JAI KISAAN
NAVRATNA

CATALYZING INCLUSIVE GROWTH

Paradeep Phosphates Limited

ESG REPORT 2021-22

PPL

“To be the one-stop solution for the farm economy.”

In this Report

To view this report online,
please visit: https://www.paradeepphosphates.com/sustainability.php

“We are committed to creating a food-secure nation through our innovative and affordable solutions for the farmers.”

About the Report

As a leading player in the fertiliser industry in India, Paradeep Phosphates Limited is committed to creating a food-secure nation through innovative and affordable solutions for farmers. By adopting a purpose-led approach, guided by the core values of sustainability, agility, integrity, and customer-first, we manage our Environment, Social, and Governance (ESG) impacts.

Our approach is designed to create value for our stakeholders and drive excellence beyond profitable growth. As responsible corporate citizens, we recognise the need to realign our business strategies and priorities to address emerging challenges and risks such as the COVID-19 pandemic. In alignment with this, we are committed to adopting ESG as a guiding framework to measure our performance and success. In further demonstration of this commitment, we are presenting our first ESG Report detailing our non-financial performance for FY 2021-22.

Reporting Guidelines

The ESG Report for Paradeep Phosphates Limited (PPL) for FY 2021-22 is guided by the principles and guidelines recommended by the International Integrated Reporting Council’s (IIRC) Integrated Reporting <IR> Framework. It is also aligned with the Global Reporting Initiative (GRI) Standards, Sustainability Accounting Standards Board (SASB) and the United Nations Sustainable Development Goals (SDGs). In aligning with these standards and principles, we are committed to a transparent and accountable reporting journey.

Report Boundary and Scope

The ESG Report demonstrates the non-financial performance of PPL from April 1, 2021 to March 31, 2022, across six capitals i.e. financial capital, intellectual capital, natural capital, manufacturing capital, human capital, and social and relationship capital. It highlights the company’s focus areas and sustainability-oriented initiatives undertaken; as well as its commitments and initiatives planned for the future. PPL acquired Zuari Agro-Chemical (ZACL), Goa unit in June 2022. Although the acquisition was completed in FY 23, the ZACL, Goa information has been included in the FY 2021-22 ESG report to create a baseline and maintain congruence for our future sustainability report. Since this is our first ESG report, we have also covered some of our past sustainability initiatives, since they contribute to our present ESG performance.

Responsibility statement

The ESG report is a transparent and accurate representation of our company’s non-financial, sustainability, and operational performance for the reporting year FY 2021-22.

Feedback

We firmly believe that as an organisation, it is our responsibility to receive input for improvement and to address the concerns and expectations of all our stakeholders. Please share your feedback, suggestions, and/or queries by contacting:

Name: **Susnato Lahiri**

Designation: **DGM - Corporate Strategy, Investor Relations and ESG**

About Paradeep Phosphates Limited (PPL)

Incorporated in 1981, Paradeep Phosphates Limited (PPL) the leading player in manufacturing, distribution, trading, and sales of a variety of fertilisers, soil nutrients, and industrial products in India. Our diverse product portfolio consists of **Urea, Di-ammonium Phosphate** (DAP), several grades of **NPK, Muriate of Potash** (MoP), and **Zypmite**, making it possible for farmers to provide balanced fertilisation to the crops, with a supply of essential plant nutrients for optimum plant growth, yield, and quality. Our brand name 'Jai Kisaan' and 'Navratna' are symbol of trust among farmers.

We have two manufacturing facilities at Paradeep in Odisha and Zuarinagar in Goa, strategically located near the ports which endow logistical advantages to the company. We aspire to become an integral part of India's prosperity journey through our customised solutions for farmers.

10+
Products

2.4 MMT
Annual Capacity

8+ Million
Farmers reached

5+ million
Hectares fertilised annually

Our Values

Mission: To create value for farmers and stakeholders by providing integrated agri solutions to all farm needs.

Our values form the foundation of our business model; acting as the catalyst to drive and deliver long-term benefits to our customers, vendors, channel partners, employees and society at large.

SUSTAINABILITY

Our value system is focussed on growing profitably while ensuring we do good for the society and environment at large.

AGILITY

Being adaptable and staying on course with the rapidly changing business dynamics helps us to be prepared with the risk and opportunities that exist.

INTEGRITY

For the longevity of the business, we understand that ethics and transparency is fundamental and we do our utmost to ensure that.

CUSTOMER FIRST

We aim to help and build authentic solutions that can help our consumers generate more yield and productivity.

Our Business Presence

Our integrated business model has contributed to our success and differentiates us from our peers. We constantly strive to tailor our product mix optimally to achieve balanced nutrition for crops grown by our customers. We are the second largest private sector manufacturer of non-urea fertilisers in India. The combined operations at Paradeep & Goa make us well-positioned to capitalise on economies of scale, allowing us to accelerate the growth trajectory.

We focus on quality as well as the timely delivery of our products, through our flagship brands – 'Navratna' and 'Jai Kisaan'. We have enhanced the lives of over 8 million farmers over an expanse of 16 states predominantly in eastern, western, and southern India.

Our Value Chain

With deep backward integration as our forte and with the added advantage of being self-sufficient in power generation, we have one of the largest single-location phosphatic plants in India.

Sourcing and Backward Integration

We source our raw materials primarily from Morocco, Jordan, Qatar, and Saudi Arabia as well as from local suppliers. Our long-term supply agreements and strong relationships with suppliers help us ensure a stable supply chain. Our partner, OCP group, based in Morocco, is one of the world's largest phosphatic players, controlling over 70% of the world's known phosphate reserves.

Quality Control

At every stage of our product cycle, from the acquisition of raw materials to packaging and distribution of the finished product, we strongly emphasise on quality assurance and product safety. We ensure that the quality of our goods maximizes customer satisfaction. All raw materials and finished products undergo robust testing procedures for dispatch clearance at our state-of-the-art Quality Control Laboratory. In addition, our samples are also independently tested at NABL-recognized and national laboratories from time to time.

Research and Development

With a strength of 31 qualified professionals, our Research and Development (R&D) efforts have been recognised by the Department of Scientific and Industrial Research, Government of India. Our experienced and skilled R&D team continue to identify and devise new innovative and diverse products in line with requirements of our farmer customer base.

Production Process

At integrated facilities in Paradeep and Goa, we produce NP/NPK/NPS and Urea fertilisers, with Sulphuric acid, Phosphoric acid and Ammonia as intermediates. Over the years, we have made significant capital investments to enhance our production capacities, energy efficiency and reduce our overall environmental footprint. Efforts have also been made to make innovative saleable products through our by-products such as Zypmite and HFSA.

Sales and Marketing

Our products are sold through a strong sales and marketing network of regional offices and above 600 stock points across sixteen states. The network comprises 5,322 dealers and over 72,925 retailers, catering to over 8 million farmers in India.

Customers

With farmers as our customer base, we recognize the importance of ensuring that our products cater to their needs and address on ground challenges. Our products have positively impacted the lives of over 8 million farmers. In addition to providing them with affordable and high quality products, we aim to contribute to an improvement in practices. Our farmers are provided with focused training on complete agronomic solutions and scientific crop management practices.

Products across

16 States

21 Regional marketing offices

5,322 Dealers

72,925 Retailers

PPL Marketing Territory

- PPL Marketing Territory
- Regional Marketing Offices
- PPL Corporate Office
- Manufacturing Units

Our brands- **Jai Kisaan** and **Navratna** have been standing powerfully strong in the minds of the Indian farmers for over five decades.

Born in 1967 amidst India's first Green Revolution and the quest for self-sufficiency in the food production. **Jai Kisaan** emphasises the sentiment that the future belongs to nations with self-sustaining food production and reinforces our '**Farmers First**' approach. **Jai Kisaan's** logo-the sprouting green seedling silhouetted against a benign blood-red sun signifies the source of life on earth with bountiful harvests firmly anchored on the bedrock of arduous efforts on the Indian farmers.

Navratna was in 2002 and soon became a household name in eastern India. The brand embodies our versatile fertiliser-mix leading to highest quality of farm produce and prosperity for the Indian farming fraternity.

Today, **Jai Kisaan** and **Navratna** have become synonymous with our farmers's ethos and trust throughout India. PPL will continue to leverage and integrate the brands to keep bolstering its leadership position throughout pan-India.

ESG Highlights FY 21-22

Environmental

2,76,506 Kwh
Total renewable energy consumed

225,191 tCO_2e
GHG emissions saved

100%
of operations are tracked through continuous emission monitoring systems

235 MG
of rainwater harvesting capacity

97%
of waste is recycled

6.85 Lakh
Cumulative trees planted since inception

100% Operation are
ZLD

Social

2,480
Employees including workers

25 average
hours of training

INR 56.7 million
for initiatives impacted over
50,000 lives

43
training sessions reached over
20,000 farmers

8+ million
Farmers outreach

5,29,584 Soil samples
& delivered soil health cards to
12,66,067
grid-based farmers.

Economic and Governance

2nd
largest private sector producer of phosphoric Acid

100%
of employees trained on code of conduct and HR policies

INR 103,838.47
million
Revenue from operations

2.40 Million MT
Annual capacity of fertiliser

5 out 9
Board of Directors are Independent

Awards and Accolades for FY 2021-22

Our efforts to improve production processes, address environmental challenges and safety issues, maintain fair human resource practices, and cater to social responsibility have been consistently recognised by government authorities, apex industry bodies, prestigious non-governmental organisations and national and state media.

Best Brand Platinum Award 2021 in Corporate Excellence Category

Greentech Foundation 'Environment Award' 2021 for effective environment management

As a testament to our operational excellence and overall success, we have received several prestigious awards and accolades in Sustainability, Corporate Excellence & Leadership. We have also been recognised for exemplary leadership in the Chemicals and Fertilisers sector in India.

Message from Chairman

Dear Stakeholders,

I am happy to present the first ESG Report of PPL aligned to the Integrated Reporting framework. At the outset, I would like to express my gratitude to all team members for completing this mammoth task. Sustainability has always been a core agenda at PPL. This ESG Report is a step forward in our commitment to transparency and accountability in our operations. The report successfully collates our efforts for sustainable development and will motivate and inspire us to do more.

Global supply chains and workforces underwent severe disruptions resulting from the COVID-19 pandemic and stringent lockdowns, presenting us with new challenges to address. As an essential commodity producer and supplier, it was a critical priority to maintain a continuous supply of fertilisers. Our long-term sourcing strategy for raw-materials and efficient handling of production processes ensured that there were no disruptions or delays in meeting the requirements of our customers.Furthermore, the support and efforts of our employees and stakeholders demonstrated our ability to act collaboratively and swiftly in response to unprecedented times. Such efforts reinforce the resilience of our systems and processes and provide us with the confidence to address any unforeseen challenges.

More than 50% of the population in India is directly or indirectly dependent on agriculture. However, awareness and adoption of balanced nutrition remain a challenge for a large section of farmers. Our efforts, therefore, have been focused on bridging this gap. Our brands ‘Jai Kisaan’ and ‘Navratna’ have been demonstrating trust among the farmer community. Over the years our efforts have been focused on being a one-stop-solution for our farmers. Through the provision of high quality products and robust systems and processes, we have catered to our customer and other stakeholder needs for over five decades.

We are strategically expanding our geographical reach and our product portfolio. The recent acquisition of Zuari’s Goa facility is an important step undertaken to target and respond to the increasing fertiliser demand in western states like Maharashtra and Karnataka in India. We have also infused research and intellectual capital that will bring tailored-made products as per regional requirements. Our endeavour remains to continue developing innovative products that will significantly change the use of fertilisers in India.

Since inception, we have placed a strong focus on enhanced energy efficiency by harnessing the heat created in our intermediary production processes. This also results in an equivalent reduction in GHG emissions. Additionally, we have positioned the principles of circularity i.e., reduce, reuse, and recycle in our operations. Along with internal research, our team is collaborating with external scientific experts to reuse and recycle waste. With our continuous efforts, we have also utilised Phosphogypsum in cement production and road construction. We are successfully selling a valuable product ‘Zypmite’ for soil conditioning made from process by-product Phosphogypsum.

