065	123	559	212	1828	118	590	204
Vaccine Division	Nos	2418	201	950	807	2362	188	1008	667	2357	172	1077	651
Total	Nos	4677	353	1683	1160	4553	339	1567	879	4308	320	1667	855



Achieved a 7% female representation among permanent employees, enhancing our workforce diversity.

## Percentage of employees per employee category <sup>66 67</sup>

		Age Group								% of	
Category		<30			30-50			>50			female emplo
		Male	Female	Others	Male	Female	Others	Male	Female	Others	yees
Senior Management (GM & above)	Nos	0	0	0	41	4	0	51	4	0	9%
Middle Management (Senior Manager to Deputy General Manager)	Nos	0	0	0	283	19	0	57	4	0	6%
Junior Management (Assistant Manager. Deputy Manager & Manager)	Nos	18	4	0	867	63	9	20	1	0	7%
Staffs (All executives, Assistants & Trainees)	Nos	1599	166	0	1680	86	0	58	1	0	7%
Total	Nos	1617	170	0	2871	172	0	188	10	0	353
% of employees	%	90%	10%	-	94%	6%	-	95%	5%	-	8%

<sup>[65] 2-7:</sup> Employees
[66] 405-1 Diversity of governance bodies and employees
[67] Details of Board of Directors have been reported in Corporate Governance section and have been excluded from Percentage of employees per employee category



## Percentage of employees received performance review 2023-24<sup>68</sup>

Employee Category	No	of Employe	es	Percentage of Employees			
Employee Calegory	Male	Female	Total	Male	Female	Total	
Sr. Management (GM & above)	86	3	89	97%	3%	100%	
Middle Management (Sr. Manager to DGM)	289	24	313	92%	8%	100%	
Junior Management (Assistant Manager, Deputy Manager & Manager)	767	62	829	93%	7%	100%	
Staffs (All executives, Assistants & Trainees)	2783	203	2986	93%	7%	100%	

### New Joinee (2023-24)<sup>69</sup>

Employee Category	UoM	<30 years	30-50 years	>50 years	Male	Female	Total
Permanent Employees (On Payroll – Staff)	No.s	731	381	4	1036	80	1116
Hiring Rate	%	22%					



#### **Employee Turnover**

Contractual positions within our organization experience a marginally higher rate of employee turnover, with individuals often departing for opportunities that offer even modest increases in compensation as reported by surrounding businesses.

It is important to underscore our dedication to supporting our employees through their parental leave. Our comprehensive parental leaves benefits have led to a significant milestone: we have achieved a 100% return-to-work rate among employees following their parental leave. This success serves as a clear indicator of our commitment to employee wellbeing and our proactive measures to ensure a seamless reintegration into the workforce post-leave.

	FY 2023-24
Employee turnover for permanent employees	19.2%

Workforce Turnover (include cases of retirement, transfer and death)							
Employee Category UoM <30 30-50 >50 Male Female Total						Total	
Permanent Employees (On Payroll – Staff)	No.s	516	405	28	880	69	949



#### Parental Leave<sup>70</sup>

		FY 202	FY 2023-24		FY 2022-23		21-22	
SNo	Parameters	Female	Male	Female	Male	Female	Male	
1	Number of employees that were entitled to parental leave	353	4677	320	4308	283	3542	
2	Number of employees who took parental leave	37	272	28	94	19	78	
3	Number of employees who returned after their parental leave ended	31	272	28	94	19	78	
4	Number of employees who took parental leave in previous year	28	94	19	78	8	64	
5	Total number of employees retained 12 months after returning to work following a period of parental leave	19	78	19	78	8	64	
	Return to work rate (%)	98%	6	100	)%	100	)%	
	Retention rate (%)		80%		-		-	

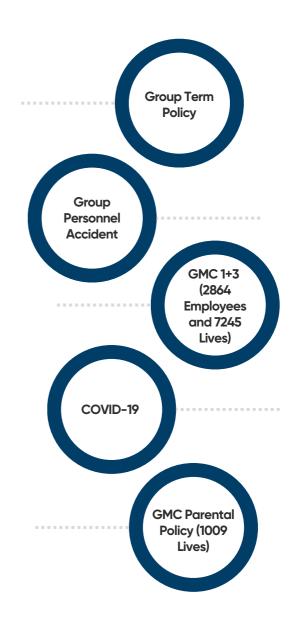
#### **Employee Benefits**

At BE, we place a high emphasis on the welfare and benefits of our employees. The Head of Human Resources, site-level HR teams, and General Managers are responsible for overseeing remuneration processes. We engage independent external advisors and compensation consultants to help determine fair employee wages, taking into account external stakeholders and industry peers to stay abreast of market trends.

We acknowledge that enhancing living standards and ensuring just treatment of our workforce, including equitable pay, is not just an ethical imperative but also a key element in building a sustainable enterprise.

We are committed to recognizing the contributions of our employees and aim to offer them comprehensive benefits as a token of our gratitude. Beyond mandatory offerings such as paid leave and Employee's State Insurance (ESI), we provide transportation services, regular health screenings, and access to a full-time occupational health clinic on our premises, available to both permanent and contractual BE staff. Health risks are evaluated according to each employee's specific job role, with assessments conducted on relevant health metrics. Our organization's Term insurance and Mediclaim policies extend coverage to include non-occupational medical incidents as well.

In addition to these provisions, our permanent employees also benefit from the Employee Provident Fund, pension plans, gratuity, medical reimbursements, and leave encashment. The following is a list of benefits we offer to our employees:



<sup>[70] 401-3:</sup> Parental leave

<sup>[71] 2-20:</sup> Process to determine remuneration

<sup>[72] 401-2:</sup> Benefits provided to full-time employees that are not provided to temporary or part-time employees



		UoM	FY23-24						
SNO.	Benefits Provided		Sum Insured	Premium Paid	Employee covergae	Family Members			
1	Group Term Policy	INR	9,47,32,16,398	93,69,012	5146	NA			
2	Group Personnel Accident	INR	9,49,27,27,500	4,58,677	4719	NA			
3	GMC 1+3 (2864 Employees and 7245Lives)	INR	1,14,06,00,000	5,08,43,816	3736	10305			
4	GMC Parental Policy (1009 Lives)	INR	35,97,00,000	2,26,62,413	NA	1143			

#### **Human Rights**

We recognize that our responsibilities extend beyond the realm of pharmaceutical innovation and into the sphere of social impact. As a organization operating on a global scale, we are deeply committed to upholding human rights throughout our entire value chain. Our dedication to human rights is guided by the Universal Declaration of Human Rights, International Labour Organization conventions, and the UN Guiding Principles on Business and Human Rights. We understand that protecting and promoting human rights is not only a moral imperative but also a key component of sustainable business practices.

The organization adheres to the highest standards of labour rights, prohibiting any form of discrimination, harassment, or forced labour. It ensures that all employment practices, including recruitment, remuneration, and promotion, are conducted with fairness and transparency. Biological E also recognizes the importance of employee well-being and professional development, offering continuous training programs, competitive benefits, and opportunities for career advancement. By fostering a culture of respect and empowerment, the company upholds the human rights of its workforce and contributes to their personal and professional growth.

Beyond its internal operations, Biological E extends its human rights ethos to the communities it serves and its supply chain. The organization actively engages with local communities to understand their needs and support their development through various initiatives, including healthcare programs, education, and economic empowerment projects. In its supply chain, Biological E insists on ethical sourcing and conducts thorough due diligence to ensure that its suppliers adhere to human rights standards. The organization's zero-tolerance policy for child labor, human trafficking, and any other human rights abuses is strictly enforced through regular audits and compliance checks. By holding itself and its partners to these principles. 73We are pleased to report that we haven't found any violations concerning labour laws and human rights during the reporting period.

Furthermore, for FY23-24, ~90% of our security personnel have received training on our human rights policies and processes across all our units<sup>74</sup>. Also, our training requirements apply to third-party organizations providing security personnel to our sites.



#### **Child Labour**

Our policy governs all our associates and covers essential facets such as respecting human rights, promoting diversity and inclusivity, preventing harassment and discrimination, ensuring a safe workplace, combating modern slavery and human trafficking, prohibiting child labour, and upholding fair work hours, wages, and benefits.



#### **Grievance Redressal Mechanism**

At Biological E, we hold our employees in the highest regard and are committed to fostering a vibrant and dynamic work environment that encourages open communication. We are dedicated to promptly addressing employee concerns and have established a robust system for reporting and managing grievances in accordance with the Industrial Dispute Act of 1947. This process is thoroughly communicated to new employees during their orientation and is readily accessible to all staff via the Biological E. Employee Portal (BEEP).

Our comprehensive grievance redressal policy allows employees to submit written complaints on a variety of issues, including perceived unfair treatment, substandard working conditions, unapproved leave, team dynamics, and discrimination based on gender, race, colour, region, age, marital status, or disability. The Human Resources department ensures the confidentiality of all grievances and oversees the effective functioning of the appeals process. There are no grievances reported during the reporting period FY 23-24. To address these concerns, we have instituted a specialized grievance redressal committee consisting of three members, including a representative from the Human Resources Department (HRD) and two others at the senior manager or functional head level.

The committee is tasked with reviewing and resolving grievances within seven days of receipt, based on the evidence presented.<sup>75</sup>

Human Resources is responsible for maintaining meticulous records in both digital and physical formats. These records include grievance checklists, details of grievance redressal committee members, grievance register filings, and the generation of grievance redressal reports. Our commitment to our employees' well-being is reflected in our diligent approach to grievance management, which is an integral part of our sustainability initiatives at Biological E.



#### Freedom of Association and Collective Bargaining

At our Gaganpahad facility, we are deeply committed to the well-being of our employees and proudly support their representation through an established union. Our collaborative efforts with the union are frequent and focused on enhancing the quality of our workers' professional and personal lives. This includes areas such as welfare, career advancement, and addressing any workplace concerns.

We abide by the terms set forth in the Memorandum of Understanding (MoU), which was formulated through the principles of collective bargaining and co-determination, ensuring that around 3% of our workforce benefits from collective bargaining agreements. These agreements play a crucial role in securing fair representation for our employees and their active involvement in the decision-making processes.

We place a high value on maintaining transparent and direct communication with our employee union. In doing so, we ensure they are well-informed of any substantial changes to policies, procedures, or practices well in advance. Our concerted efforts are aimed at fostering mutual respect and cultivating a workplace atmosphere characterized by harmony.

Biological E is dedicated to applying the same set of rules and regulations to all employees, regardless of their coverage under collective bargaining agreements, 6 to ensure uniformity across the board. For those not included in such agreements, the organization determines their working conditions and terms of employment by referencing either the collective bargaining agreements that apply to other employees within the organization or those from external sources. This strategy is pivotal in upholding equity and consistency in how all employees are treated, irrespective of their union membership or bargaining position.