Our processes and operations are backed by a strong governance framework that for continuous improvement and greater transparency to our mode of operation. We are also committed to maintaining integrity and ethics in our operations. To this end, we also ensure that our employees are trained on our code of conduct which lays the foundation and commitment for going beyond compliance.

We strongly recognise the importance of ensuring a holistic and empowering environment for all our employees. This is evidenced by the long standing association that several of our employees have with us across the organisation and low attrition rate. Our focus remains on fostering an environment wherein our employees are able to resonate with our purpose and also gain holistic experiences.

As a responsible corporate citizen, we are cognizant of our duty to contribute to the socio-economic development of communities located around our plants.Our project “Navratna Prayas”, impacts almost 50,000 lives every year. This is our commitment towards catalysing ‘Inclusive Growth’. We closely work with 10,000 households in and around our plants to address issues related to Livelihoods, Education, and Health (WaSH - Water, Sanitation and Hygiene) with a special focus and involvement of women and children. Through our initiatives we aim to support millions of people in creating a sustainable tomorrow.

As we move forward on this journey of operational excellence and sustainable development, I extend my gratitude to all the shareholders, board members, employees, customers, distributors, suppliers, banks, regulatory bodies, governments, and other stakeholders for supporting the company in its progress.

Warm Wishes,

S. K. Poddar

Chairman

Governance

At PPL, our robust corporate governance framework is the driving force of our business strategies and operational approach. It enables financial accountability and ethical conduct and ensures responsibility and transparency to all our stakeholders. The framework has been designed for effective adaptation and implementation across all levels of the organisation and is aligned with our core values and purpose.

Highlights of FY 2021-22

5 Independent directors on board

100% Employees trained on Code of Conduct

Board Governance and Oversight

Our Board of Directors consists of a diverse and multidisciplinary group of skilled and experienced professionals. Their guidance provides strategic direction n and their expertise and counsel in areas of risk control practices and standard regulatory compliance enables us to maintain the highest standards of corporate governance.

As of March 31, 2022, there are 9 directors on our board, consisting of 1 Chairman (Non executive member), 1 Managing Director, 2 Directors and 5 Independent Directors. The Independent Directors are experts drawn from diverse fields with extensive management, technical and sectoral expertise.

Board Committees

To ensure effective implementation of our corporate governance framework, we have constituted various committees with separate mandates. Periodic communication and updates are provided by each committee to management personnel for effective monitoring and timely decision making. The key committees of the Board are depicted in the figure below:

Audit

Responsible for overseeing the quality and integrity of the accounting, auditing and reporting practices of the Company; and its compliance with the legal and regulatory requirements. The committee recommends to the board of directors for appointment, re-appointment, replacement, remuneration and terms of appointment of auditors of the Company. Also, responsible for the evaluation of internal financial controls,adequacy of the internal control systems and risk management systems.

Nomination and Remuneration

Responsible for evaluating remuneration of Directors, Key Managerial Personnel(KMPs) and senior management, involving a balance between fixed and incentive pay reflecting short- & long-term performance objectives, appropriate to the working of the Company and its goals. In addition,overseeing the Employee Stock Option Plan(s), advising the Board on diversity and evaluating the performance of Board members also fall within the ambit of the Committee.

Risk Management

The committee is an independent function, responsible for managing internal and external risks including tasks of possible emerging risk identification, prediction and mitigation. It ensures the usage of appropriate methodology, processes and systems, to monitor and evaluate risks associated with the businesses of the Company. It monitors and oversees implementation of the risk management policy and periodically reviews it, with a minimum of two checks a years.

Finance Committee

Constituted with members of the Board who have specific skillset and knowledge of the topics and themes that are to be covered by the committees, in synchronization with the organizations vision. This diversity at committee level helps engage intense discussions and gives the committee members a stronger sense of realization on various topics and issues. The inputs from the committee are summarized to the board for further discussionby the directors.

Corporate Social Responsibility

Designs CSR policies in accordance to the CSR law and in-agreement to the board. The committee is responsible for the management of the CSR department or team, its functions and the CSR implementation. The committee holds the responsibility of program development, expenditure review, implementation and timely completion. It ensures that the board is updated with the progress of CSR initiatives and its impact.

Stakeholder Relationship

Ensures that the stakeholder rights and interests are protected, transparency is maintained; and checks that the trust and confidence of the stakeholder in the Company stays intact. The committee is responsible for looking into various aspects of interest of the shareholders, debenture holders and other security holders and resolving their grievance(s), if any.

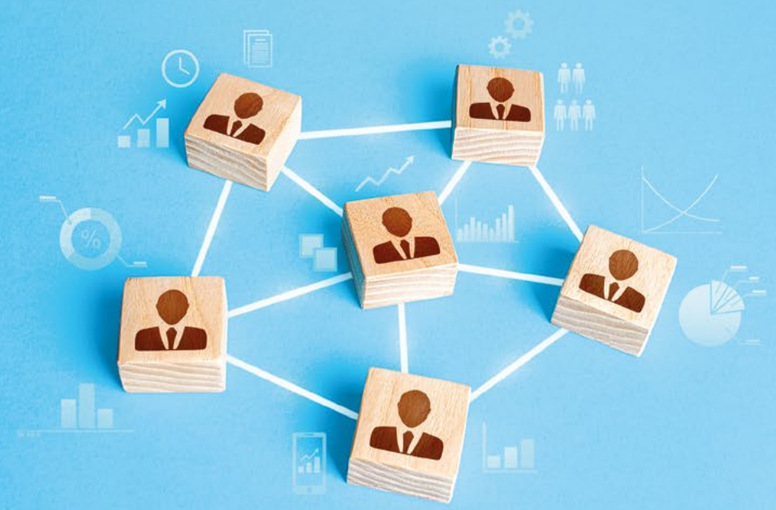
ESG Governance

At the centre of our ESG approach lies our fundamental belief in doing business the right way. We are driven by our commitment to create long-term value creation for all our stakeholders. We recognize the importance of developing financially viable business strategies and processes that deliver a positive impact for the community and environment.

To further embed ESG within the organisation, an ESG Committee has been formalised with a clear mandate to provide oversight and monitor implementation of developed strategies and processes. Under the chairmanship of our Managing Director, the committee consists of experienced members representing all key business functions, presenting diverse insights for effective management of our ESG approach. -

The Committee provides quarterly updates on ESG priorities and progress achieved to the Board of Directors. Key roles and responsibilities of the committee include -

- Assist in setting strategy with respect to ESG, and to consider and recommend policies, practices, and disclosures that conform with the strategy;
- Oversee reporting and disclosure with respect to ESG for stakeholders including board of directors, promoters and investors;
- Assist in overseeing internal and external communications regarding the company's position or approach to ESG;
- Consider current and emerging ESG trends that may affect the business, operations, performance or public image of PPL and anything else that's pertinent to the company and its stakeholders and to make recommendations, on how PPL's policies, practices and disclosures can adjust to or address these current trends ;
- Review and assess internal ESG KPIs annually and recommend necessary changes;
- Establish monitoring mechanisms and processes for ESG progress



Business Ethics

The foundation of our governance framework is guided by critical principles of trust, ethics and accountability. This ensures that we maintain transparency and responsibility with all our stakeholders. This framework is further enhanced through robust internal controls and systems that provide clear direction for implementation of our processes and operational approach. Our ESG approach is further reinforced through this and we have formalised several ESG aligned policies for stronger governance. These include:

Code of Conduct

Our Code of Conduct outlines clear guidelines and expectations for all employees with respect to ethical standards and business conduct. It is intricately linked to our core values and serves as a manual for our people to maintain the highest standards of ethical conduct. Moreover, our Code of Conduct also details our grievance redressal channels to protect our people and address any instances of non-compliance.

Board Diversity Policy

We are cognizant of the need for a Board of Directors that is diverse in nature and who harbour a range of experience and inputs for a strong governance approach. We have institutionalised this through formalisation of a Board Diversity policy that details our approach to providing for a representative and experienced Board. Several factors, including but not limited to culture, gender, age, regional background, industry experience, talent, and knowledge, have been taken into account while determining the Board's composition

Whistle-Blower Policy

All permanent, probationary, trainee and temporary employees are provided with a formal mechanism to report any actual or suspected violations of the Code of Conduct or any unethical behaviour.

Corporate Social Responsibility policy

Our approach to social responsibility and community development is embodied in our Corporate Social Responsibility (CSR) policy. We strongly believe that local communities are critical stakeholders in our success. All our CSR projects are designed and implemented in line with our CSR policy, in accordance with Section 135 of the Companies Act, 2013.

Prevention of Sexual Harassment Policy

In order to ensure a safe and inclusive work environment, we have formalised a Prevention of Sexual Harassment Policy. This includes a strict zero tolerance approach to any form of harassment at the workplace. The policy aids in the creation of a safe, secure, and enabling environment free from any form of harassment, thereby improving women's participation in work, resulting in economic empowerment and inclusive growth.

Integrated Management System policy

We have adopted a comprehensive approach towards improving the efficiency and effectiveness of our operations by constituting an Integrated Management System (IMS) policy. We have aligned our processes with the procedures of IFA's Protect & Sustain (P&S) initiative, ensuring that we minimise the adverse impact of products and activities on the environment, maintain ecological balance, and protect biodiversity in and around the operations.

Risk Management

As we grow as an organisation, fostering a strong risk culture for effective management remains a priority across all our operations to protect our stakeholder's interests, mitigate and adapt to risks and maximise sustainable value.

We have developed a robust risk management framework that guides our approach to identify, evaluate and mitigate actual or potential risks to the company. This framework also enables timely monitoring and ensures strong oversight on risk management practices and processes. Through a rigorous evaluation process, our framework enables management of several variables and associated risks, including strategic, operational, compliance and reporting risks. Our identified risks are:

Business Model Risk

New business models and dependency on other partners may create risk for business value chain of the company

Mitigation Plan
We have adopted an integrated business model and strategic location for logistic advantage and ensuring strong relationships with community

Macroeconomic Risk

Global and local demand-supply, inflationary fluctuations, country's economic growth, per capita income

Mitigation Plan
Management processes are based on favourable or adverse macroeconomic conditions the company can realign it's ongoing strategies and operational and financial aspects

Financial Risk

Rising inflation and subsequent increase in cost of financing / interest rates could adversely impact capex plans. We are also exposed to currency volatility.

Mitigation Plan
Maintaining healthy cash flow
Credit limits set and worthiness data for every dealer / partner is tracked

People Risk

Attrition or disruption of operations due to non-compliances of laws and noncompliance

Mitigation Plan
Regular training on skill upgradation and key policies provided Equal opportunities provided to all employees

Location Risk

Dependency on single or limited locations of manufacturing, distribution and sourcing.

Mitigation Plan
Company has expanded to two units, this reducing the single location Risk.

Acquired the Goa Fertilizer Plant from Zuari Agro Chemicals Limited.

Pandemic Risk

Pandemic like COVID-19 maybe have a significant impact across sectors, affecting the way business is being carried out and to be carried out in the future

Mitigation Plan
Safety and health initiatives including working from home options for administrative staff

Market Competition Risk

Market presence and penetration can be affected by domestic and international competitions

Mitigation Plan
Building economies of scale in manufacturing, distribution and procurement to maintain cost advantage

Strengthening long-term relationships with key customers by offering better quality and service know-how

Climate Change Risk

Climatic conditions are cyclical in nature. Seasonal variations in monsoon and unfavorable local and global weather patterns may have an adverse effect on agri inputs sales.

Mitigation Plan
Expanding in other states to avoid any climatic risks

Regulatory Risk

Evolving regulatory framework may have material impact on operations. Deviation in compliance and adherence may also adversely impact reputation.

Mitigation Plan
Constant monitoring of the regulatory landscape

Operational agility to reduce any impact as an outcome of unfavorable regulatory policies.

The framework is strengthened by a detailed Risk Management policy that provides clear actions to respond to identified risks and protect and strengthen our assets, performance, workforce, and reputation. An independent Risk Management committee maintain an overall oversight of the risk profile of the business and takes necessary actions to manage and mitigate identified risks, including ESG risks. Periodic updates are provided to the Board of Directors by this Committee.

Cyber Security and Data Privacy

With an increasing integration of technology and digital solutions within our business operations, we are cognizant of the concerns associated with data privacy and security breaches. Our operational success heavily relies on safeguarding information and ensuring "**Confidentiality, Integrity and Availability**". We are committed to ensuring the highest standards of data privacy and cyber security, as detailed in our Information Security Management System (ISMS) policy.

Our ISO 27001: 2013 certified Information Management System provides for a strong system of checks and balances to protect sensitive information, such as customer data, financial information, and intellectual property, from cyber threats, such as hacking, data breaches, and malware. Additional steps taken to strengthen our efforts for data privacy and cyber security include:

- Installation of layered cyber defences
- Established data leakage prevention systems
- Implementation of a monitoring mechanism to track and log critical transactions

Our ESG journey

As responsible corporate citizens, in line with our core values, we recognise the importance of contributing to an empowering and healthy future for all. In FY 2021-22, we made critical progress on our ESG journey for enhanced transparency and improved performance in alignment with leading ESG frameworks. Strong efforts have been made to formally integrate ESG within our governance framework with a focus on our policies, systems, processes, and culture.

Improving business resilience through effective management of short and long-term risks and impacts of climate change has been identified as a critical action area. Efforts have also been made to reduce the carbon footprint of our value chain. Along with protecting the environment we operate in, we also recognise our duty to protect our people and local communities. As a responsible employer, we place a strong emphasis on fostering a diverse, equitable, and inclusive workplace to provide our employees with an exceptional experience. We have also implemented several initiatives for local communities, with a focus on livelihood, sanitation, education and environmental conservation.

Our ESG initiatives over the years

- Zero Liquid Discharge Plants
- ISO 9001, ISO 14001 ISO 45001 and ISO 50001 certified operation at Paradeep
- ISO 14001 and ISO 45001 operation at Goa
- Progress towards Zero Waste to landfill (97% recycle or reused)
- Continuous reduction in Specific energy consumption through energy efficiency and heat recovery measures implemented
- Continuous reduction specific water consumption through water efficiency, recycling, and use.
- Rainwater harvesting
- Captive solar plant
- Online monitoring of emissions through CEMS and AAQMS
- Biodiversity assessments at sites
- Comprehensive CSR policy and programmes
- Integrating circularity in business through innovative products Zypmite, HFSA, and industrial gypsum.
- Employee engagement and satisfaction survey
- Extensive farmer outreach programmes

Recent ESG Highlights

- We have an ESG steering committee to regularly assess our ESG performance.
- We are reviewing our existing policies and processes for identifying further opportunities to deepen ESG within our strategy, operating model, and culture.
- We conducted the first materiality assessment to identify the focus areas for our business and consulted internal and external stakeholders to identify our priorities.
- We conducted GHG inventorisation for scope 1, 2, and limited scope 3 parameters
- We also introduced ESOP for employees

Stakeholder Engagement

We are committed to upholding open channels of communication for greater transparency, accountability and collaboration. Engagement with a diverse set of stakeholders form a critical component of our business strategy and operational approach. Regular and focused dialogue with our stakeholders fosters collaboration, which in turn enables us to drive and deliver long-term shared value. Insights gained through such engagement ensures alignment of business strategy with stakeholder expectations and timely action for sustained value.

Our approach to stakeholder engagement has been designed to enable trust building and effective decision making, and foster an environment of collaboration and continuous learning for improvement. It focuses on advocacy, engagement and transparent communication for effective redressal of concerns and identification of beneficial opportunities.

Core stakeholders have been identified as individuals or groups of individuals or institutions that contribute to our operational success and strengthen the value of our business chain activities. The core stakeholders of our company and the manner and mode of engagement with them are:

Stakeholder Group	Engagement approach	Expectations
Employees	• Satisfaction surveys • Grievance Redressal • Celebrations • Meetings with employee associations and unions	• Fair and equal opportunities • Merit-based career development • Workplace safety • Employee benefits • Leadership connects sessions • Training and skill development
Customers	• Annual Customer Meet • Zonal Customer Meet • Customer Interactive Meet	• Quality fertilisers • Competitive pricing
Suppliers	• Supplier Meets -Industry Conclave	• Fulfil contractual obligations • Timely payment • Long term business opportunity
Investors/ Shareholder	• Investor Meets • Conducting Press conferences	• Financial performance • Share broad future strategies • Get feedback and address concerns • Seek approval from shareholders on major decisions
Government/Regulators	• MoUs • Quarterly -Progress Report • Annual Report	• Compliance with statutory laws and regulations • Contribute to national development
NGOs/Community Members	• Project Meetings • Annual Reviews	• Skill development • Women empowerment • Community development

Approach to Materiality

We firmly believe that the identification and integration of ESG aspects that are important to our stakeholders, enables us to create a resilient and sustainable organisation. An ESG Materiality Assessment was conducted in the reporting year to gauge stakeholder expectations, concerns and interests, including risk factors that may impact our operations. We believe that the outcomes of this endeavour will guide us in refining our ESG priorities, and be fundamental to define the direction of business strategy in the short to medium term.

In FY 2021-22, we conducted our first materiality assessment, consisting of four phases including identification of material topics and stakeholders, deployment of surveys and analysis and validation of results:

Identifying the Universe of Relevant ESG Topics

Based discussions with internal stakeholders, peer review and benchmarking, sector scans, media reports and secondary sources

Identifying Stakeholders

Including identifying a sample set of internal and external stakeholders and developing questionnaires to capture their stakeholder inputs

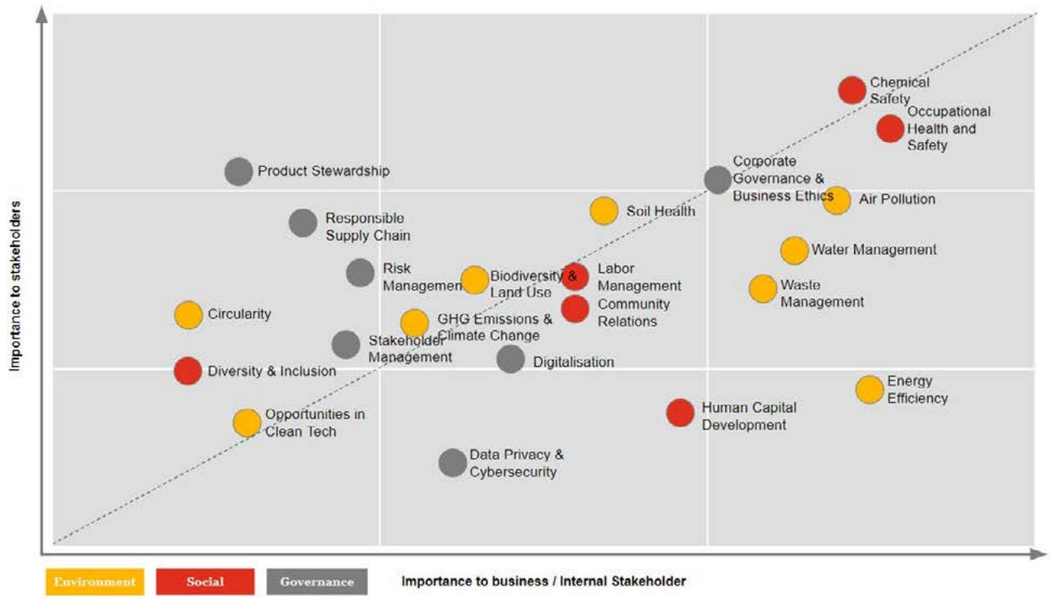
Materiality Survey

Using online surveys to collect data and information from stakeholders to prioritize the list of identified ESG topics

Analysis of Survey Results

By analyzing survey responses from internal and external stakeholders, and synthesizing the collected data into a materiality matrix of PPL

The results of the materiality assessment are summarised in the matrix below:



PPL Materiality Topics

Environment	Social	Governance
Air Pollution	Occupational Health and Safety	Corporate Governance
Water Management	Chemical Safety	Risk Management
Energy Efficiency	Human Capital Development	Digitalization
Waste Management	Labor Management	Responsible Supply Chain
Soil Health	Community Relations	Stakeholder Management
Biodiversity and Land Use	Diversity and Inclusion	Product Stewardship
GHG Emission and Climate Change		Data Privacy and Cybersecurity
Circularity		
Opportunities in Clean Tech		

Our Strategy for Value Creation

Inputs

Financial Capital

We endeavor to provide our shareholders with strong capital, return ratios, lower balance sheet leverage and lowered effective tax rates.

- PBT - **INR 5,340 million**
- Finance costs - **INR 860 million**
- Debt equity ratio - **1.33**

Manufactured Capital

We invest in new capacities and maintaining existing ones to manufacture quality products

- Manufacturing facilities - **2**
- Production capacity - **2.4 MMTPA** including Paradeep and Goa

Intellectual Capital

Our research and development efforts are primed to utilize the best technologies, superior competencies, and strategic partnerships, helping us do truly global cutting-edge work.

- **PPL Navratna R&D centre**
- R&D team strength - **31**
- Spent on R&D - **INR 11.2 million**

Human Capital

Innovation, transformation and continuous improvement enables us to attract the best talent, develop skills, enhance roles and shape careers that contribute to the fulfillment of our vision

- Total employees - **2480**
- **INR 1380 million** Employee benefit expense
- **25.5** Average training hours

Social and Relationship Capital

We work towards creating economic development, social development, natural resource management, infrastructure development

- **6000+** Suppliers
- CSR expenditure - **INR 56.7 million**
- **42** training sessions conducted for farmers

Natural Capital

We continue to upgrade and invest in infrastructure to create a greener footprint of our operations through energy conservation and GHG reduction, waste water, and waste management.

- Solar energy - **995.42 GJ**
- Water consumed - **10.44 million m³**

Our Business

Vision

To be the one-stop solution for the farm economy.

Mission

To create value for farmers and stakeholders by providing integrated agri solutions to all farm needs.

Key Values

Our Products

- DI – Ammonium Phosphate
- NPK Complex fertilizers
- Muriate of Potash
- Soil Conditioners
- Gypsum and other industrial products

Outputs

Financial Capital

- **INR 3,980 million** PAT
- **INR 10,383.8 million** Revenue
- **INR 7,100 million** EBITDA

Manufactured Capital

- **1.85 MMT** of manufactured products
- **3.46 MT** of intermediate products
- **ISO 9001**, **14001**, **45001**, and **50001 certified** operations at Paradeep Plant
- **ISO 14001** and **45001 certified** operations at Goa Plant

Intellectual Capital

- Innovative products from Waste - Gypsum, Zypmite and Fluorosilicic acid
- Waste as a filler material

Human Capital

- **100% of employees** received career development reviews
- **Healthy** and **skilled** workforce

Social Capital

- Reached out to more than **8 million farmers**
- Impacted **50,000+** lives through CSR

Natural Capital

- **643,130.9 tCO_2** of GHG emissions
- **224,192 tCO_2e** GHG emissions saved
- **97%** of waste recycled or reused
- **6.7 lakh** Trees plant since inception

Outcomes

- Sustained growth in revenue driven by operational performance
- Long-term value creation for shareholders through increased returns

- 2nd largest private sector of non-urea fertilizers
- 14% Contribution of nation's output towards Phosphoric acid

- Innovation of new products
- Development and deployment of sustainable and green technologies
- Building robust brand portfolio

- Long term employee retention
- Number of employees engaged in leadership training programs

- Farmers' Trusted Brand 'Navratna and Jai Kissan'
- Enhanced social footprint through community outreach
- Strong supplier network

- Committed to positive natural capital
- Greentech Foundation 'Environment Award' 2021

Financial Capital

Our management of financial capital focuses on continued investments and optimal operational performance. We strive to maximise our returns on financial resources and investments for the creation of shared value for all our stakeholders. We are committed to a sustained growth to ensure long-term and holistic development for all.