Furthermore, we have implemented an employee grievance redressal procedure that aligns with the Industrial Dispute Act of 1947. This procedure is thoroughly communicated to new employees during their orientation, demonstrating our commitment to addressing and resolving any workplace issues promptly and effectively. Our approach to employee relations is a testament to our dedication to sustainability and social responsibility within our organization.



#### 7.2 Diverse and Inclusive Workforce

Biological E Limited acknowledges the crucial role that diversity and inclusion play in shaping a progressive and dynamic organizational culture. Our commitment to these principles is not just a reflection of our dedication to equity and fairness for all employees, but it is also a strategic imperative that fuels innovation, creativity, and success. Diversity at Biological E extends beyond the traditional markers of race, gender, and ethnicity—it encompasses an array of perspectives, experiences, and talents that enrich our corporate environment.

In our quest to create a workplace where all individual's unique abilities are leveraged, we have taken deliberate steps to foster inclusivity. This begins with our recruitment strategies, which are designed to provide equal opportunities to all candidates, thereby ensuring a meritocratic hiring process free from biases. Our aim is to remove any barriers that could prevent the fair treatment of any potential or current employee.

Our commitment to diversity and inclusion is further demonstrated through our ongoing educational initiatives. By providing training and workshops, we aim to raise awareness and promote understanding of the nuances of diversity. This education encourages open communication and respectful interactions among our workforces. Employee resource groups also play a vital role, offering a forum for underrepresented voices to share their insights, thereby promoting a sense of community and empowerment.

We believe that our dedication to these values significantly contributes to our ability to attract and retain exceptional talent, engage our employees effectively, and catalyse innovation. By valuing the diverse contributions of each team member, we not only affirm our pledge to sustainability within our organization but also extend this ethos to the broader communities we impact. Through our unwavering efforts to advance diversity and inclusion, we are confident that we will continue to drive positive change and uphold our role as a responsible and forward-thinking enterprise.





#### 7.3 Occupational Health and Safety

Over the last decade, our organization has proudly achieved a notable milestone, maintaining a record of zero fatalities, zero workplace recordable High consequence injuries and zero work-related illhealth for employees and workers. 77 78 However . we recorded 5 first aid cases in the reporting period. As a conscientious vaccine manufacturer, we place the utmost importance on the health and safety of our workforce. To this end, we have instituted rigorous Standard Operating Procedures (SOPs) that underscore our commitment to occupational health and safety.



"Zero" reportable incidents, LTIFR or incidents during the reporting period, showcases the commitment to safety, health and environment

Total	Man	Hours					
Worked							

FY 2021-22		FY 2022-23		FY 2023-24	
Permanent Employees	Contract Employees	Permanent Employees	Contract Employees	Permanent Employees	Contract Employees
50,13,316	45,29,602	65,35,354	48,52,261	65,50,280	51,86,444

#### **Employee Health and Well-being**

Our proactive measures include mandatory preemployment medical screenings for all new recruits and comprehensive annual health assessments for every employee, irrespective of their contractual status. We meticulously analyse health data to pinpoint potential areas for enhancement and, based on these insights, we develop a targeted action plan considering non-occupational worker health risks.



The health initiatives we have introduced are multifaceted and include weekly consultations with medical professionals, nutritional adjustments to our canteen offerings, and informative sessions led by medical experts covering vital topics such as nephrology, stress management, and diabetes management best practices.<sup>79</sup>We conduct Annual health checkup for all employees and workers and based on the outcome we undertook some initiatives such as dietary changes in canteen, conducting health talks and other health related initiatives.



We treat the confidentiality of personal health records with the gravity it deserves. Our protocols are designed to ensure that employees' health information is strictly protected and that their engagement with occupational health services is never a basis for any form of differential treatment. We adhere unwaveringly to all pertinent regulations to safeguard our employees' health privacy and security.

#### Safety Management Systems

Biological E. Limited places paramount importance on the health and safety of our employees, which is why we have embraced the ISO 45001 standard for occupational health and safety management systems for 4 Sites (Shameerpet Vaccine, Shameerpet SEZ, Shameerpet Pharma and Gaganpahad)<sup>80</sup> The ISO management system covers all the operations of the respective sites and has been implemented as per organisation requirements.

The work-related injury rates are calculated based on 10,00,000 hours worked [77] 403-9 Work-related injuries

<sup>[78] 403-10</sup> Work-related ill health [79] 403-6 Promotion of worker health

<sup>[80] 403-1</sup> Occupational health and safety management system



The Azamabad, Dehradun, and Patancheru facilities, which are smaller in scale with respect to size, workforce, and operational capacity, are designated for inclusion in the Stage 2 Implementation phase.

The occupational health and safety management system at Biological E encompasses a comprehensive range of workers, activities, and workplaces to ensure a safe and healthy working environment. This system is meticulously designed to cover all employees and contract workers, across various departments and operational activities. It extends to all areas of the workplace, from research and development laboratories to manufacturing facilities, administrative offices.

This framework integrates our approach in creating a safe and secure work environment. By aligning with the standards, we have established a systematic process to minimize the risk of injury and ill health, enhancing the well-being of our workforce. Our adherence to this international standard demonstrates our proactive commitment to continuous improvement in safety performance and compliance with legal and regulatory requirements. We conduct regular audits and reviews of our safety management practices to ensure effectiveness and to identify opportunities for further enhancement.

Workers covered by an occupational health and safety management system.<sup>81</sup>

S.No	Description	Number	Percentage
1	The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system	2114	74%
2	The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited	2114	74%
3	The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party	2114	74%

#### **Fostering Safety Culture**

At Biological E Limited, employee safety and wellbeing are at the forefront of our operational ethos. We have instituted robust safety committees, inclusive of senior management and workforce representatives, to carry out regular safety evaluations and enforce essential safeguards.<sup>82</sup>

These committees meet quarterly and are accountable to the overarching Safety, Health, and Environment Committee (SHE), which diligently reviews incidents, potential risks, and the efficacy of the actions implemented. In addition, management review committee convenes every 6 months to discuss on identified safety issues and action for resolution.

The organization employs a comprehensive approach to identifying work-related hazards and assessing risks, both for routine and non-routine activities, by adhering to the hierarchy of controls. This systematic process aims to first eliminate hazards and then minimize risks to ensure a safe working environment. To maintain the integrity of these processes, the organization ensures that individuals responsible for carrying them out are highly competent and receive ongoing training to stay abreast of best practices in occupational health and safety management.

We have devolved Standard Operating Procedure (SOP), known as BE IMSP 11.83 This SOP delineates our Hazard Identification and Risk Assessment (HIRA).

Utilizing Hazard Identification and Risk Assessment (HIRA), the organization meticulously evaluates potential risks associated with biological entities. The findings from HIRA are integral to our continuous improvement cycle, enabling us to refine our occupational health and safety management system. By analyzing the results, we can implement targeted actions to mitigate identified risks and enhance our preventive measures. This proactive approach not only safeguards our employees but also contributes to the sustainability and resilience of our operations, which is a key aspect of our commitment to fostering a culture of safety and health excellence. This dedication to safety is reflected in our sustainability report, underscoring our unwavering commitment to the well-being of our workforce and the environment.

<sup>811 403-8</sup> Workers covered by an occupational health and safety management system

<sup>[82] 403-4</sup> Worker participation, consultation, and communication on occupational health and safety

<sup>[83] 403-2</sup> Hazard identification, risk assessment, and incident investigation



## Occupational Safety Incident Protocols

We ensure the well-being of our workforce, we have established comprehensive procedures for employees to report any work-related hazards or unsafe conditions. Employees are encouraged to notify their immediate supervisors or the designated safety officer about any potential risks they encounter. Our reporting system is designed to be accessible and user-friendly, with options for anonymity to encourage open communication. We assure all employees that the company strictly prohibits any form of retaliation against individuals who raise safety concerns. Our non-retaliation policy is clearly communicated to all employees and is enforced to maintain a culture of trust and safety.



Biological E prioritizes the health and safety of its employees above all else. As part of our commitment to a secure workplace, we empower our employees with the right to withdraw from any work situation that they perceive as being dangerous to their health or safety. This policy is clearly outlined in our employee handbook and safety training programs. Employees are instructed to report such conditions to their supervisors without fear of penalty or job loss. We provide assurance that the company will protect employees from any negative consequences as a result of exercising this right, thereby upholding our dedication to a harmfree work environment.

#### **Incident Investigation Processes**

At Biological E, we have a robust process in place for the investigation of work-related incidents. This process is critical for understanding the underlying causes of incidents and for preventing their recurrence

Upon the occurrence of an incident, a thorough investigation is initiated to identify any hazards and to assess the associated risks. Our approach utilizes the hierarchy of controls to determine the most effective corrective actions. Following the investigation, we review and update our occupational health and safety management system to incorporate necessary improvements. This systematic approach ensures continuous enhancement of our safety practices and reinforces our commitment to the well-being of our employees.

By harnessing accurate incident data, nurturing a proactive culture, and executing data driven actions, we've forged a safer work environment. At BE, we prioritize our employees' well-being, which is why we have adopted the SAILOR system. This system helps us categorize observations and enables us to effectively address risks. As we remain focused on safety, the SAILOR system remains an essential tool that reflects our ongoing dedication to our employees' safety and workplace wellness.

Recognition of Excellence in Safety, Health, and Environment Practices: International Safety Award Winner 2024 by British Safety Council







This year, Biological E Limited's commitment to safety, health, and environmental (SHE) practices has been recognized on a global scale by the British Safety Council. In a rigorous assessment of over 1,250 companies worldwide, our Shameerpet Vaccines facility has been honoured with a Distinction award, achieving an impressive score of approximately 97%. This remarkable accomplishment places us among the top 5% of all award recipients, a testament to our dedication to maintaining the highest standards of workplace safety and environmental stewardship.

Furthermore, our Special Economic Zone (SEZ) and Gaganpahad locations have also been acknowledged for their outstanding SHE practices, each securing a Merit award. These accolades underscore our organization's unwavering commitment to creating a safe and sustainable work environment across all our operations.

# **Sustainability Milestones Achieved by Shameerpet Vaccines and SEZ**





In a significant stride towards sustainability and environmental stewardship, Biological E Limited is proud to announce that our Shameerpet Vaccines and Special Economic Zone (SEZ) facilities have been recognized for their exceptional commitment to environmental, health, and safety (EHS) standards. At the esteemed CII EHS Excellence Awards in 2023, held in Coimbatore on May 15, 2024, Shameerpet Vaccines was awarded the Silver category award, while SEZ took home the Bronze.

These awards reflect our steadfast dedication to integrating EHS best practices into our operations. Our teams at Shameerpet Vaccines and SEZ have demonstrated exemplary performance in implementing sustainable processes, ensuring employee safety, and minimizing environmental impact.

## OHS Training<sup>84</sup>

Our engagement with safety extends to the annual observance of National Safety Day from March 4th to 11th, where we conduct a series of activities designed to reinforce a culture of safety among our employees.





Further illustrating our commitment to employee health, we offer an array of health services, including medical check-ups, blood donation drives, and partnerships with local medical facilities. <sup>85</sup> Our facilities have reported zero safety incidents, demonstrating our prompt response to safety incidents. We are in the process of developing a comprehensive monitoring and reporting system for all facilities, extending our safety assurance beyond those covered by ISO 45001 certification. We actively encourage our employees to report nearmiss incidents, reinforcing a safety-conscious mindset within our organization.



Type of employee	Description	Unit	Annual Total 2023 24	Annual Total 2022-23	Annual Total 2021-22
Permanent employees	Number of trainings attended	Nos	26704	20204	22873
	Training Hours	Hours	15320.85	10714	12080
	Average Training Hours	Hours	3.04	2.19	2.61
Contract employees	Number of trainings attended	Nos	2209	981	424
	Training Hours	Hours	1714.55	1051	424

The average training hours for permanent employees increased by 38.86% in FY 2024, rising from 2.19 hours in FY 2023 to 3.04 hours.

Additionally, we have implemented the SAILOR Emergency Management Framework to ensure a cohesive safety approach across all sites and functions.

Our incident investigation procedures, encapsulated in BE IMSP 26, detail the responsibilities and investigative steps to be undertaken following any incident. This proactive measure ensures a thorough examination and contributes to the continuous improvement of our safety protocols.

Biological E has established a robust Business Continuity Plan (BCP) that is designed to ensure the resilience of its operations in the face of potential disruptions, including those related to occupational health and safety incidents. The BCP encompasses emergency response procedures, crisis management, and recovery strategies, ensuring that the company can maintain critical functions and return to normal operations as swiftly and safely as possible after an incident. By prioritizing the health and safety of its workforce and maintaining operational continuity, Biological E demonstrates its unwavering commitment to sustainability and the well-being of all stakeholders.



#### **Green Revolution**

As part of the 70th-anniversary celebrations of Biological E. Limited, we were delighted to introduce the Adopt a Plant Programme on June 16, 2023. This initiative, which has been successfully conducted, was aimed at planting a substantial number of saplings to enrich the livability and environmental friendliness of our society and community.





# Career Guidance Initiative for the Next Generation

Reflecting on the 70th anniversary of Biological E. Limited (BE), we are pleased to report the successful completion of a series of virtual career counselling sessions. Held from July 22, 2023, to October 21, 2023, these sessions were dedicated to the children of our employees, underscoring our commitment to nurturing their aspirations. Recognizing the critical importance of informed career choices, we provided these sessions as a valuable resource for guidance. They were designed to offer insights, advice, and resources to help the young participants explore their interests, passions, and potential career paths, thereby investing in their future success.

Educational Empowerment Through Study Kit Distribution: In celebration of the 70th anniversary of Biological E. Limited, we are proud to have initiated the distribution of study kits to underprivileged students across three government schools in the villages of Kolthur, Anantharam, and Lalgadi Malakpet. This distribution event took place at the Zilla Parishad High School (ZHPS) in Kolthur village on August 16, 2023. Our organization's commitment to social responsibility and the advancement of education among the less fortunate is exemplified through this endeavour. Initiatives like these are pivotal in equipping students with the essential resources they need to thrive academically and improve their educational outcomes.

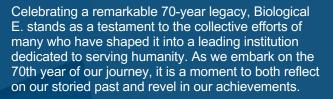
## **70 Years of Celebration**









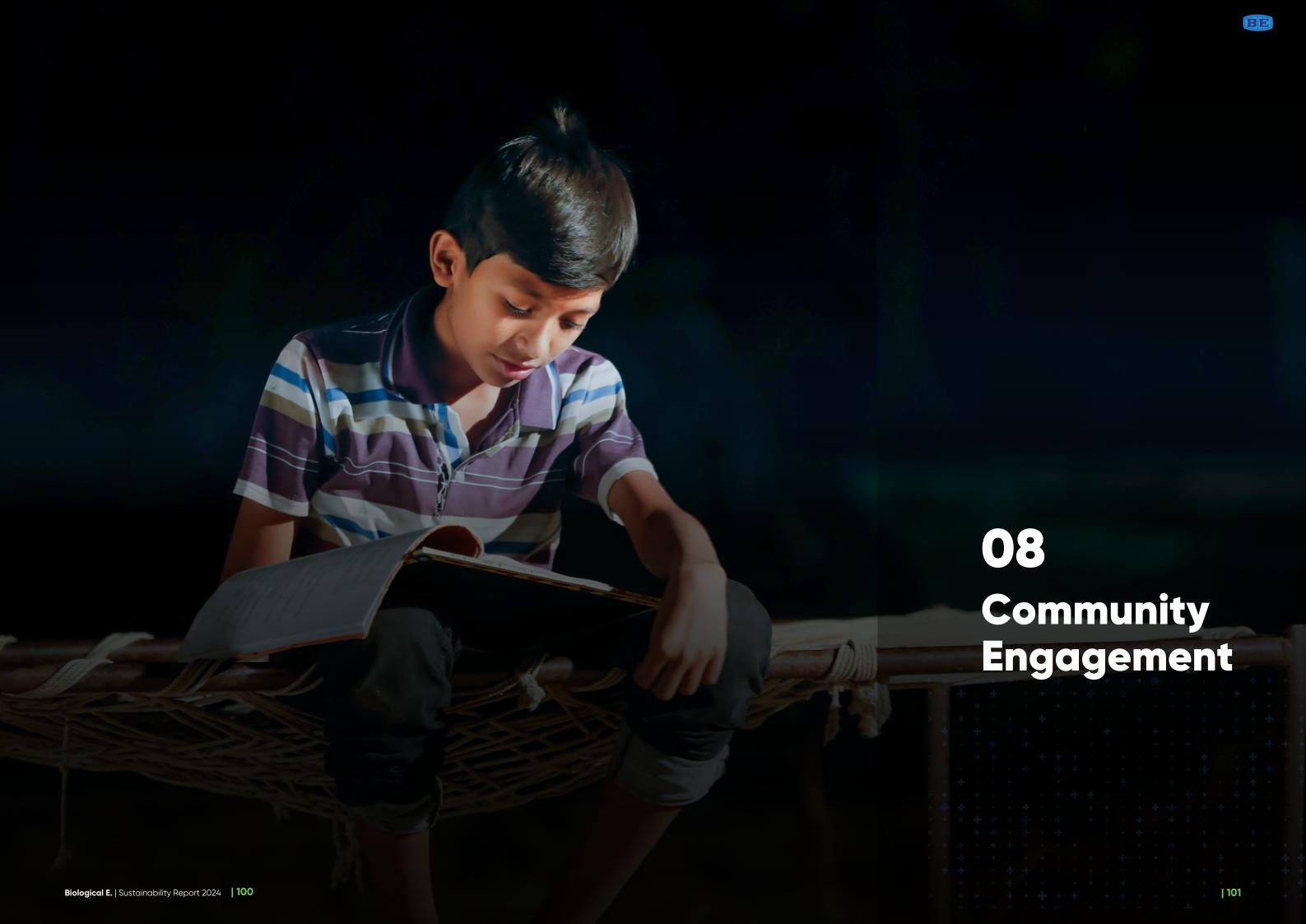


We are excited to honour this milestone by engaging with our colleagues, their families, and the broader community, launch the festivities by inviting our employees to participate in a logo design and title-making competition. This initiative is a call for creativity, as we look forward to the innovative designs and compelling titles that will capture the essence of our 70-year odyssey. These contributions will serve as emblems of our enduring spirit and the promising future that lies ahead.





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Our firm is committed to fostering the progress of the communities we engage with by means of our Corporate Social Responsibility (CSR) activities. These endeavours are strategically directed towards pivotal sectors that yield beneficial outcomes for the populace we cater to. Our programs are designed to enhance vocational skills and promote efficient educational opportunities, guarantee the provision of cost-effective, superior healthcare services, and supply crucial infrastructural aid to neighbourhood educational institutions. We are convinced that a solid educational foundation is crucial for the holistic development of a person's intellectual, emotional, and physical strengths, equipping them with the tools necessary to surmount life's obstacles.

#### **CSR Vision**

In alignment with its vision, as a socially responsible corporate citizen, will continue to enhance value creation in the society and community in which it operates. Through its conduct, services and engagement with CSR initiatives it will strive to promote, sustained growth in the regions it operates.

#### Obejctives -

To operate its business in a sustainable manner respecting the society & the environment, while recognizing the interests of all its stakeholders.

The Organization believes in conducting its business responsibly, fairly and in a most transparent manner. It continually seeks ways to bring about an overall positive impact on the society and environment where it operates and as a part of its social objectives. The overview of projects proposed to be undertaken are:



To develop the required capability and self-reliance of beneficiaries at the grass roots, especially of women, in the belief that these are prerequisites for social and economic development.

To provide equal opportunities to beneficiaries of the organization's CSR programs to become vendors or employees based on merit, and to promote sustainability through partnerships with industry associations, creating a multiplier impact.

To engage in affirmative action interventions such as skill building and vocational training, to enhance employability and generate livelihoods for persons from disadvantaged sections of society. To pursue CSR Programs primarily in areas that fall within the economic vicinity of the organization's operations to enable close supervision and ensure maximum development impact.

To direct Organization's CSR Programs, inter alia, towards achieving one or more of the following - enhancing environmental and natural capital; supporting rural development; promoting education; providing preventive healthcare, providing sanitation and drinking water; creating livelihoods for people, especially those from disadvantaged sections of society, in rural and urban India; preserving and promoting sports.



SNO.	Activity	FY 21-22	FY 22-23	FY 23-24
1	Education	1,63,97,000	1,86,37,000	4,43,82,177
2	Health	6,00,75,000	4,19,30,000	1,64,04,000
3	Livelihood-Skill Development		60,000,00	2,50,00,000
4	Community Development/Social Service/Others	10,00,000		1,64,18,823
	Total	7,74,72,000	6,65,67,000	10,22,05,000

In pursuit of our objectives, we engage in partnerships with government-run educational institutions and community organizations to ensure the effective delivery of inclusive education. Over the course of this period, we have maintained close relationships with several schools, assisting in the development of vital infrastructure, facilitating skill enhancement programs, and promoting health awareness. These efforts have significantly contributed to the overall prosperity and advancement of the communities we support.

Subsequent sections of this report will present motivational case studies that demonstrate the concrete benefits derived from our endeavours. These narratives underscore the profound and enduring changes we have instigated in the lives of individuals and entire communities. We remain steadfast in our commitment to fostering a sustainable and flourishing future for everyone.