Highlights of FY 2021-22

INR 103,838.47 million

Total Revenue from operations

INR 7,103 million

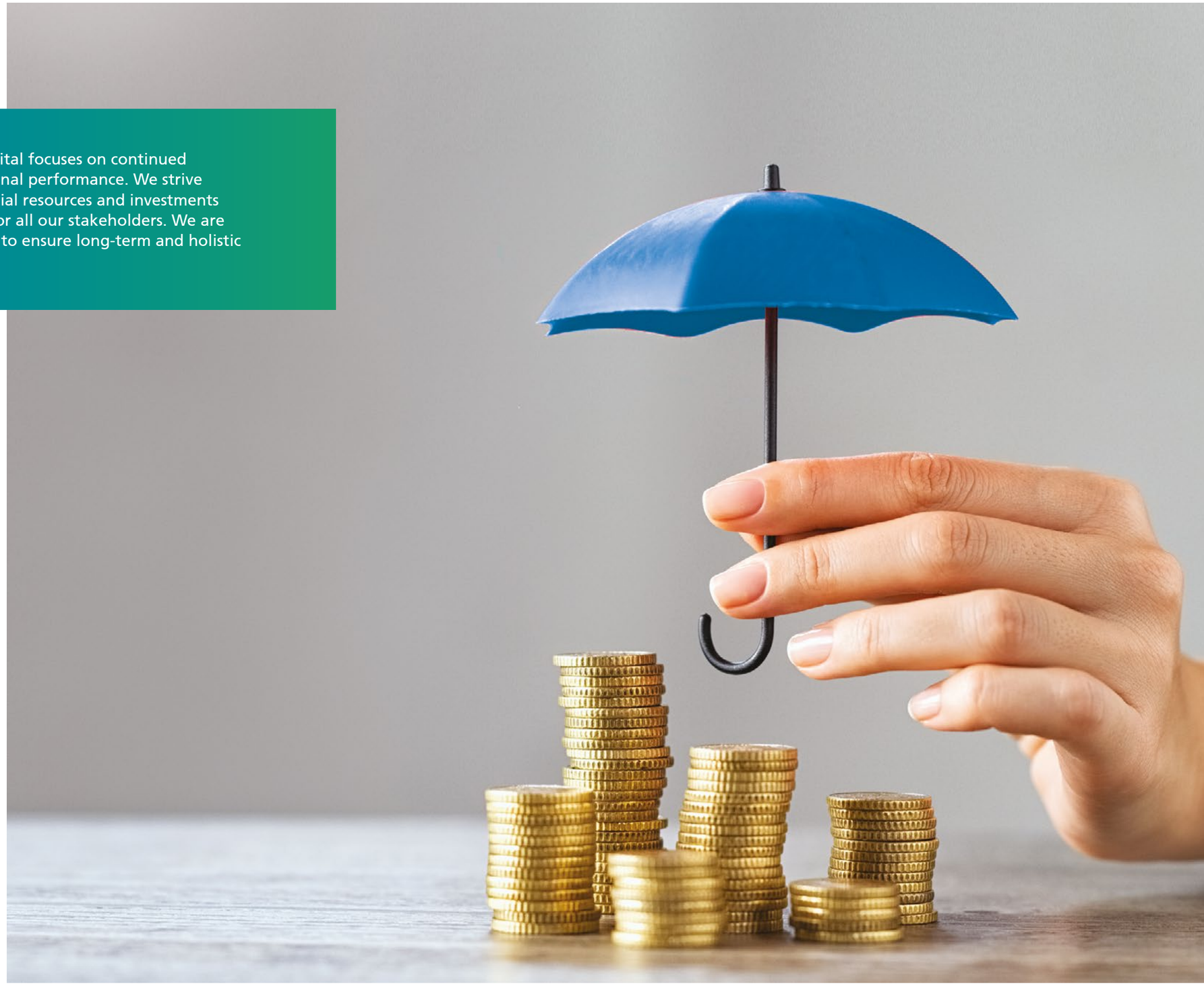
EBITDA

1.33

Net Debt/Equity

Financial performance

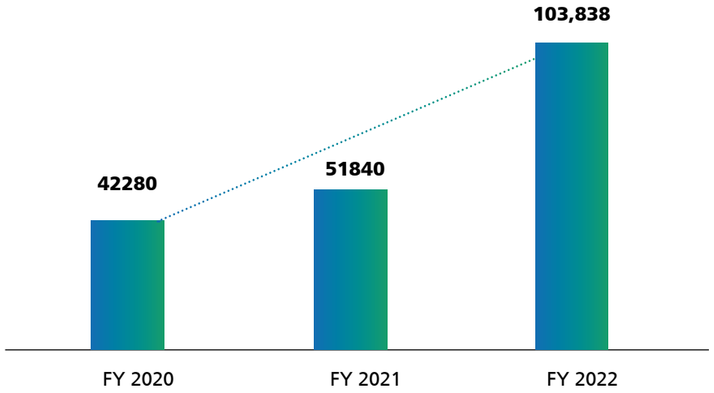
We have a fiduciary duty to manage our financial capital in a reasonable manner to maintain our business model and provide accretive value for investors. While the focus is to increase profits for our shareholders, we also place a strong emphasis on ecosystem development by funding R&D and in cutting-edge technologies that will provide the groundwork for future growth.



Revenue from operations

Our financial performance for FY 2021-22 was characterised by sustained growth, despite the impact of the COVID-19 pandemic on our supply chain and the resulting financial burden. The operating revenue was 100.3 % higher than the revenue from the prior year, coming in at INR 103,838.47 million. The increase is attributed to higher production and sales. A snapshot of revenue for the past three years has been illustrated in the graphs below.

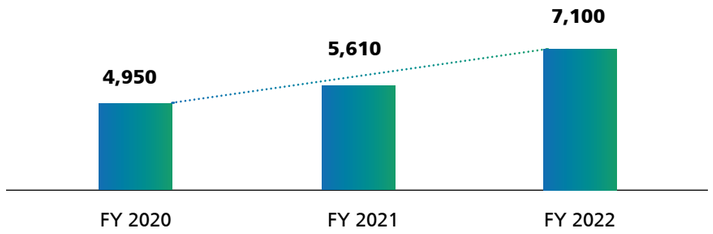
Revenue (INR million)



EBITDA

For FY 2021-22 we recorded an EBITDA of INR 7,100 million that represents a 27% increase over the previous financial year.

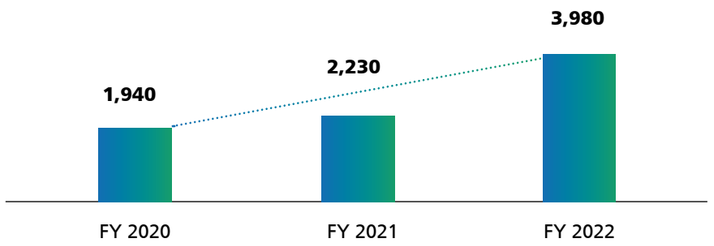
EBITDA (INR million)



PAT

Our net profit for the company stood at INR 3,980 million, representing a 78% increase on a y-o-y basis. With higher EBITDA (+8%), lower finance costs (-29%), and lower regime income tax rate as per section 115 BAA, our effective income tax rate came down to 25.5% from 39.1% has resulted in improved PAT numbers.

PAT (INR million)



A detailed account of our financial performance can be found in the standalone and consolidated financial statements in the Annual Report.

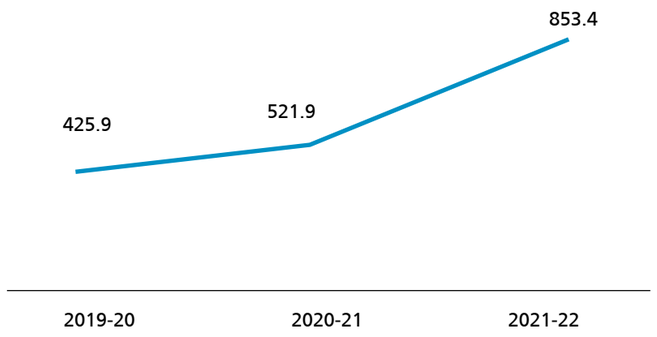
Sales and raw materials

Our raw materials are sourced both locally and from Morocco, Jordan, Qatar and Saudi Arabia, amongst others. Despite an increase in the cost of raw materials in FY 2021-22, a high volume of sales enabled a considerable increase in gross profit. We sold 12,40,997 tons of manufactured products and 2,45,203 tons of traded products, an increase of **10.79%** and a decrease of **47.77%** respectively. The increase of 10.79% in manufactured products was aided by higher production of DAP & NPK. The volume of traded products decreased by 47.77% during FY2021-22

Capital expenditure

We invested INR 591.2 million in project plant and equipment (PPE) for the DAP-C train project during FY 2021-22 was spent for Additionally INR 2543.1 million for the DAP train renovation, the expansion of the phosphoric acid capacity, and the installation of a fourth evaporator, among other projects. We have also invested in several environmental projects for improving energy efficiency and air pollution control. Over the past three years, our investment in the environment has increased by almost 100% from INR 425 million to INR 853 million.

Environment expenditure (INR million)



Intellectual Capital

Innovation is a critical driving force of our operations. By focusing on innovation, we are able to deploy excellent technologies for increased product quality for all our stakeholders, specifically our farmers. An increased focus on digitisation has fostered a strong environment for efficiency and enhanced execution.

Highlights of FY 2021-22

31

R&D Team

INR 11.22 million

Investment in R&D

Research and development

Our critical priorities include investing in the development of best-in-class technologies and state-of-the-art infrastructure that are supported by a culture of innovation. Our focus is to innovate by leveraging advanced technologies, superior competencies and strategic alliances.

Our strong in-house capabilities are nested within the R&D Navratna Centre at Paradeep, Goa. The team brings quality expertise and insights that drive continued improvement of current processes and tailoring of products to meet on ground requirements. For the scalability of products from lab to plant size, our teams actively work with the R&D team to optimise process parameters.

The core functional areas of R&D include

- Product innovation
- Process scale-up to establish standard procedures
- Identification of raw materials like rock phosphates, ammonia, sulphur, plant nutrients additives etc
- Explore new application areas of by-products
- Pre-feasibility performance study on raw materials
- Analytical methods developments and their validation
- Customise product development as per Fertiliser Control Order (FCO) norms

The following R&D activities have been undertaken during the year:

R&D projects	Status
Indigenous development of suitable metal oxide descaling/anti-scaling agents.	Completed
Development and exploration of suitable Bentonite resources - Zypmite product formulation for better granulation and crushing strength improvement.	Completed
Hydrometallurgical leaching of Vanadium spent was the catalyst for the recovery of Vanadium.	Completed
Biomass Mediated Value Addition to Fertiliser Industry Waste	Ongoing

Efforts have also been focused on increased energy efficiency of processes and reduction losses:

Intervention	Outcome
Creation of two new anti-scaling agents, PMH-293 and PMH-343 to remove scales	This helped to increase the reactor's volume availability for the reaction between rock and sulphuric acid, which resulted in increased production of phosphoric acid. A record-breaking 3 Lakh MT of H3PO3 was produced in the previous year
Development of Bentonite resources to improve granulation and crushing strength	Increase in Output with better quality of Zypmite from 100 TPD to 180 TPD
Recovery of Vanadium through Hydrometallurgical leaching	92% to 94% vanadium recovery efficiency from used catalysts has been established

In 2018, PPL completed successful R&D trials in conjuction with CRRI to make a road measuring 500 metres by 3.75 metres in the plant premise using neutralized phospho-gypsum (NPG) at a cost of Rs 1.25 crores.

The Indian Road Congress, post monitoring the successful trail results, has approved the use of NPG for commercial road-building.

Our Memberships

Our company fields representation on various platforms and industry bodies that play a significant role in the fertiliser sector. Our company is represented on the Confederation of Indian Industry (CII), Federation of Indian Chamber of Commerce (FICCI), Associated Chambers of Commerce and Industry (ASSOCHAM), Indian Chamber of Commerce (ICC) and other industry associations. Through such platforms we further enhance our agenda of fostering enhanced efficiency and execution in the industry.

We have also collaborated with leading academic and research institutions including IIT Bhubaneswar and Centre for Scientific and Industrial Research (CSIR) to harness the potential of smart agriculture to develop innovative crop solutions for our farmer community.