Invested over Rs. 10.22 Crores in CSR projects in the reporting period





# Biological E Limited honoured on word CSR Day at the 13th Global CSR Excellence & Leadership

We are thrilled to announce that Biological E Limited has been recognized with the prestigious "Best Corporate Social Responsibility Practices" award at the 13th edition of the Global CSR Excellence & Leadership Awards.

This esteemed accolade is certified by the World Federation of CSR Professionals, underscoring our commitment to excellence in corporate social responsibility.

Our CSR team demonstrated exemplary dedication and insight during the jury's rigorous evaluation process, engaging in detailed discussions on crucial topics such as:

- The Importance of Corporate Social Responsibility
- Implementation Strategies for CSR Programs
- The Impact of CSR Programs

These discussions highlighted our innovative approaches and the significant positive effects our CSR initiatives have had on communities we serve.

#### Case Study: Connecting Futures: Launching the Digital Communication Lab

Biological E. Limited, through its CSR arm, the Dr. Vijay Kumar Datla Foundation, has made a significant contribution to the realm of education and digital literacy by establishing a state-of-the-art Digital Communication Lab at the Mahatma Jyotibha Phule Telangana Backward Classes Welfare Residential (MJPTBCWR) School in Turakapally. This initiative is a testament to the organization's commitment to Corporate Social Responsibility (CSR) and its focus on empowering underprivileged students with essential digital communication skills

In a world where digital literacy is increasingly becoming a fundamental skill, the need to provide quality education and resources to all sections of society is paramount. Recognizing this need, Biological E. Limited, through its CSR initiatives, has been actively involved in projects that aim to bridge the digital divide and foster an environment conducive to learning and growth.

The Digital Communication Lab was inaugurated on March 27, 2024. The event marked a significant milestone in the organization's CSR journey.

The primary objective of the Digital Communication Lab is to provide approximately 1500 underprivileged students with access to modern digital tools and platforms, thereby enhancing their digital communication skills. The lab is equipped with advanced technology and comprehensive features designed to offer a holistic learning experience.





The initiative aims to:

- Empower students with digital literacy skills.
- Provide a platform for interactive and innovative learning.
- Enhance communication proficiency among students.
- Prepare students for future challenges in a digital world.





The success of this project can be attributed to the dedicated efforts of CSR volunteers from Biological E. Limited. These volunteers played a pivotal role in the planning, execution, and ongoing support of the lab. Their involvement has been crucial in ensuring that the lab is utilized effectively and that the students receive the maximum benefit from the resources provided.

The establishment of the Digital Communication Lab has been met with overwhelmingly positive feedback from both students and the school management. The lab has been recognized as a pioneering venture in the region, setting a benchmark for similar educational initiatives. The impact of the lab is evident in the enhanced digital and communication skills of the students, which will undoubtedly contribute to their future success.

The inauguration of the second Digital Communication Lab by the Dr. Vijay Kumar Datla Foundation marks a significant stride towards achieving digital inclusivity and educational empowerment. Biological E. Limited remains committed to its CSR goals and continues to explore avenues for positive societal impact. This case study serves as an inspiring example of how corporate entities can play a transformative role in the communities they serve.

## Case Study : Skill Development and Livelihood

In collaboration with ABV Foundation -The Skill Development Project was launched in Secunderabad with the stated goal of providing employment opportunities guided by the principles of Decent Work to women from poor and disadvantaged communities through Job Oriented Vocational Training (JOVT). It was envisaged that this effort would reach out directly to 2000 adolescents and young women aged 18-40 years from disadvantaged communities of Secunderabad and Hyderabad.



# Case Study: "Bridging the Health Divide: The Dr. Vijay Kumar Datla Building and Urban Medical Advancement"

Biological E. Limited, through its dedicated CSR initiative, the Dr. Vijay Kumar Datla Foundation, has significantly enhanced public health infrastructure by funding and constructing the Dr. Vijay Kumar Datla Building. This facility, which houses the Urban Primary Health Centre (UPHC) at Musheerabad, Hyderabad, was inaugurated on March 4, 2024, and represents a significant investment in sustainable healthcare development, underscored the importance of the initiative and its alignment with the government's vision for healthcare.

Access to quality healthcare is a fundamental right and a critical component of sustainable development. Recognizing the need for improved healthcare facilities in urban areas, Biological E. Limited has directed its CSR efforts towards the construction of a state-of-the-art building dedicated to primary health services.

The Dr. Vijay Kumar Datla Building is a fully equipped medical facility that includes:



- Wide halls for patient waiting and consultation
- A pharmacy center for dispensing medications
- A laboratory for medical testing and diagnostics
- A minor operation theater for surgical procedures
- A dressing room for wound management and care
- A nursing room for patient support and care
- An observation hall for monitoring patients
- Restrooms for convenience and hygiene

The foundation invested Rs. 3.12 crore to construct this facility, ensuring that every aspect of the building meets the highest standards of healthcare provision.

The primary objective of the Dr. Vijay Kumar Datla Building is to provide accessible, high-quality healthcare services to the urban population of Musheerabad. The facility aims to:







- Enhance the healthcare infrastructure in the region
- Offer comprehensive medical services under one roof
- Reduce the burden on tertiary healthcare facilities
- Improve health outcomes for the local community

The impact of this initiative is far-reaching, with the potential to improve the quality of life for thousands of residents by providing timely and effective healthcare services.

The establishment of the Dr. Vijay Kumar Datla Building by the Dr. Vijay Kumar Datla Foundation is a shining example of how CSR initiatives can align with sustainable development goals. Biological E. Limited's commitment to corporate social responsibility is reflected in this project, which not only provides immediate health benefits to the community but also contributes to the long-term sustainability of the urban healthcare system, highlighting the transformative power of strategic CSR investments in creating a healthier, more sustainable future.

#### **Case Study: Transforming Educational Spaces**

The Datla Foundation, in line with the CSR objectives of Biological E. Limited has successfully renovated the Zilla Parishad High School (ZPHS) in Lalgadi Malakpet village. This initiative was aimed at improving the educational environment for the students and was completed in October 2023, with the reopening of the school post-Dussehra vacation.

Recognizing the importance of a conducive learning environment, the Datla Foundation embarked on a mission to refurbish the ZPHS, which is in close proximity to Biological E. Limited's Shameerpet Plants. The project was designed to enhance the school's infrastructure, thereby directly impacting the quality of education for the children of Lalgadi Malakpet village.



#### **Renovation Highlights**

The renovation project encompassed several critical improvements:

- Classroom Electrification: Upgraded electrical installations, including new wiring, tube lights, and fans, to ensure a bright and comfortable learning space.
- Classroom Doors and Windows: Repairs were made to classroom doors and windows to enhance safety and functionality.
- Toilet Facilities Upgrade: Both boys' and girls' toilets were renovated to improve sanitation facilities, promoting better hygiene practices among students.
- Fresh Painting: The school's interior and exterior were painted in the corporate color of Biological E. Limited, revitalizing the school's appearance and contributing to a more vibrant learning environment.

The reopening of the school was marked by the presence of CSR volunteers from Biological E. Limited, who played a crucial role in welcoming the students back and emphasizing the importance of the newly improved facilities. Their involvement was key in fostering a sense of community and ownership over the renovations.

The reopening of the school was marked by the presence of CSR volunteers from Biological E. Limited, who played a crucial role in welcoming the students back and emphasizing the importance of the newly improved facilities. Their involvement was key in fostering a sense of community and ownership over the renovations.

The refurbished school has been met with acclaim from students, teachers, and the local community. The improvements have not only beautified the school but also instilled a sense of pride and motivation among the students. The staff has acknowledged the positive changes, which have contributed to a more engaging and secure educational experience.

The ZPHS Lalgadi Malakpet renovation is a testament to the power of CSR in transforming educational environments. The Datla Foundation's investment has yielded a significant return in terms of student engagement and community development. This case study illustrates the potential for corporate social responsibility to drive sustainable improvements in education, ultimately leading to broader societal progress.

# SHE Shuttle Service Launch for Women Workers in Genome Valley



On April 23, 2024, our organization proudly launched the SHE shuttles service at the Shameerpet Vaccine Plant, a significant step forward in our commitment to women's safety and mobility within the Cyberabad commissionerate. This service, a joint venture between the Dr. Vijay Kumar Datla Foundation and the Society for Cyberabad Security Council (SCSC), provides a complimentary and secure mode of transportation for female employees. Operating between Kolthur and Turkapally in Genome Valley, the SHE shuttles aims to offer a reliable transit solution for women workers, reflecting our dedication to fostering an inclusive and supportive work environment.







The Research and Development (R&D) team serves as the foundation of our intellectual assets, driving innovation and consistently launching new offerings by leveraging our scientific and technological expertise. Their forward-thinking strategies empower us to confront health issues, devise solutions, and meet specific regional demands. In medical science, R&D is crucial for crafting treatments based on genetic insights into illnesses. This groundwork paves the way for cutting-edge therapies, enhanced health outcomes, and economic expansion.

At Biological E, we acknowledge the critical role of R&D in propelling our business forward and accordingly allocate significant funding to it. Our commitment to innovation and making it widely available helps maintain the health sector's vitality and sets the stage for revolutionary drugs. Our overarching ambition is to be at the forefront of therapeutic breakthroughs and engage in transformative research that yields treatments that improve lives. As we strive for a sustainable future through partnerships, we place a high emphasis on the health and safety aspects of our products, guaranteeing that everyone has access to reliable medications.

Description	2023-24	2022-23	2021-22
Capex	9,718	12,592	24,194
Opex	15,520	25,643	10,631
R&D investments (in Lakhs INR)	25,238	38,235	34,824



Regulatory Authority	FY 2023-2024
Overall Filings	2- Filings (Canada/Australia) 13- Filings (Emerging markets)
Overall Approvals	7- Approvals (USA/EMA/Brazil/Australia) 8- Approvals (Emerging markets)
US - ANDA Filings	NA
US - ANDA Approvals	2-Approvals Phenylephrine Hydrochloride Injection – June 26, 2023 Enoxaparin PFS - June 06, 2023
EMA – Filings	NA NA
EMA – Approvals	1-Approval Daptomycin 350mg & 500mg powder for solution for injection – RUP (FR (Tillomed), CY, EL (Cooper), AT (Rokitan)) – October 20, 2023
Brazil – Filings	NA NA
Brazil – Approvals	2-Approvals Daptomycin for Injection 500mg/vial (ABL) – February 05, 2024 Daptomycin for Injection 500mg/vial (ABL) – October 16, 2023
Canada– Filings	1-Filing Heparin Sodium Injection, USP 5,000 Units per 0.5 mL (10,000 Units per mL) – Sterimax - July 18,2023
Canada– Approvals	NA
Australia– Filings	1-Filing Enoxaparin Sodium Injection USP 20 mg/0.2 mL, 40 mg/0.4 mL, 60 mg/0.6 mL, 80 mg/0.8 mL& 100mg/mL – Pharmacore - September 14, 2023
Australia- Approvals	2-Approvals Daptomycin for Injection 500 mg/vial & 350mg/vial – CIPLA - June 29, 2023 Fosaprepitant 150mg Injection – MEDSURGE-November 09,2023
China -Filings	NA NA
China -Approvals	NA
Other Emerging Market Countries - Filings	13 – Filings Dominican Republic – 3 Colombia - 1 Guatemala – 1 Paraguay – 3 Saudi Arabia – 1 Serbia – 2 Armenia – 1 Ukraine – 1
Other Emerging Market Countries - Approvals	8 Approvals Mexico – 2 Chile-1 UAE – 3 Singapore-1 Thailand -1

Beyond emphasizing safety, we've instituted a stringent protocol to continually oversee and protect our intellectual property (IP) rights throughout the product development lifecycle. Our organization places great emphasis on respecting the intellectual property (IP) rights of others, prioritizing the prevention of any violations. Our Research and Development team is consistently educated through internal training programs to maintain awareness and adherence to IP laws. We have established a structured governance framework that ensures we meet all applicable legal requirements across various regions. Additionally, our in-house specialists routinely review product specifications and promptly implement any required corrective actions.