Our cooperative project, "Biomass mediated value addition to fertiliser industries waste," is a collaboration between PPL Navratna R&D and DST CSIR IMMT.

Transformative and Digital Innovation

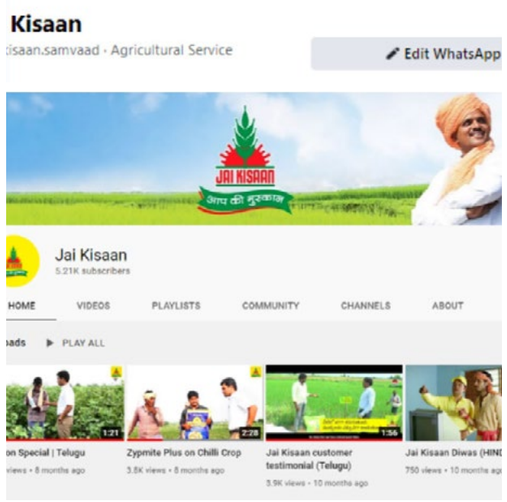
We recognise the importance of increased technological integration and adoption of digitization for optimal operational performance. All business activities use SAP S/4HANA, an integrated ERP analytic business solution that enables us to conduct transactions and analyse our business data in real time. This ensures effective data-driven decision making and real time performance management. It also fosters collaboration and knowledge sharing across all our business functions. Additional systems such as SAP-integrated agri sales portal for sales, stock transfers, e-invoicing, dealer statement of accounts and more, have been implemented for our field sales force, handling agents, transporter, and dealers.

Digitalisation of the Agricultural Services

In India, the agricultural sector has undergone a transformation with the introduction of mFMS (Mobile-based Fertilisers Monitoring System), enabling Direct Benefit Transfer by tracking fertiliser movements and sales up to the farmer level via POS (Point of Sale) devices. The fertilizer sector has played a vital role in this transformation. As a major player in the sector, we have also made focused efforts to digitise our Agri Services for enhanced efficiency of the industry and improved products and product delivery to our primary consumers.

Established internal portals and applications in partnership with external digital partners have strongly contributed to fostering a digital ecosystem. For optimal usage and greater coverage, implementation guidance and support is also provided by on site officials to the farming community.

We have also developed a mobile application “Jai Kisaan- Sampark” to expand our reach to the farming community.



Manufacturing Capital

Our state-of-the-art manufacturing facilities form the backbone of our operational success. We make strong investments in cutting edge technology and infrastructure. Equipped with end-to-end capabilities, we are able to produce high quality products while meeting stringent regulatory requirements.

Highlights of FY 2021-22

2.4 MMTPA

Of Cumulative Capacity

PPL Goa

ISO 14001 | ISO 45001 | protect&sustain – The Global Fertilizer Industry Product Stewardship Initiative

PPL Paradeep

ISO 9001:2015 | ISO 14001 | ISO 45001 | ISO 50001 Energy Management | protect&sustain – The Global Fertilizer Industry Product Stewardship Initiative

Manufacturing Capabilities

Strategically located near ports, our manufacturing facilities in Pardeep and Goa provide for the greater outreach of and access to our products. The Paradeep plant is the second largest private sector producer of Phosphoric acid in the country, producing 14% of the nation's output. For FY 2021-22. the total Di-ammonium Phosphate (DAP) and Nitrogen phosphorus potassium (NPK) production capacity of PPL Paradeep was 1.35 MMTPA. The facility has four trains for the manufacturing of DAP and NPK, three plants to produce sulfuric acid, three captive power plants. The plant also has three operational concentrators to concentrate weak Phosphoric acid into strong Phosphoric acid. The installed annual manufacturing capacity for phosphoric acid at the Paradeep facility is 0.30 million MT, while the installed annual capacity for sulfuric acid production is 1.39 million MT.

The other offsite and support facilities include 5 x 10,000 MT atmospheric Ammonia storage tanks, 6x10,000 MT Phosphoric acid storage tank, 4x10,000 and 6000 MT Sulphuric acid storage tank as well as 2x1500 MT fuel oil tanks, bagging facilities and silos. The imported Ammonia and Phosphoric acid are pumped through pipeline from fertilizer berth of Paradeep port to storage tank.

Manufacturing, distribution and sales of various complex and nitrogenous fertilisers (urea) is undertaken at the plant in Goa. Unique in nature, the plant is co-located with ammonia-urea and phosphatic manufacturing facilities. With access to the markets of Maharashtra, Karnataka, MP, Chhattisgarh and Telangana, the plant meets 46% of the phosphatic fertiliser consumption in the country. The primary raw materials used in manufacturing include RLNG, Phosphoric acid, MOP, Ammonia and Urea. Goa Plant also brings us the powerful brand of Jai-Kisaan that has a very strong equity in the minds of Indian farmers.

The installed capacity of the PPL Goa plant for manufacturing ammonia and urea is 0.34 MMTPA and 0.49 MMTPA respectively. Ammonia and CO2 are the key raw materials for Urea production. The CO2 produced during ammonia manufacturing is later used to make urea. Along with urea and ammonia, the Goa plant has two 0.5 MMTPA NPK grade fertiliser streams.

Enhancing Manufacturing Capabilities

Efforts are currently underway to increase the annual granulation capacity of DAP and NPK production to 1.8 million MT from 1.2 million MT at the plant in Paradeep. Simultaneously, we have set a goal to ramp up the capacity of phosphoric acid production from 3,00,000 to 5,00,000 MT. This will fulfill more than 90% requirement of our requirement for phosphoric acid. Our competitive advantage lies in our share in OCP, the global leader in phosphates with more than 70% of known global phosphate reserves. The acquisition of the Goa Plant of ZACL gives us access to key western markets of India in addition to the unique and complementary product portfolio of the Goa plant.

Product Portfolio

Our diversified product portfolio strong support our aim to ensure balanced fertilisation, i.e., supply of essential plant nutrients such as N (Nitrogen), Phosphorus (P), Potassium (K), Sulphur (S) and Zinc (Zn) for optimum plant growth, yield, and quality.

We produce, distribute, trade, and sell a variety of complex fertilisers, including Urea, DAP, and various NPK grades. We also sell the by-products of the process, such as HFSA, phosphogypsum, and zypmite and intermediate products of Sulfuric acid, phosphoric acid, and ammonia. Additionally, we sell, trade, and distribute MOP and city compost.

Urea

NPK

MOP

DAP

Fertilisers/ Nutrients

Urea is a source of Nitrogen, an essential nutrient crucial for crop growth and development. Urea is the most important nitrogenous fertiliser in the country because of its high N content (46%N). Neem Coated Urea (N) is the Neem oil-coated Urea specially developed only to be used as agricultural fertiliser. The coating of Neem slows the nitrification of urea thereby helping in the increased absorption of nutrients in the soil as well as reduces groundwater pollution. PPL produced **4,33,876** MT of Urea during the fiscal year.

Diammonium Phosphates, DAP is a granulated, high quality, Compound fertiliser containing primarily 18% Nitrogen and 46% Phosphate by weight. DAP is suitable for all types of soils and can be used as a base fertiliser for all crops. PPL produced 7,21,565 MT of DAP during the fiscal year.

NPK Fertilisers
NPK or complex fertiliser contains three essential nutrients needed for plant growth and overall plant health. These three essential nutrients include nitrogen (N), phosphorus (P), and potassium (K). The NPK ratio indicate the percentage of nitrogen, phosphorus, and potassium in an NPK fertilizer. A 20-20-20 fertilizer, for example, would have 20% nitrogen, 20% phosphorus, and 20% potassium. During the fiscal year, PPL produced **4,96,280** MT of NPK

Soil Conditioners

Zypmite is a micronutrient mixture containing Sulphur, Zinc, Boron, Calcium and Magnesium. Zypmite helps in improving the soil fertility, increasing the intake of NPK fertilisers, and improving the quality of yield of crops.PPL produced 40,540 MT of Zypmite during the fiscal year.

Phospho-gypsum contains Sulphur and Calcium in the ratio of 17:21. Phosphogypsum is suitable for alkaline soils. Phospho-gypsum enhances the yield and quality of crops such as rice, pulses, oil seeds and sugarcane. PPL produced 15,83,132 MT of Phospho- gypsum during the fiscal year

Industrial Products

Hydrofluorosilicic acid (HFSA) is an inorganic compound, colourless liquid and manufactured as a coproduct in the production of phosphates fertilisers. It is used as a precursor to aluminium trifluoride and synthetic cryolite, which are used in aluminium processing. During the fiscal PPL produced 4,903 MT of HFSA.

Other traded Products

Potassium Chloride or Muriate of Potash (MOP, or Potash as generic) is red- white crystal containing 60.0 percent Potassium Oxide (K2O). MOP is one of the major plant nutrients, and is completely soluble in water and therefore readily available to the crops. It is imported by PPL through various ports of India and is sold in the marketing territories along with other complex fertilisers

City Compost

Production FY 2021-22

Products Manufactured	PPL Total (FY 21-22) (MT)	% increase w.r.t FY 20-21
UREA	4,33,876	(6.90%)
DAP	7,21,565	12.97%
Phosphoric Acid	3,01,050	3.62%
Sulphuric Acid	12,50,580	18.18%
HFSA	4,903	39.81%
Phosphogypsum	15,83,132	31.34%
Zypmite	40,540	144.60%
NPK	4,96,280	29.37%

Quality Control and Certification

As a leading player in the manufacturing industry, we are strongly cognizant of the importance of maintaining high standards of quality across our operations. Our approach to ensuring quality is governed by robust systems and policies to drive consistency, compliance, and continuous improvement. Moreover, we are ISO 9001:2015 certified and compliant with Good Manufacturing Practices (GMPs) and maintain strict alignment with the global industry standards and the changing regulatory landscape.

Our state-of-the-art laboratories at our plants in Paradeep and Goa are equipped with Both manufacturing locations have set up full-fledged laboratories with the most cutting-edge and sophisticated modern analytical instruments for the measurement and analysis of environmental parameters. We have also tied up with third-party laboratories for stack and ambient air monitoring. Our facilities have Protect and Sustain certification from International Fertiliser Association (IFA).

IFA Protect & Sustain

Protect & sustain is the global product stewardship standard for fertilisers. It was developed by the International Fertiliser Association and tailored specifically for fertiliser sectorial certificates to assure the highest levels of safety and security performance in the fertiliser industry. Protect Sustain covers the specific quality, environmental, health, and safety aspects of the ISO 9001 and 14001, as well as the ISO 45001 certifications. The IFA standard also has many points in common with Responsible Care 14001, which addresses the whole chemical industry.

Natural Capital

We understand the importance of resource conservation to sustainably run our business and ensure long-term creation for all our stakeholders. Resultantly, environmental stewardship lies at the crux of our business strategy. We are committed to enhance resource efficiency for a reduced carbon footprint and make focused efforts for decarbonization.

Highlights of FY 2021-22

2,899,461 GJ
Energy Saving

225,191 tCO_2
GHG Savings

97%
Waste recycled

100%
increase in environmental expenditure

100% ZLD
Operation

85%
Recovered heat from Process

Aligned with global standards, our environmental management system directs our approach to continual improvements in environmental performance and to generate value for the organisation. Our manufacturing facilities at Paradeep and Goa have been certified with ISO 14001:2015. We strictly comply with all relevant environmental guidelines and regulatory requirements, including the MoEF&CC Charter on Corporate Responsibility for Environmental Protection Action Points (CREP) guidelines for the fertiliser sector.

During the financial year, we commenced our environment footprint baseline measurement which covers greenhouse gas emissions, waste generation and disposal, and water consumption. We are proactively exploring opportunities to reduce our impact on the environment without compromising operational standards or shareholder value. Over the last 3 years, our environmental-related capital expenditure has increased by more than 100% and operational expenditure has increased by 14%. Outcomes of the same are reflected in energy savings, water conservation, emission reduction, and effective waste management.