# 10 Responsible Product

- 113 Ethics and Compliance
- 115 Data Privacy and Cyber Security



Biological E continues to set benchmarks in the pharmaceutical industry, delivering high-quality Active Pharmaceutical Ingredients (APIs), finished formulations, and biologics to the global market. Our unwavering commitment to brand promotion has allowed us to continually broaden our international reach, bringing our diverse product range to an ever-expanding list of countries.

At Biological E, the safety and quality of our operations are paramount, especially within our research and development endeavours. We rigorously follow safety protocols and maintain the highest standards of hygiene, recognizing their critical importance in the healthcare sector. Our products undergo thorough clinical trials in the premarketing phase to confirm their safety, and we continue to monitor them through post-marketing surveillance to identify any potential risks.88

We are dedicated to the health and safety of the end-users, which is why our products are subjected to comprehensive life cycle testing. Environmental responsibility is also a core value of our operations; we conduct in-depth research to guarantee that our products are environmentally sustainable and do not pose any adverse effects.

To date, we have received no complaints regarding non-compliance, nor have there been any incidents related to product labelling, marketing communications, quality, or health and safety impacts that have resulted in fines, penalties, or warnings.

Our vigilant R&D and Quality Control/Quality Assurance Committees continuously assess our products and processes to pre-emptively address and mitigate potential risks, ensuring that we uphold the highest standards of excellence and safety in all that we do.89 90



#### **10.1 Ethics and Compliance**

#### **Ethics**

At Biological E., effective governance ensures that we place a high value on ethical business practices that align with all relevant national laws and regulations.

We understand the critical role that our employees play in shaping our work environment and interactions with business partners and clients. In our commitment to the highest ethical standards, we have developed an extensive 'Code of Conduct and Ethics' to guide our employees' professional actions.91The business ethics document which is shared to all the employees is reviewed and approved by the managing director. It is applicable to employees, contractors, suppliers and everyone in the value chain This code is designed with careful attention to the thoroughness of processes, the implementation of precautionary measures, and adherence to international human rights standards. Biological E Limited has implemented a policy regarding conflict of interest, outlined in their Ethics handbook. 92 This policy aims to effectively manage and mitigate any conflicts of interest that may arise within the company.

We hold regular training sessions for our directors and employees to emphasize important topics such as fostering a positive organizational culture, managing vendor relations, ensuring a genderneutral workplace, complying with legal standards, implementing health and safety protocols, avoiding conflict of interest, maintaining transparency, and protecting confidential data. These educational efforts are essential in promoting a culture of ethical decision-making across our organization.

The senior management team and the Board of Directors are responsible for monitoring the ethical conduct within Biological E. 93The principles of our business ethics are outlined in our employee handbook, which is endorsed by our Managing Director.

The business ethics handbook is a vital document that details Biological E.'s commitment to addressing and mitigating any adverse effects our operations may have. It sets forth the procedures for recognizing and resolving complaints, including the creation of effective grievance redressal systems. The handbook further describes the involvement of stakeholders in the development, evaluation, and enhancement of these systems, ensuring their feedback and concerns are integrated into the resolution process.

<sup>417-1</sup> Requirements for product and service information and labeling 417-2 Incidents of non-compliance concerning product and service information and labelling

<sup>417-3</sup> Incidents of non-compliance concerning marketing communications

<sup>2-23:</sup> Policy commitments 2-15: Conflict of Interest

<sup>2-24:</sup> Embedding policy commitments



Additionally, the handbook sheds light on how Biological E.assesses the success of grievance mechanisms and other corrective measures, providing instances of their effectiveness based on stakeholder feedback. This approach allows us to periodically refine these processes and rectify any negative outcomes from our activities.

All of our 8 sites (100% of our own operations) have been audited and no significant risks of corruption were identified. Furthermore, we have consistently maintained a 100% alignment with our organisation objectives and policies, with no recorded instances of any deviations.<sup>94</sup> 95

The procedures for reporting significant concerns are detailed in the following policies: <sup>96 97</sup>

- Grievance Redressal Mechanism: This system
  offers a formal method for employees and
  stakeholders to voice their grievances or
  complaints, guaranteeing a just and prompt
  resolution. Furthermore, the highest governance
  body regularly solicits feedback from the C-suite
  and leadership team regarding the identified
  critical concerns. This allows for continuous
  monitoring and addressing of these concerns.
- Whistleblower Policy: This policy provides a confidential avenue for employees to report any perceived illegal or unethical conduct within the organization, ensuring that such reports are handled discreetly and effectively.

Moreover, the Board of Directors actively seeks input from the executive and leadership teams on these critical concerns, allowing for ongoing scrutiny and resolution.<sup>98</sup>

The principles that form the core of our Mission, Vision, and organizational ethos are deeply ingrained at every level of Biological E., from the top executives to each individual employee.

These values are also integral to our goal-setting processes, underscoring our dedication to maintaining ethical standards throughout the organization. Beyond regular training sessions, we actively disseminate these values to our staff through a variety of communication methods, such as emails, posters, and directives from upper management. This ongoing emphasis ensures that our entire team is alert and committed to ethical professional conduct. To promote a culture of openness and responsibility, we are ready to act decisively and appropriately on any issues that are reported, guaranteeing an equitable and ethical workplace for everyone.

#### **Anti-Corruption and Anti-competitive**

Biological E. is committed to delivering extensive anticorruption training to employees as part of the initial orientation and ongoing refresher programs. This training program is compulsory for all employees, members of the governance body. specific anticorruption instruction is provided during Good Manufacturing Practice (GMP) training for new hires. The training program covers 100% of our employees and members of governance body as well. As a part of our responsible supply chain initiative, 100% of our suppliers are communicated about organization's anticorruption policies and procedures .

We have zero legal disputes related to anti-competitive actions, anti-trust, or monopoly laws. We strongly urge our employees to report any suspected corruption and have established a clear protocol for handling such reports, including thorough investigations and the gathering of credible evidence.

Additionally, we have evaluated every part of our supply chain to identify and manage any potential corruption risks, ensuring they are kept in check. Notably, we have not registered any reported instances of corruption in the organization during the reporting period FY 2023-24 through internal and external stakeholders. Also, our anti-corruption policy is designed in line with Prevention of Money Laundering Act, 2002 and Prevention of Corruption Act, 1988.



Reported zero cases of bribery and corruption in the reporting period

#### Compliance

In the realm of pharmaceuticals and vaccines, adhering to environmental regulations is of paramount importance, especially given the regularity of audits by clients and officials from local environmental agencies. Our legal team takes great care to ensure compliance with all pertinent environmental laws at both national and local levels, aiming to minimize any adverse effects on the environment.

<sup>[94] 205-1</sup> Operations assessed for risks related to corruption

<sup>[95]</sup> Only our own operations were assessed for risks related to corruption and suppliers were included in the assessment

<sup>[96] 2-26:</sup> Mechanisms for seeking advice and raising concerns

<sup>[97] 2-26</sup> Mechanisms for seeking advice and raising concerns

<sup>[98] 2-16:</sup> Communication of critical concerns

<sup>[99] 205-2</sup> Communication and training about anti-corruption policies and procedures [100] 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices



The strict adherence to globally recognised standards is essential to our sustainability strategy, as demonstrated by our adoption of ISO 14001, ISO 45001, and ISO 50001 standards across carefully selected production facilities. In addition to guaranteeing regulatory compliance, this uncompromising adherence also highlights the immaculate foundation of our organization's business outlook.

Our internal evaluations confirm full compliance with environmental legislation. These accomplishments are a testament to our steadfast commitment to environmental conservation and ethical business practices. Through our proactive compliance with legal mandates and our attentiveness to the concerns of our stakeholders, we endeavour to foster sustainable operations that benefit both the environment and the communities we engage with.

#### 10.2 Data Privacy and Cyber Security

IT and cybersecurity are fundamental pillars for Biological E.'s operations. Recognizing the significance of data integrity, security, and privacy, we prioritize safeguarding the confidential information of our stakeholders, including customers. Through robust systems and measures, we ensure responsible handling of personal and confidential data throughout their life cycle, from collection to disposal.

To address the rapidly changing landscape of cybersecurity threats and our heightened vulnerability to them as we shift towards a more digital and interconnected world, we have established a robust IT security management framework, designed to safeguard both corporate resources and personal data. Our proactive measures go beyond technical systems and include comprehensive training programs designed to enhance cyber security awareness among our employees. This holistic approach to cyber security and data privacy positions us well to handle stakeholders' sensitive data and adhere to data protection regulations.

Zero concerns or complaints related to identified leaks, thefts, or losses of customer data, violations of customer privacy or loss of customer data were reported in FY 2023-24.101





#### **SDG Mapping**



We are committed to supporting underserved communities by producing costeffective vaccines and contributing to skill development, job creation, healthcare education, and delivering quality education through our Corporate Social Responsibility initiatives.



Dedication to developing and distributing vaccines and medications that safeguard public health and enhance the quality of life. Our initiatives align with global efforts to ensure healthy lives and promote well-being for all at all ages, as we strive to make healthcare accessible and affordable, contributing to the eradication of diseases and the reduction of health inequalities.



Through our Corporate Social Responsibility programs focused on elevating educational standards and fostering women's empowerment via skill-building and income-creating opportunities, we are actively engaged in realizing Sustainable Development Goal (SDG) 4: Quality Education. These efforts are crucial to our mission of advancing educational excellence.



Our commitment lies in guaranteeing the availability of clean water, enhancing water conservation and recycling measures at our facilities, and effectively handling waste management in our operations. These concerted actions are directed towards achieving Sustainable Development Goal 6 (SDG 6).



We are making substantial progress in acquiring renewable energy sources, as evidenced by the installation of rooftop solar panels at two of our locations. This initiative represents our first step towards embracing clean energy solutions, in line with our overarching goal to decrease dependency on fossil fuels and support the fulfilment of the Sustainable Development Goal for clean energy.



In our pursuit of Sustainable Development Goal (SDG) 9, Industry, Innovation, and Infrastructure, we are at the forefront of pharmaceutical innovation, continuously advancing our manufacturing capabilities to meet global health needs. Our investment in cutting-edge infrastructure and commitment to sustainable industry practices underscore our role in driving progress and resilience in healthcare.



Our commitment lies in generating new job prospects and fostering individual skill enhancement via ongoing training initiatives. The continuous research and development conducted by our company propels economic advancement. Additionally, by guaranteeing that vaccines and medicines reach marginalized communities, we not only bolster public health but also contribute to economic prosperity and workforce productivity.



We are diligently measuring our direct and indirect greenhouse gas emissions (Scope 1 and Scope 2), and scope 3 from the current year. Simultaneously we have begun to decrease our dependence on fossil fuels by shifting towards renewable sources of electricity. In line with this effort, we are implementing rooftop solar installations to capture renewable energy, promoting clean and sustainable power usage.



We are establishing partnerships with respected entities including the World Health Organization (WHO), UNICEF, the National Safety Council, the Federation of Indian Chambers of Commerce and Industry, and the Pharmaceuticals Export Promotion Council of India (Pharmexcil). Our goal with these alliances is to secure licenses for our vaccines and facilitate their broad dissemination to assist those in need.





ANDA	Abbreviated New Drug Application
API	Active Pharmaceutical Ingredients
ВЕЕР	Biotechnology Industry Research Assistance Council
BIRAC	Coalition for Epidemic Preparedness Innovation
CEPI	Coalition for Epidemic Preparedness Innovation
CSR	Corporate Social Responsibility
DGCI	Drugs Controller General of India
DI	Drug Intermediates
ESI	Employee State Insurance
GCP	Good Clinical Practice
GMP	Good Manufacturing Practices
GWP	Global Warming Potential
IAEC	Institutional Animal Ethics Committee
ICH	International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use
IBR	Integrated Business Review Committee
IBSC	Institutional Biosafety Committee
IPV	Inactivated Polio Vaccine
ISO	International Organization for Standardization
KL	Kilo Litre
KSM	Key Starting Materials
ML	Mega Litre
NCI	National Cancer Institute
OH&S	Occupational Health and Safety
PCV	Pneumococcal Conjugate Vaccine
PQCDSM	Productivity, Quality, Cost, Delivery, Safety, Morale
SAB	Scientific Advisory Board
SHEC	Safety, Health and Environment Committee
тсv	Typhoid Conjugate Vaccine
UNSDG	United Nations Sustainable Development Goal
USFDA	U.S. Food and Drug Administration
WHO	WHO World Health Organization





# INDEPENDENT ASSURANCE OPINION STATEMENT

Statement No: SRA-680600

#### Biological E. Limited Sustainability Report FY 2023-2024

The British Standards Institution is independent of Biological E. Limited (BE) and has no financial interest in the operation of BE other than for the assessment and assurance of this report.

This independent assurance opinion statement has been prepared for BE only for the purposes of assuring its statements relating to its Sustainability report, more particularly described in the scope, below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This statement is intended to be used by stakeholders & management of BE. The stage 1 assurance was completed by using a hybrid model of onsite visits and remote assessment using immersive techniques which was conducted over Microsoft Teams video-conferencing tool, where the assessor and the client representatives connected through the computer systems and internet. All the sites covered in the scope of verification were verified by using physical onsite visits for environmental and social KPIs individually, and overall economic KPIs for all the sites were verified by using remote assessment.

This independent assurance opinion statement is prepared based on a review by the British Standards Institution of information presented to it by BE. The review does not extend beyond such information and is solely based on it. In performing such a review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to BE only.

BSI Group India Private Limited The Mira Corporate Suites Plot 1-2, Ishwar Nagar Mathura Road, New Delhi-110065 India T: +91 11 4762 9000 info.in@bsigroup.com bsigroup.com/en-IN





#### **Scope**

with BE includes following: The scope of engagement agreed upon the 1. The assurance covers the Sustainability Report FY 2023-2024 of the BE, prepared "In accordance" with GRI Universal Standards 2024 and focuses on systems and activities of BE covering the manufacturing unit's vaccine division located in Shameerpet, Gaganpahad, and Shameerpet SEZ, as well as for pharma division operating from Shameerpet, Patancheru, Azamabad, Dehradun and corporate office at Jubilee Hills, Hyderabad in India during the period from 1st April 2023 to 31st March 2024.

2. The AA1000 Assurance Standard, AA1000AS v3, Type 2 moderate level engagement evaluates the nature and extent of BE's adherence to all four AA1000 AccountAbility Principles: Inclusivity, Materiality, Responsiveness, and Impact. The specified sustainability performance information/data disclosed in the report has been evaluated.

#### **Opinion Statement**

Our work was carried out by a team of sustainability report assurors in accordance with the AA1000 Assurance standard, AA1000AS v3, and GRI Universal Standards 2024. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that BE's description of their self-declaration of compliance with the GRI Standards was fairly stated.

We conclude that the BE's Sustainability Report FY 2023-2024 review provides a fair view of the BE's CSR programs and performances during 2023-2024. We also believe that the sustainability report 2023-2024 economy, environment, and people performance disclosures are fairly represented. The sustainability performance disclosures disclosed in the report demonstrate BE's efforts recognized by its stakeholders. The intended users of our assurance report are the management and stakeholders of BE.

#### Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- A top-level review of issues raised by external parties that could be relevant to BE's policies to provide a check on the appropriateness of statements made in the report.
- Discussion with senior executives and their external consultant on BE's approach and methodology of collection and evaluation of stakeholder engagement. We had no direct contact with external stakeholders.
- Interviews with staff and authorities involved in sustainability management, report preparation, and provision of report information were carried out.
- Review of key organizational developments.
- Review of supporting evidence for claims made in the reports.

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- An assessment of the company's reporting and management processes concerning this
  reporting against the principles of Inclusivity, Materiality, Responsiveness, and Impact as
  described in the AA1000 AccountAbility Principles Standard v3.
- A sample-based assessment of the reliability and quality of information on the company's performance is provided in the sustainability report.

A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality, Responsiveness, and Impact and the GRI Standards is set out below:

#### **Inclusivity**

We have assessed the company's stakeholder engagement processes and confirm that the organization actively seeks input from various stakeholders. This includes customers, investors, regulatory authorities, employees, suppliers, NGOs, the local community, and media ensuring that all voices are heard and considered in decision-making and reporting. The company has demonstrated a commitment to fostering a culture of inclusivity by integrating diverse perspectives into its sustainability initiatives.

In our professional opinion, the report covers the BE's inclusivity issues that demonstrate the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

#### **Materiality**

BE publishes sustainability information that enables its stakeholders to make informed judgments about the company's management and performance.

The company has adopted a robust materiality assessment process to identify key sustainability issues highly relevant to the business and its stakeholders. We have reviewed the process and confirm that it aligns with best practices, ensuring that all significant economic, environmental, and people factors are considered and addressed in the company's reporting. The material issues identified reflect the company's understanding of its operational impacts and stakeholder concerns.

The material topics identified are Procurement Practices, Anti-corruption, Energy, Water and Effluents, Emissions, Waste, Supplier Environmental Assessment, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Supplier Social Assessment, and Customer Privacy. The adequacy of the previous year's identified material topics was assessed internally and was adopted for the current reporting year.

In our professional opinion, the report covers the BE's material issues by using the BE materiality matrix, internal and external stakeholder consultation, and boundary mapping.

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### Responsiveness

BE has implemented the practice to respond to the expectations and perceptions of its stakeholders. Feedback from all the internal stakeholder representatives was collected along with a few selected external stakeholders.

The company has shown a high level of responsiveness to stakeholder feedback and emerging global sustainability challenges. It has established clear mechanisms to address and respond to stakeholder concerns, ensuring that these concerns are integrated into the company's strategic decision-making processes. The responsiveness is reflected in the company's ability to adapt its strategies and actions to meet evolving expectations and needs.

These engagement methods include Customer satisfaction surveys, One-to-one meetings, Employee satisfaction surveys, Vendor and supplier meets, surveys, Social/public meetings, and Press releases.

In our professional opinion, nothing has come to our attention to suggest that the responses related to identified material topics are not adequately represented in the report.

### **Impact**

BE has also demonstrated that adequate systems are in place to monitor, measure, and be accountable for their actions that affect the economy, the environment, society, stakeholders, and the organization itself.

Based on our review, we confirm that the company's sustainability initiatives have made a measurable and meaningful impact on both the environment and society. The company tracks and reports key performance indicators (KPIs) related to its sustainability efforts, and we have found the data to be accurate and reliable. The company has effectively communicated its progress and is transparent about its challenges and opportunities for further improvement.

#### **Conclusions**

Based on our assessment, we provide limited assurance that the company has demonstrated a commitment to inclusivity, materiality, responsiveness, and impact in its sustainability reporting. The processes in place are aligned with recognized standards and best practices, and the company is making substantial progress in addressing its sustainability goals and responsibilities.

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### **GRI-reporting**

Biological E. Limited provided us with their self-declaration of compliance "In accordance with" the GRI Universal Standard, 2024.

Based on our verification review, we are able to confirm that social responsibility and sustainable development disclosures in all 3 categories (Economy, Environment, People) are reported "In accordance with" the GRI Universal Standard 2024. It is the responsibility of BE corporate to notify GRI post publishing the report.

In our professional opinion, the self-declaration covers BE Corporate's social responsibility and sustainability issues. Based on the verification undertaken, nothing has come to our attention to suggest that the report does not properly describe the general disclosures (GRI 2-1 to GRI 2-30), materiality-related disclosures (GRI 3-1 to GRI 3-3) and the following material topic disclosures as stipulated in the GRI Standards:

- GRI 204: Procurement Practices 2016: 204-1
- GRI 205: Anti-corruption 2016: 205-1, 205-2
- GRI 302: Energy 2016: 302-1, 302-2, 302-3, 302-4
- GRI 303: Water and Effluents 2018: 303-1, 303-2, 303-3, 303-4, 303-5
- GRI 305: Emissions 2016: 305-1, 305-2, 305-3, 305-4, 305-6, 305-7
- GRI 306: Waste 2020: 306-2, 306-3, 306-4, 306-5
- GRI 308: Supplier Environmental Assessment 2016: 308-1, 308-2
- GRI 403: Occupational Health and Safety 2018: 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10
- GRI 404: Training and Education 2016: 404-1, 404-2, 404-3
- GRI 405: Diversity and Equal Opportunity 2016: 405-1
- GRI 414: Supplier Social Assessment 2016: 414-1, 414-2
- GRI 418: Customer Privacy 2016: 418-1

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# **Competency and Independence**

The assurance team was composed of Lead auditors experienced in the industrial sector, and trained in a range of sustainability, environmental and social standards including GRI Universal Standard 2024, AA1000AS, GARP, BEE, IGBC, ISO 14001, ISO 45001, ISO 14064, ISO 50001 and ISO 9001, etc. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

### **Assurance Level**

The type 2 moderate level of assurance provided is in accordance with AA1000 Assurance standard, v3 in our review as defined by the scope and methodology described in this statement.