Material Management

Material management is a critical function at PPL. Our procurement team ensures continuous supply of raw materials, a significant amount of which is imported in the absence of indigenous available rock phosphates and potash. Our promoter, OCP Group, manages 70% of the global phosphate reserve in Morocco. As a result, we gain a competitive advantage and are able to leverage our partnership with the OCP Group for a sustained supply of our core raw material. Additionally, both our plants are strategically located near ports, enhancing our access to multiple channels of supply.

At PPL Goa, natural gas is the major raw material that is used to produce ammonia, which is further reacted with CO2 to form urea. Natural gas is used in the steam reforming process, process heating, and generation of electricity.

At Paradeep, our key raw materials are rock phosphates, sulphur, ammonia, and muriate of potash. Sulphuric acid and Phosphoric acid are the intermediate products in the process which are finally combined with Ammonia and Potash to prepare the final product i.e, DAP and NPK fertilisers. We are continuously exploring new avenues of raw material supply to reduce overall carbon footprints of our supply chain. A significant step in this direction can be seen in securing supply of Molten Sulphur from IOCL.

Minimising our environmental footprint through localization of raw material Molten Sulphur from Indian Oil Corporation Limited (IOCL)

In 2017, we collaborated with IOCL to obtain molten sulphur to be consumed as an alternate material against imported Sulphur (which is in the form of solid granules). As a result, our sulphur import has seen an annual decrease of 30-40%. Moreover, it has enabled direct cost saving in terms of landed cost. As sulphur is received in a molten state, it also eliminates the conversion cost from solid to molten form (cost of steam). This has helped us save ~22MT of steam daily and direct GHG savings of 41 tCO2e on an annual basis. Given the close proximity of IOCL's refinery to our fertiliser plant, we have also seen a reduction in our upstream transportation scope 3 emission associated with imported sulphur.

Packaging and labelling

All our products are packaged and labelled as per standards and guidelines mandated by Legal Metrology Dept., GoI. The labels on the respective fertiliser products contain information on chemical composition and other important statutory information for transport, storage and handling of fertilisers.Capacity-building support has also been extended to small scale companies for packaging material, enabling reduced cost and transportation-related emissions, and generation of local employment opportunities.

Energy Consumption

Continuous reduction in energy consumption, a top priority for a manufacturing industry, directly enables lower costs of production, reduction in emission of pollutants and GHG emissions. Since 2012, the Fertiliser sector in India has been covered under the Government of India's Perform, Achieve and Trade (PAT) scheme, a market based compliance to accelerate improvements in energy efficiency. We have consistently achieved over and above the targets given under the PAT scheme.

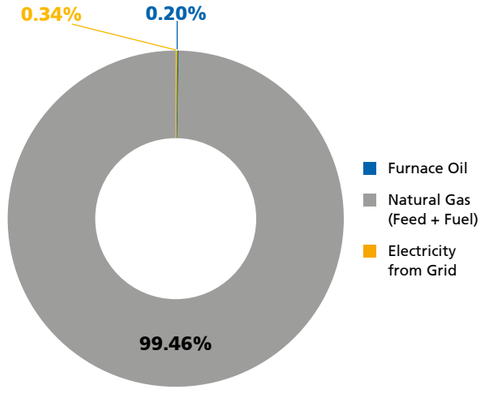
At our facility in Paradeep, nearly 85% of the energy demand is met through waste heat recovery systems installed in sulphuric acid plants. We have two captive power plants of 16 MW each and one captive power plant of 23 MW capacity. These captive power plants generate power from the steam generated from the heat recovery in the sulphuric acid production plants, making our facility self-sufficient in fulfilling its energy needs. This facility has also been certified with the Energy Management System ISO 50001.

Heat Recovery System at PPL Paradeep

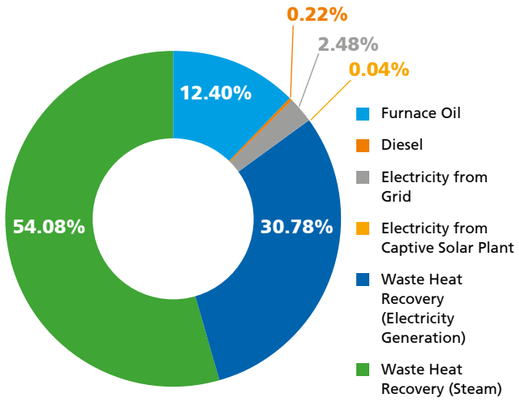
PPL has taken steps towards the co-generation through waste heat recovery. Captive Power is generated by utilising the steam generated from the Sulphuric acid Plant. PPL has HRS in all the 3 sulphuric acid plants. The installation of the Heat Recovery System (HRS) shifted the energy recovery paradigm of PPL. On a daily basis, our heat recovery system generates power equivalent to 245 MW. It is equivalent to replacing 142 MT of coal on a daily basis and eliminating 225,191 tCO_2e annually.

PPL Goa meets its energy demands from the natural gas-based captive power plant and grid electricity. Natural gas is also consumed as feedstock and fuel in the steam reforming process for manufacturing Ammonia. The production of Ammonia-Urea at our Goa plant contributes 84.4% in overall energy consumption of PPL. 13% of PPL's overall energy consumption is sourced from internal heat recovery systems.

Goa Energy Break Up

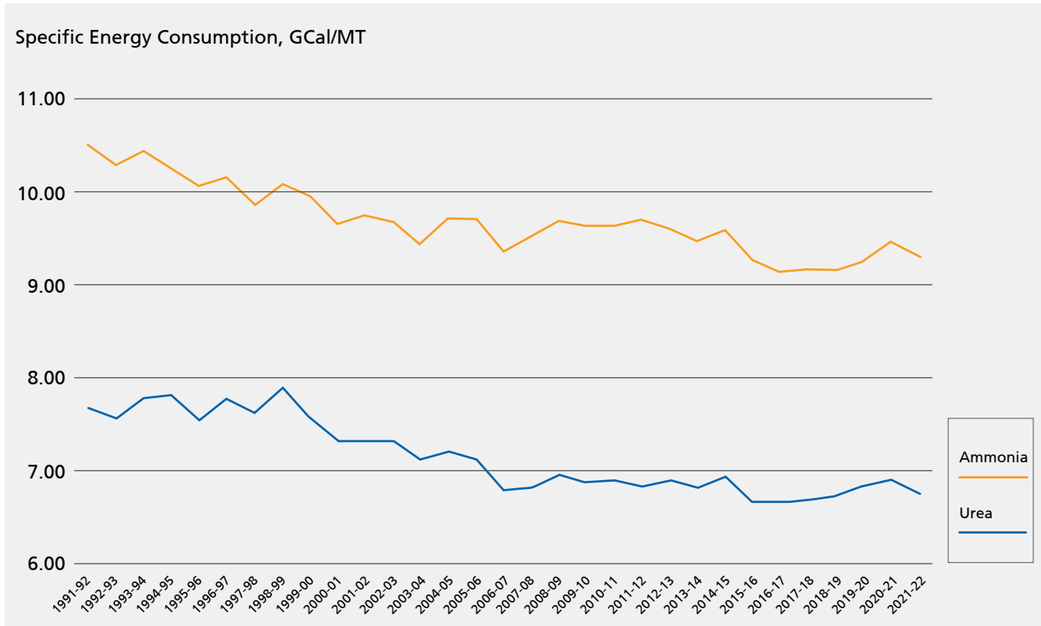


Paradeep Energy Break Up



Over the years, we have continuously reduced specific energy consumption for urea production. We are committed to making increased capital expenditure to reduce our energy intensity and GHG emissions.

Trend of Specific Energy Consumption for PPL Goa



We regularly conduct third-party energy audits and monitor the energy efficiency of our equipment and processes to identify key areas of improvement which are presented to the management at a periodic intervals. With the support of our cross-functional teams, we are optimising our operations and maximising energy efficiency. With collaborative efforts, we have been able to implement energy-saving measures of 2,899,461 GJ in FY 2021-22.

Measures we have taken to reduce our energy consumption include:

- ~85% of conventional lights have been replaced with LED
- Installation of energy efficient motors
- Optimization of steam recovery
- Reducing Effluent treatment plant (ETP) power consumption by reducing effluent load

Energy Conservation measures at PPL in FY 2021-22

Category (2021-22)	Energy Saved (GJ)
Insulation and refractory revamp of primary reformer in Ammonia Plant and other areas	25903
Steam Trap Replacement	16810
Cooling Tower make-up water optimization	114264
Waste Heat Recovery (SAP)	818338
Molten Sulphur (Steam saving)	24
Total	975339

Initiatives for Renewable Energy

Furthering our commitment to environmental stewardship, we make focused efforts to increase our investment and reliance on non-renewable sources of energy. A 255 kWh solar module has been installed within the Paradeep PPL township, resulting in a reduction of power import from captive power generation unit & grid. In FY 2021-22, our power consumption from solar sources was 2,76,506 kWh.

Water Stewardship

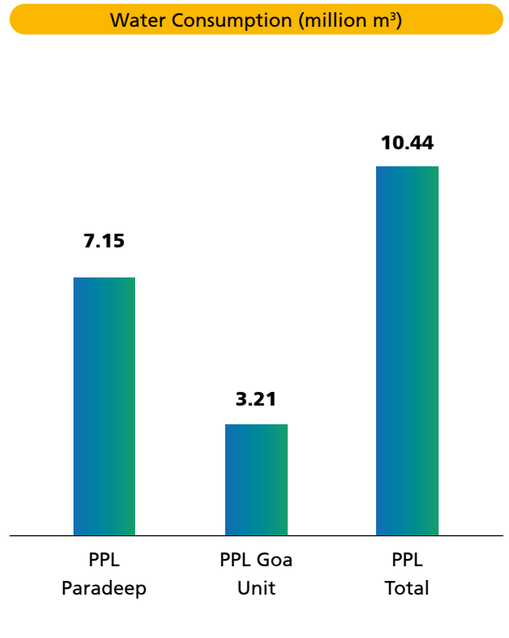
Water conservation is a critical priority for us. Our operations are situated in areas of medium and high water stress and we are committed to maximising reuse and recycling of water within our operations. Advancing our agenda to reduce our water footprint, we ensure that none of our plants source groundwater for industrial or domestic purposes.

Water at our Paradeep facility is sourced from the Taladanda canal, as agreed with the Odisha Water Resource Department. Moreover, the design of our production processes ensures that wastewater does not travel beyond the boundary of our plant location. Treated water is reused in additional processes such as ETP treated water and CT blowdown is utilised in the Ball mill of PAP. A critical initiative for optimised water conservation has been the installation of Heat Recovery System at the Sulphuric acid plant. Resultantly, our water consumption has reduced by 45%.

At our Goa facility, sourcing of raw water is undertaken from the Water Resource Department Goa. The predominant use of water is in steam and power generation and cooling tower makeup. At the time of inception, the designed raw water consumption of the entire complex was 22,000 KLD. With focused efforts and investments, the raw water consumption of this facility has reduced by over 50%, from 22,000 KLD to 10,000 KLD. Significantly, the plant production level increased by 90 % during the same period.

We strictly adhere to the Charter for Corporate Responsibility for Environmental Protection (CREP) Guidelines by MoEF&CC. Our specific water consumption for urea is 7.27 m3/tonne urea, % less than the CREP limit of 8.12 m3/tonne urea for gas-based urea plants.

Our annual water consumption is 10.44 million $m3$, 70% of which is consumed at Paradeep.



Both our facilities are equipped with Effluent Treatment Plants (ETP) and Sewage Treatment Plants (STP). Furthermore, during the non-monsoon season, both sites are zero liquid discharge, achieved through a closed loop water cycle and multiple recycling channels. We also undertake rainwater harvesting at the captive lake of 235 MG capacity at our Goa facility.Installation of a Reverse Osmosis (RO) Plant at our Goa facility, to treat Cooling Tower Blow-down streams has further reduced freshwater consumption. The permeate is reused as cooling tower make up and the reject is used as process water at our NPK plants.

We maintain stringent adherence with all national regulations and laws related to effluent discharge. For FY 2021-22, we have Nil instances of non-compliance.

Installation of efficient drift eliminators

We have replaced cross wood type drift eliminator and installed PVC honeycomb structure type drift eliminator. Honeycomb drift eliminator are more efficient and resistant to erosion, have reduced water losses by 1000 m³/day.