# Responsibility

It is the responsibility of BE's senior management to ensure the information presented in the sustainability report is accurate. It is also left to the decision of the BE management on the publishing/submission of the report to any of their stakeholders. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

# Reliability

The assurance statement on the performance was issued based on the evidence collected from the ground level provided by the employees of BE. The sample selection was on a random basis and selection was done by the BSI auditor.

The assessment covers the manufacturing unit's vaccine division located in Shameerpet, Gaganpahad, and Shameerpet SEZ, as well as for pharma division operating from Shameerpet, Patancheru, Azamabad, Dehradun, and the corporate office at Jubilee Hills, Hyderabad in India during the period from 1<sup>st</sup> April 2023 to 31<sup>st</sup> March 2024. The assurance team was convinced that the performance information presented in the report was reliable and representative.

### Quality

The quality of information was checked through cross-verification of data. Field level measurement and records were verified with the procurement and supply chain invoices/bills. Interviews with the responsible persons detailed the activities, maintenance, and process performance. The fitness of the measuring devices, frequency of measurement and recording, competency of the person concerned, and review & approval of information were checked and found in conformance.

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#### **Performance Information**

BE Sustainability Report has addressed their Economy, Environment, and People performance through GRI Universal Standard 2024 topic disclosures. The assurance team has evaluated the requirements of the GRI disclosures for general disclosures and those relevant to the material topics.

For the specific data presented in the report, technical/compilation errors that were identified during the sampling process were corrected and presented in the final report.

Based on the processes and procedures conducted with moderate assurance, there is no evidence that the Economy, Environment, and People data information presented in the Biological E. Limited's Sustainability Report for the period 2023-2024 is materially correct and is not a fair representation of their Economy, Environment and People performance.

Issue Date: 30/12/2024

For and on behalf of BSI:

SKOTTE"

Theuns Kotze, Managing Director – IMETA Assurance



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**Statement of use:** Biological E has reported in accordance with the GRI standards for the reporting periods April 1, 2023 – March 31, 2024

- GRI 1 used foundation 2021
- Applicable GRI sector standard Not applicable

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission			
GRI 1: Foundation 2021								
GRI 1	Foundation 2021 Reported	2021 Reported	About the Report	15				
GRI 2: Genero	al Disclosures 2021							
2-1	Organizational details	2-1 a Reported 2-1 b Reported 2-1 c Reported 2-1 d Reported	About Biological E. Our Global Presence	18				
2-2	Entities included in the organization's sustai nability reporting	2-2 a Reported 2-2 b Reported 2-2 c Omitted	About this Report	15	2-2 c Not applicable: BE does not have any ownership interest in any entity that is not organization owned or controlled			
2-3	Reporting period, frequency and contact point	2-3 a Reported 2-3 b Reported 2-3 c Reported 2-4 d Reported	About this Report	15				
2-4	Restatements of information	2-4 (i) Reported 2-4 (ii) Reported	About this Report	15				
2-5	External Assurance	2-5 a Reported 2-5 b Reported	Assurance Statement	18				
2-6	Activities, value chain and other business relationships	2-6 a Reported 2-6 b Reported 2-6 c Reported 2-6 d Omitted	Our Global Presence About Biological E. Responsible Sourcing	18, 22, 80	2-6 d: Not applicable: There has been no significant change in 2- 6 a, 2-6 b, 2-6 c.			
2-7	Employees	2-7 a Reported 2-7 b Reported 2-7 c Reported 2-7 d Omitted 2-7 e Reported	Workforce welfare	87	2-7 d: Not applicable: All the employees working for BE are accounted in 2-7 a & 2- 7 b			
2-8	Workers who are not employees	2-8 a Reported 2-8 b Reported	Workforce welfare	86				

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
		2-8 c Reported			
2-9	Governance structure and composition	2-9 a Reported 2-9 b Reported 2-9 c Partially Reported	Corporate Governance	38, 40	2-9 c (vi) Information unavailable: Composition of the highest governance body and its committees have not been evaluated for under-represented social groups  2-9 c (viii) Information unavailable: Composition of the highest governance body and its committees have not been evaluated for stakeholder representation
2-10	Nomination and selection of the highest governance body	2-10 a Omitted 2-10 b Omitted		-	2-10 Confidentiality constraints: Nomination and selection process for highest governing body and its committees is based on internal criteria of the company
2-11	Chair of the highest governance body	2-11 a Reported 2-11 b Reported	Corporate Governance	37	
2-12	Role of the highest governance body in overseeing the management of impacts	2-12 a Reported 2-12 b Reported 2-12 c Reported	Corporate Governance	37	
2-13	Delegation of responsibility for managing impacts	2-13 a Reported 2-13 b Reported		41	
2-14	Role of the highest governance body in sustainability reporting	2-14 a Reported 2-14 b Reported	Corporate Governance	37	
2-15	Conflicts of interest	2-15 a Reported 2-15 b Reported	Corporate Governance	37, 113	

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
2-16	Communication of critical concerns	2-16 a Reported 2-16 b Reported	Corporate Governance	114	
2-17	Collective knowledge of the highest governance body	2-17 a Reported	Corporate Governance	38	
2-18	Evaluation of the performance of the highest governance body	2-18 Omitted	-	-	2-18: Confidentiality constraint: The evaluation of the highest governance body is done by the managing director and the human resources head. The evaluation processes is based on internal criteria of the company
2-19	Remuneration policies	2-19 a Omitted 2-19 b Omitted	-	-	2-19: Confidentiality constraint: The renumeration the highest governing body is evaluated same as that of all the employees and is evaluated based on their performance. The renumeration policies for senior executives is for internal use only.
2-20	Process to determine remuneration	2-20 a Reported 2-20 b Reported	Workforce Welfare : Employee Benefits	89	
2-21	Annual total compensation ratio	2-21 a Omitted 2-21 b Omitted 2-21 c Omitted	-	-	2-21: Confidentiality constraints: Biological E is a privately held business and disclosures of the renumeration details of the senior executives is confidential and is not reported outside.
2-22	Statement on sustainable development strateg y	2-22 a Reported	Message from MD & CSO Our Strategy	54	

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
2-23	Policy commitments	2-23 a Reported 2-23 b Reported 2-23 c Omitted 2-23 d Reported 2-23 e Reported 2-23 f Reported	Responsible Products Human Rights	90, 113	2-23 b – Not applicable: No vulnerable groups are at risks within our operations or in our supply chain 2-23 c – Confidentiality constraint: The policies are not available externally.
2-24	Embedding policy commitments	2-24 Reported	Corporate Governance	113	
2-25	Processes to remediate negative impacts	2-25 a Reported 2-25 b Reported 2-25 c Reported 2-25 d Reported 2-25 e Reported	Responsible Product : Ethics and Compliance Materiality Impacts	91	
2-26	Mechanisms for seeking advice and raising concerns	Reported	Responsible Product : Ethics and Compliance	114	
2-27	Compliance with laws and regulations	2-27 Reported	Responsible Product : Ethics and Compliance	58	
2-28	Membership associations	2-28 a Reported	Membership and Associations	28	
2-29	Approach to stakeholder engagement	2-29 a (i) Reported 2-29 a (ii) Reported 2-29 a (iii) Reported	Stakeholder Engagement and Materiality	47	
2-30	Collective bargaining agreements	2-30 a Reported 2-30 b Reported	Freedom of Association and Collective Bargaining	91	
GRI 3: Materio	al Topics 2021				
3-1	Process to determine material topics	3-1 a Reported 3-1 b Reported	Stakeholder Engagement and Materiality	48, 51	

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
3-2	List of material topics	3-2 a Reported 3-2 b Reported	Stakeholder Engagement and Materiality	50	
Energy and E	missions Management				
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Energy and Emissions	51, 58	
GRI 302: Ener	gy 2016				
302-1	Energy consumption within the organization	302 -1 a: Reported 302 -1 b: Omitted 302 - 1 c: Reported 302 - 1 d: Omitted 302 - 1 e: Reported 302 - 1 f: Reported 302 - 1 g: Reported	Environment Protection : Energy and Emission Management	58	302 – 1 b. Not applicable: As currently BE does not consume any energy from renewable sources 302 – 1 c (ii, iii, iv) Not applicable: BE does not have any heating, cooling, and steam consumption for any of its activities. 302 – 1 d. Not applicable, as BE does not sell any heating, cooling, or steam.
302-2	Energy consumption outside the organization	302 – 2 a: Reported 302 – 2 b: Reported 302 – 2 c: Reported	Environment Protection : GHG Emission -	-	This is reported in Scope 3 Section. Since , we have reported Scope 3 data in CO2e , reporting in GJ is not technically feasible.
302-3	Energy intensity	Reported	Environment Protection: Energy and Emission Management	59	
302-4	Reduction of energy consumption	302-4 a - Reported 302-4 b - Reported 302-4 c - Reported 302-4 d - Reported	Environment Protection : Energy and Emission Management	60	
302-5	Reductions in energy requirements of	Omitted	-	-	302 – 5: Not applicable: BE's business activities

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
	products and services				are on production of vaccine and pharmaceutical products.
GRI 305: Emis	sions 2016				
305-1	Direct (Scope 1) GHG emissions	305 – 1a: Reported 305-1b: Reported 305 – 1c: Omitted 305 – 1d: Reported 305 – 1e: Reported	Environment Protection : GHG Emission Our Strategy	61	305-1 b) Emissions reported include only CO2e gas 305-1 c Data Unavailable: We do not have tracking mechanism to report Biogenic emissions 305 – 1 e: Biological E uses emission factors 305-2 f BE uses the operational control method to aggregate its emission
305-2	Energy indirect (Scope 2) GHG emissions	305 – 2 a: Reported 305 – 2 b: Omitted 305 – 2 c: Reported 305 – 2 d: Reported 305 – 2 e: Reported 305 – 2 f: Reported 305 – 2 g: Reported	Environment Protection : GHG Emission	61	305 – 2 b Not applicable: Emissions are not calculated by market-based approach 305–2 c Emissions reported include only CO2e gas 305–2 f Operational control method is used to aggregate its emission.
305-3	Other indirect (Scope 3) GHG emissions	Reported	Environment Protection : GHG Emission	62	We have reported the following Scope 3 categories: Category 1 - Purchased goods and services Category 2 - Capital goods Category 3 - Fuel- and energy-related activities Category 5 - Waste generated in operations Category 6 - Business travel Category 7 - Employee commuting