Air Emissions

Pollution control measures have been strongly embedded within our processes. We are committed to taking necessary actions for reductions in emissions and waste generation in manufacturing process & associated activities. As a minimum requirement, we maintain strict compliance with the stipulations of the Central & State Pollution Control Boards. Across our operations, stack emissions of PM, SO2, NOx, HF and NH3 remain l below prescribed limits . In FY 2021–22, capital of ~INR 3000 million has been made to enhance our mandate of emissions reduction.

Dual Mole Scrubbing

Through continuous in-house improvement efforts, our Goa unit's NPK Plants have been revamped and updated to achieve an increased throughput and reducing emissions. The scrubbing system has been upgraded with Dual Mole Scrubbing Technology of M/s Jacobs (in NPK-B plant for DAP Grade production). This has enabled a significant reduction in NH3 emissions as detailed in the table below.

Particulars	Ammonia Emission Norm/Standard, mg/Nm³
Existing Plant – Indian Standard	300
New Plant – Indian Standard	150
Existing/New Plant – IFC Standard	50
Design/Actually Achieved in PPL, Goa NPK-B Plant	35/18

This system improvement ensures that Ammonia Emissions, PM and HF Emissions remain within acceptable limits. All four Granulation units at our Paradeep facility have also been equipped with this updated technology.

Controlling Fugitive emissions

With the objective of reducing and mitigating fugitive emissions from our operations. We have installed Sulphuric acid mist eliminators in Sulphur acid plants. We have also provided fume scrubbers in our phosphoric acid plant to reduce fluoride emissions. Additionally, we conduct regular operation and maintenance activities for our ducts and vents to detect possible leakages to control fugitive SO2 emissions.

Monitoring of air emissions

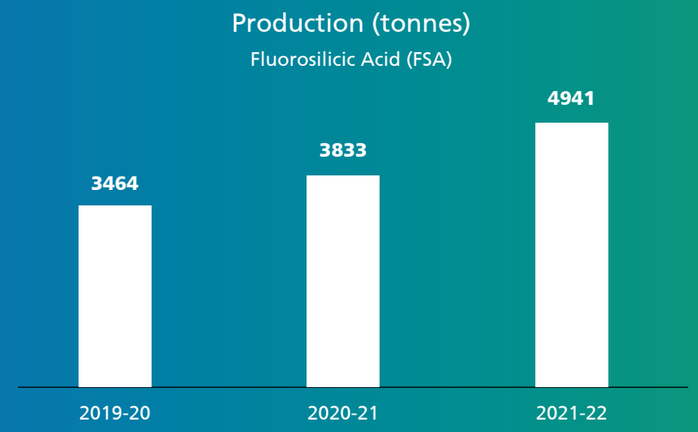
In addition to effective strategies for reduction and mitigation of our air emissions, we recognise the importance of robust monitoring to track our progress. Continuous Monitoring Systems (CEMS) enables constant and real time oversight on our emissions and effluents footprint.

At Paradeep, CEMS are installed at the Di-ammonium Phosphate Plant, Sulphuric Acid Plant and Phosphoric acid plant. At Goa, we have installed CEMS at Ammonia plant , DG stack for monitoring Particulate Matter and Fumes stack of NPK-A Plant & NPK-B stack. The data from stacks has been linked to the state and central pollution control board.

In addition to the above, both our facilities are equipped with four Continuous Ambient Air Monitoring stations the pollutants are well below permissible limits at all times. Data collected is further displayed on an through an electronic digital display board at the gate of our premises.

Fluorine Recovery Unit

Fluorine is the by-product in phosphoric acid production. There are stringent norms for fluorine emissions. PPL installed the Fluorine recovery system (FRU). FRU converts HF gases to harmless by-product FSA (fluorosilicic acid) which is sold to the aluminium industry to utilise it in the manufacture of Aluminium Fluoride (AlF3). Thus, HF emissions are drastically reduced from the phosphoric acid production process while creating additional revenue streams. The capacity of the fluorine recovery unit is 20-22 TPD with 90-92% fluorine recovery.



Waste Management

Along with optimal usage of raw materials, we recognise the necessity of effective waste management processes. Our approach to waste management is guided by the 3R principle of 'Reduce, Reuse and Recycle. Across our operations, efforts are made to maximise the reuse of waste. Waste that cannot be reused is disposed of in line with regulatory requirements and statutory guidelines.

Hazardous waste

Hazardous waste generated at our sites include used/ spent oil, sulphur muck, tank sludge and cleaning residues, spent catalyst, ETP sludge, waste oil and empty barrels.e. All hazardous waste is disposed of through CPCB registered and SPCB authorised recyclers. Drain sludge, ETP sludge and Sulphur muck is utilised as filler material at our Phosphatic Fertiliser Plant and NPK Plant.

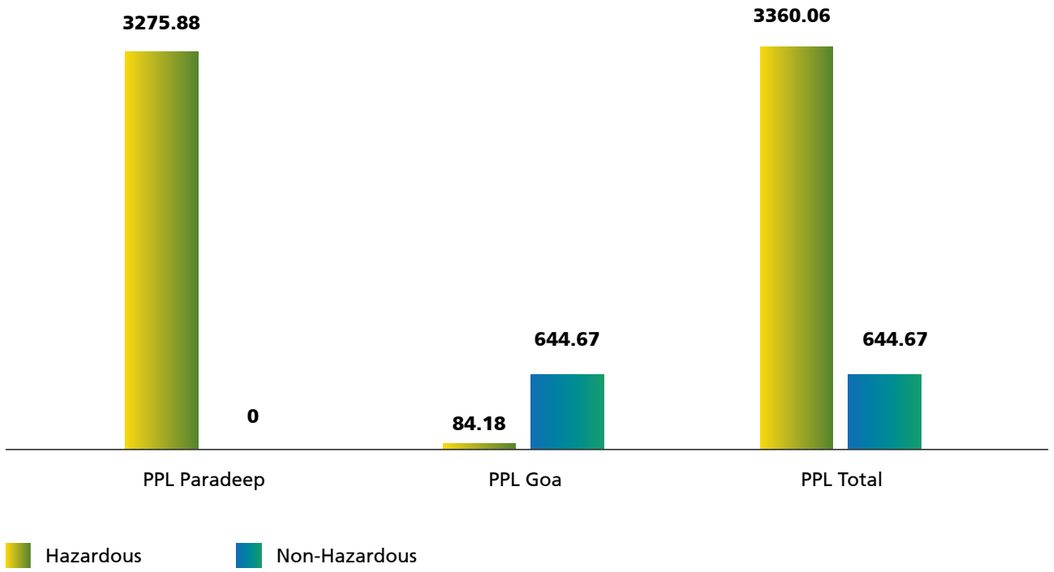
Non-hazardous waste

All non-hazardous waste generated at our operations is either recycled or reused. This includes DM plant resin, sand from filters, activated carbon from filters, STP sludge, and food waste from canteen. We have installed an organic waste converter at Goa facility with a capacity of 200kg/day to convert biodegradable waste into organic compost. Further, STP Sludge generated is used as a biofertilizer for the maintenance of green belts

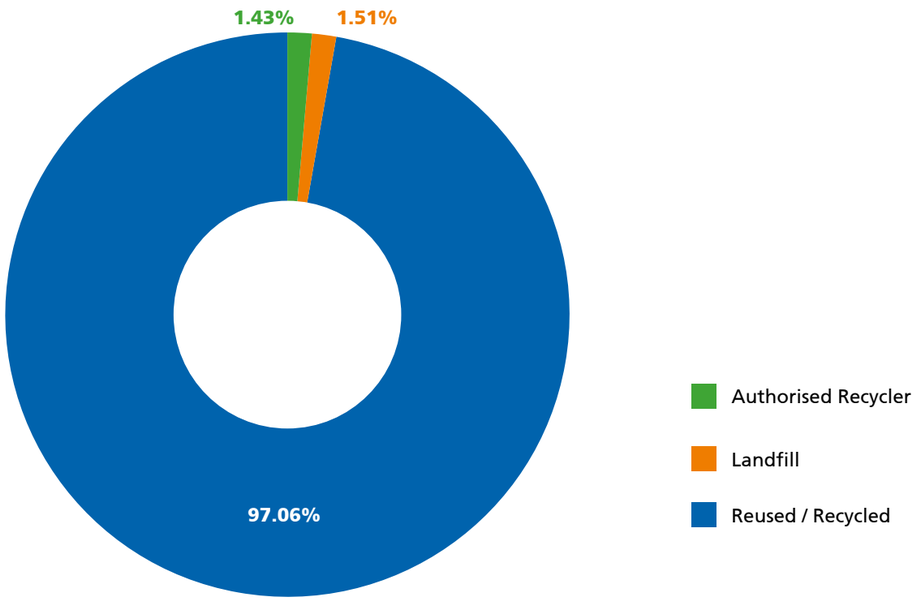
Other wastes

All other waste including e-waste, plastic waste and bio medical waste is disposed as per regulatory requirements.

PPL Waste Generation (MT)

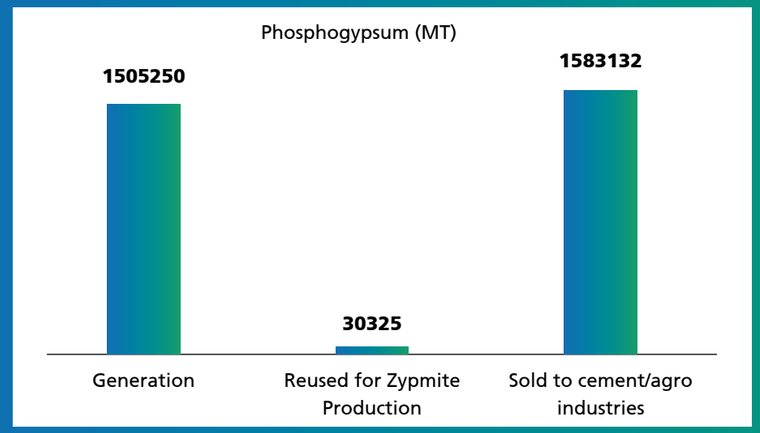


PPL Waste Disposal



New sustainable business opportunities from waste Gypsum

Phosphogypsum is one of the most significant wastes generated as a by-product of phosphoric acid production. Our operations produce over 5000 MT/day of gypsum and are stored in stacks at our sites. In order to address the challenge of legacy stocks, we use gypsum in the making of roads and cement production. As a result, our rate of evacuation has far exceeded our rate of generation.



* After research and trials on scientific and environmentally friendly disposal mechanism for phosphogypsum, we are reusing old stored phosphogypsum that is why disposal quantity is higher than generation.

Zypmite

Our R&D efforts have also focused on utilising phosphogypsum in innovative ways. We developed a product 'Zypmite', a combination of Phosphogypsum and micronutrient supplement supplying Ca, Mg. This product addresses micronutrient deficiencies in the soil within our marketing area.

Over 600 trials on various soils, crops, and climatic conditions in the marketing area of PPL, including studies conducted through Orissa University of Agriculture and Technology (OUAT) have been undertaken to gauge the efficacy of the product..

After succesful trials, we installed & commissioned a 10 TPH Zypmite plant for granulation of the physical mixture of phosphogypsum (~75%) and micronutrient supplement. Thereafter the product is packed in 25kg / 50kg bags.

Scientific disposal of hazardous material

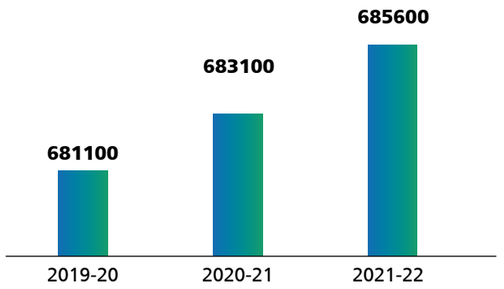
We have made focused efforts to comply with all relevant recommendations of the Charter on Corporate Responsibility for Environmental Protection(CREP) for Fertiliser Industries. This includes the phasing out of the use of Arsenic in the CO2 absorption system at the Ammonia plant. In 2014, we carried out a “solution swap” wherein Arsenic based solution was replaced with non-arsenic dual activator based GV solution. Inventory disposals have been undertaken in 2004 and 2017. The process technology for solidification, stabilization and entombment and was developed by NEERI, Nagpur for which they hold a patent. Additionally, chromium bearing waste was also disposed along with this solution in a scientific manner.