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
					We have excluded the following categories from our reporting scope: Category 4 - Upstream transportation and distribution Category 8 - Upstream leased assets Category 9 - Downstream transportation and distribution Category 10 - Processing of sold products Category 11 - Use of sold products Category 12 - End-of-life treatment of sold products Category 13 - Downstream leased assets The following categories are not applicable to our business operations: Category 14 - Franchises Category 15 - Investments
305-4	GHG emissions intensity	305 – 4 a: Reported 305 – 4 b: Reported 305 – 4 c: Reported 305 – 4 d: Reported	Environment Protection : GHG Emission	63	305-4 d Emissions reported excludes SF <sub>6</sub> , NF <sub>3</sub>
305-5	Reduction in GHG emissions	305 – 5 : Omitted	Environment Protection : GHG Emission	60	Since there is no significant reduction in in absolute emissions.
305-6	Emissions of ozone- depleting substances (ODS)	305 – 6 a: Reported 305 – 6 b: Reported 305 – 6 c: Reported	Environment Protection : GHG Emission	63	

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
		305 – 6 d: Reported			
305-7	Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	305 – 7 a: Reported 305 – 7 b: Reported 305 – 7 c: Reported	Environment Protection : GHG Emission	63	305 7 a: Data is reported on NOX, SOX, SPM 305 7 b: Data is received from the lab results
Water Stewa	ırdship				
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Water Stewardship	51, 64	
GRI 303: Wat	er and Effluents 2018				
303-1	Interactions with water as a shared resource	303-1 a Reported 303-1 b Reported 303-1 c Omitted 303-1 d Omitted	Environment Protection : Water Stewardship	64	303-1 c Data Unavailable: Currently we are not tracking the water data of our suppliers  303-1 d Not Applicable: Since none of our sites are in water stressed area
303-2	Management of water discharge- related impacts	303-2 a Reported	Environment Protection : Water Stewardship	66	
303-3	Water Withdrawal	303–3 a Reported 303–3 b Omitted 303–3 c Reported 303–3 d Reported	Environment Protection: Water Stewardship (Water Withdrawal and Consumption)	65	b) Not applicable, since as per Central Ground Water Authority (CGWA) our businesses do not fall under water stress areas
303-4	Water discharge	303-4 a- Reported 303-4 b Reported 303-4 c Omitted 303-4 d Omitted	Environment Protection: Water Stewardship (Responsible disposal of Water)	66	303-4 c) Not applicable, since as per Central Ground Water Authority (CGWA) our businesses do not fall under water stress areas

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
		303-4 e Reported			303-4 d) Not applicable: As all discharge is being sent to CETP
303-5	Water consumption	303–5 a Reported 303–5 b Omitted 303–5 c Reported 303–5 d Reported	Environment Protection : Water Stewardship (Water Consumption)	66	303 – 5 b) Not applicable, since as per Central Ground Water Authority (CGWA) our businesses do not fall under water stress areas 303 – 5 c) BE does not have any kind change in water storage that would have any significant water related impact
Waste and H	azardous Material Man	agement			
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Waste and Hazardous Material Management	51, 67	
GRI 306: Was	te 2020				
306-1	Waste generation and significant waste related impacts	306-1 Omitted	Environment Protection : Waste management	-	306-1 Confidentiality Constraint: We cannot disclose our raw materials, process and manufacturing materials.
306-2	Management of significant waste-related impacts	306-2 a Reported 306-2 b Omitted 306-2 c Reported	Environment Protection : Waste management	67	306 – 2 b Not applicable
306-3	Waste generated	306-3 a Reported 306-3 b Reported	Environment Protection: Waste management (Waste Generated)	68	
306-4	Waste diverted from disposal	306-4 a Reported 306-4 b Reported	Environment Protection : Waste management	70	



GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
		306-4 c Reported 306-4 d Reported 306-4 e Reported	(Responsible handling of Waste)		
306-5	Waste directed to disposal	306-4 a Reported 306-4 b Reported 306-4 c Reported 306-4 d Reported 306-4 e Reported	Environment Protection: Waste management (Responsible handling of Waste)	69	
Supply Chain	Management				
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Supply Chain Management	51, 76	
GRI 204: Proc	eurement Practices 2016	5			
204-1	Proportion of spending on local suppliers	204-1 a Reported 204-1 b Reported 204-1 c Reported	Responsible supply chain :Responsible Sourcing	80	
GRI 308: Supp	olier Environmental Asse	essment			
308-1	New suppliers that were screened using environmental criteria	Reported	Resilient Supply Chain : Responsible Sourcing	80	
308-2	Negative environmental impacts in the supply chain and actions taken	Reported	Resilient Supply Chain : Responsible Sourcing	80	
GRI 414: Supp	blier Social Assessment	2016			
414-1	New suppliers that were screened using social criteria	Reported	Responsible Sourcing	80	



GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
414-2	Negative social impacts in the supply chain and actions taken	Reported	Responsible Sourcing	80	
Occupation	al Health and Safety				
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Occupational Health and Safety	52, 93	
GRI 403: Occ	upational Health and S	afety 2018			
403-1	Occupational health and safety management system	Reported	Workforce Welfare : Occupational Health and Safety	93	
403-2	Hazard identification, risk assessment, and incident investigation	403-2 a Reported 403-2 b Reported 403-2 c Reported 403-2 d Reported	Workforce Welfare : Occupational Health and Safety	94	
403-3	Occupational health services	Reported	Workforce Welfare: Occupational Health and Safety	96	
403-4	Worker participation, consultation, and communication on occupational health and safety	Reported	Workforce Welfare : Occupational Health and Safety	94	
403-5	Worker training on occupational health and safety	Reported	Workforce Welfare: Occupational Health and Safety	96	
403-6	Promotion of worker health	Reported	Workforce Welfare: Occupational Health and Safety	93	



GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Reported	Workforce Welfare : Occupational Health and Safety	97	
403-8	Workers covered by an occupational health and safety management system	Reported	Workforce Welfare: Occupational Health and Safety	94	
403-9	Work-related injuries	Reported	Workforce Welfare: Occupational Health and Safety	93	
403-10	Work-related ill health	Reported	Workforce Welfare: Occupational Health and Safety	93	
Training and	Development				
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Training and Development	52 , 85	
GRI 404: Trai	ning and Education 2010	6			
404-1	Average hours of training per year per employee	Reported	Workforce Welfare: Training and Development	85	
404-2	Programs for upgrading employee skills and transition assistance programs	404 -2 a Reported 404 -2 b Reported	Workforce Welfare: Training and Development	86	
404-3	Percentage of employees receiving regular performance and career development reviews	Reported	Workforce Welfare: Attracting and Retaining talent	88	



GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission			
Diverse and Inclusive Workforce								
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Diverse and Inclusive Workforce	51, 92				
GRI 405: Dive	GRI 405: Diversity and Equal Opportunity 2016							
405-1	Diversity of governance bodies and employees	Reported	Corporate Governance	87				
405-2	Ratio of basic salary and remuneration of women to men	Omitted	-	-	405 – 2: Confidentiality constraint			
GRI 406: Non	-Discrimination 2016							
406-1	Incidents of discrimination and corrective actions taken	Omitted	-	-				
Ethics and Co	ompliance							
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Ethics and Compliance	52, 112				
GRI 205: Anti-	-corruption 2016							
205-1	Operations assessed for risks related to corruption	Reported	Responsible Product: Ethics and Compliance	114				
205-2	Communication and training about anti- corruption policies and procedures	Reported	Responsible Product : Ethics and Compliance	114				
205-3	Confirmed incidents of corruption and actions taken	Omitted	-	-				
Data Privacy and Cyber Security								
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Ethics and Compliance	52, 112				



GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission		
GRI 418: Customer Privacy 2016							
GRI 418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Reported	Data Privacy and Cyber Security	115			
Transparent Reporting and Communications							
GRI 3-3	Management of Material Topics	Reported	Materiality Impacts Transparent Reporting and communication	52	We disclose all data/information pertaining to our material topics. We also report our non-financial & financial information annually in our Sustainability Report and it is assured externally.		
Other Topic I	Other Topic Disclosures determined as Not Material						
GRI 201: Econ	omic performance 2016	)					
201-1	Direct economic value generated and distributed	201-1 a Reported 201-1 b Reported	Financial Highlights	30			
201-2	Financial implications and other risks and opportunities due to climate change	Omitted	-	-	201-2: Not applicable		
201-3	Defined benefit plan obligations and other retirement plans	Omitted	-	-	201 – 3: Confidentiality constraints		
201-4	Financial assistance received from government	Omitted	-	-	201 – 4: Not applicable		
GRI 206: Anti-competitive Behaviour 2016							
206-1	Legal actions for anti-competitive behaviour, anti- trust, and monopoly practices	206-1 Reported	-	114	-		

GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission		
GRI 401: Employment 2016							
401-1	New employee hires and employee turnover	401–1 a Reported 401–1 b Reported	Workforce Welfare : Attracting and retaining Talent	88			
401-2	Benefits provided to full-time employees that are not provided to temporary or part- time employees	Partially Reported	Workforce Welfare : Employee Benefits	89	401-2 (iii) Currently we do not have disability and invalidity coverage 401-2 (vi) This information is considered confidential. Therefore, it is not disclosed		
401-3	Parental leave	Reported	Workforce Welfare : Attracting and Retaining Talent	88, 89			
GRI 408: Chile	d Labor 2016						
408-1	Operations and suppliers at significant risk for incidents of child labor	Reported	Resilient Supply Chain : Responsible Sourcing	78			
GRI 409: Force	ed or Compulsory Labo	or 2016					
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Reported	Resilient Supply Chain : Responsible Sourcing	79			
GRI 410: Secu	GRI 410: Security Practices 2016						
410-1	Security personnel trained in human rights policies or procedures	Reported	Grievance Redressal Mechanism	90			
GRI 413: Loca	GRI 413: Local Communities 2016						
413-1	Operations with local community engagement, impact assessments, and development programs	413-1 a Reported	Community Engagement	101			



GRI Disclosures	Description	Status	Section cross- reference	Page no.	Remarks/Reason for omission		
413-2	Operations with significant actual and potential negative impacts on local communities	413-2 a Omitted	-	-			
GRI 417: Mark	GRI 417: Marketing and Labelling 2016						
417-1	Requirements for product and service information and labelling	417-1 a Reported	Responsible product	113			
417-2	Incidents of non- compliance concerning product and service information and labelling	417 -2 a Reported 417-2 b Reported	Responsible product	113			
417-3	Incidents of non- compliance concerning marketing communications	417 -3 a Reported 417-3 b Reported	Responsible product	113			

Queries or comments related to this report may be directed to Mr. Anil Kumar Chiti, Vice President, Sustainability Via: Anil.Chiti@biologicale.com

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