Biodiversity

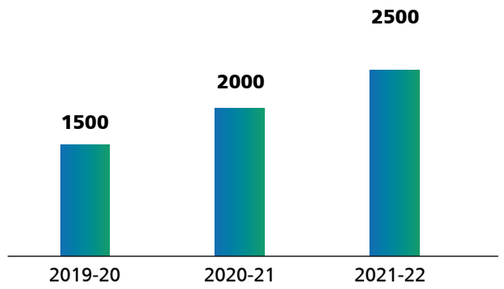
We are cognizant of our duty to protect the environment in and around our areas of operation. Our efforts are focused on ensuring minimal impact on the rich biodiversity of our locations. The biodiversity of our locations include several species of trees including Neem, Ashoka, Jamun, Baula, Berry, Guava, Banyan, Tamarind, Habali, Karanja, Amla, Jackfruit, Kendu, Mango, Polanga, Palasa and Patoli trees.

Dedicated and experienced teams have been appointed to undertake periodic biodiversity assessments of our locations.These assessments are focused on identifying the impacts of our operations on our surrounding biodiversity and provide for timely mitigation of any identified risks. Further, our CSR efforts also place a strong focus on enhanced protection of biodiversity beyond our premises. Over the years, we have undertaken multiple initiatives for the development of green belts in and around our manufacturing facilities. We have a strong focus on plantation activities that suit the climatic conditions of our area of operation. We also offer support to local communities by providing free saplings to neighbouring areas during the annual tree plantation drive (Van Mahaotsav) at our facility in Goa. We have planted over 6.85 Lakhs trees in and around our operations till date.

Cumulative Plantation



Annual Tree Plantation (Paradeep)



In addition to plantation activities, we undertake regular clean up of ponds and water bodies across our locations. The Department of Forest, Government of Odisha, conducts regular Bird Census of the migratory birds in and around our operations. These ponds and water bodies are also utilised for natural rainwater harvesting.

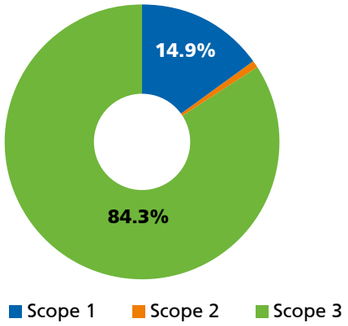
Climate Change

Fertilisers play a vital role in providing required nutrients to the soil and fostering food security, however the resulting emissions and impact on climate change can be adverse. As a leading player in the fertiliser sector, we recognise our responsibility to address the impact our manufacturing processes have on the climate. We make focused efforts to reduce direct and indirect GHG emissions emitted across our value chain.

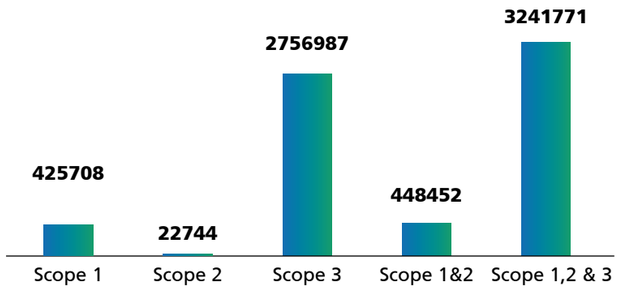
In order to map our GHG footprint, we undertook an extensive GHG inventorisation in FY 2021-22. The scope of this exercise included Scope 1 and Scope 2 emissions along with Scope 3 emissions to a limited extent. Insights generated from the inventorisation have enabled the setting of a GHG baseline to be used to adopt a reduction target subsequently.

Of our total emissions, 84% are emitted from our value chain (Scope 3). Scope 1 and Scope 2 emissions comprise 14.9% and 0.8% of our GHG footprint respectively.

PPL Total



PPL Total (tCO2e)



For GHG inventory, we have followed the principles for corporate GHG inventory reporting, as defined by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD) in the GHG Protocol Corporate Accounting and Reporting Standard (2004).

Scope 1 emissions

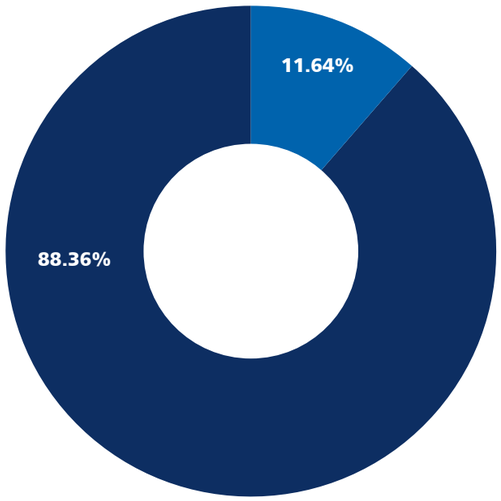
Our scope 1 emissions include stationary fuel combustion, emission from mobile combustion and fugitive emissions (associated with the release of other refrigerants into the atmosphere due to leaks from equipment).

To reduce our emissions, we focus on using the latest technologies, switching to cleaner sources of fuels, and accelerating the transition to renewable energy. At our Goa facility, we adhere to the stringent energy targets as prescribed by GoI's PAT scheme. Of our total Scope 1 Emissions (0.42 million tonnes) for FY 2021-22, our Goa facility contributes 88.36%. At Paradeep, more than 80% of the energy needs are met through heat recovery systems. This is equivalent to replacing 142 MT of coal on a daily basis and eliminating 218,201 tCO2e annually.

Scope 2 emission

Our Scope 2 Emissions are generated from the purchase of electricity and the heating, cooling and steam processes. For both Goa and Paradeep, we source our electricity from the grid. For FY 2021-22, Our total Scope 2 emissions were 22,744 tCO2e. At Paradeep, 2,76,506 KWh of electricity is consumed from our captive solar plants, enabling an offset of 196 tCO2e emissions.

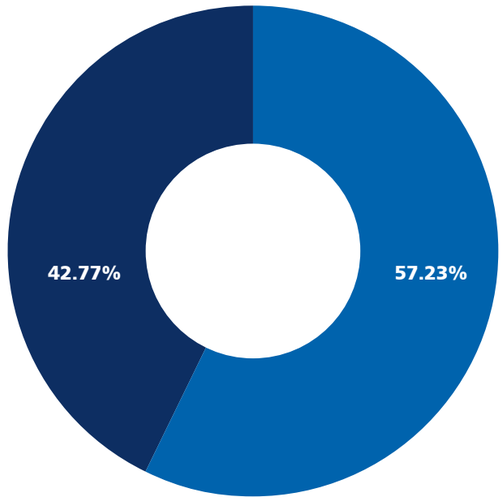
Scope 1 (tCO2eq)



Paradeep 49527.65

Goa 376138.24

Scope 2 (tCO2eq)



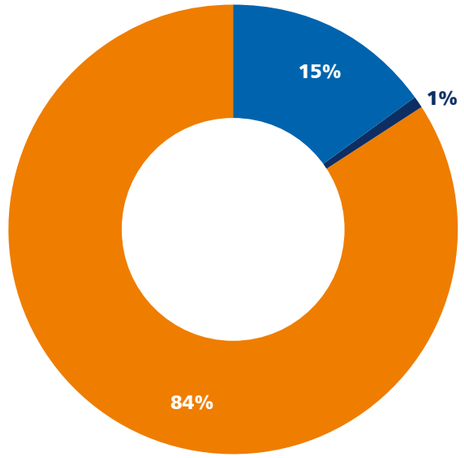
Paradeep 13016.21

Goa 9728.04

Scope 3 emission

Of our overall GHG footprint, Scope 3 Emissions contribute 84% which include emissions from purchased goods and services, fuel and energy(that are beyond scope 1 and 2), upstream and downstream transportation and distribution, business travel, processing of sold products and franchises.

GHG Emission ((tCO2eq)

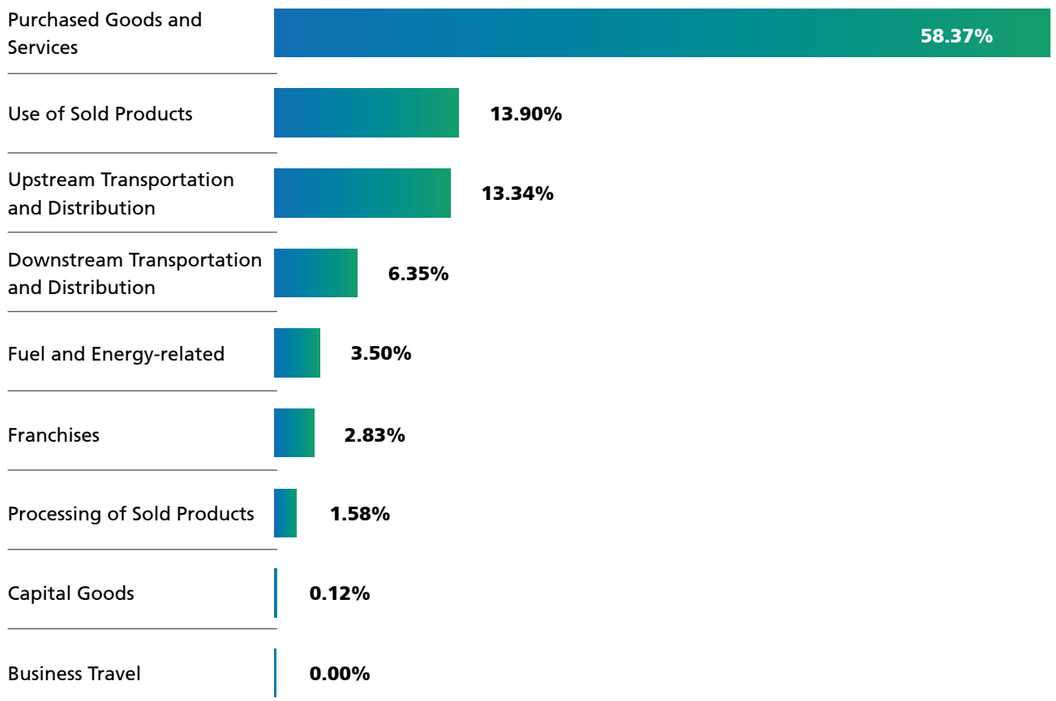


Scope 1 425709

Scope 2 22744

Scope 3 2404286

% GHG Emission (tCO2eq) by Category



Human Capital

Management of our Human Capital is governed by our commitment to nurture and empower our people and provide them with a holistic experience. Our employees are central to our success and to provide support and care for them is part of our DNA. Our systems, policies and processes are aligned with industry benchmarks and enable the creation of a safe and inclusive environment, conducive to development and growth. This approach ensures that we are able to attract and retain the right talent while also delivering on our commitment to long-term value creation for all our stakeholders.

Highlights of FY 2021-22

2,480

strong workforce of employees and workers

25

average training hours for employees

100%

of employees receive career development review

Value-based culture

Embedded in our value system, we prioritise creation of the right culture, governed by principles of ethics, integrity, transparency and accountability. Our detailed and well-articulated Code of Conduct (CoC) and ethics policy fosters trust among our employees and promotes responsible and ethical business conduct

Our Code of Conduct enshrines our commitment to equal opportunity, protecting human dignity and fostering an ethos of accountability and transparency. It provides clear guidance on maintaining the highest ethical standards and promotes accountability for all our stakeholders. We also have detailed processes and policies to identify and report breaches and instances of non-compliance. All employees are trained on Code of Conduct and are encouraged to imbibe cross-cultural sensitivity and develop an inclusive mindset.

Workforce overview

We are committed to providing our employees with an exceptional experience and fostering a work environment wherein they are able to thrive and achieve success. As on 31st March 2022, our workforce comprises 2480 permanent employees; 990 employees at PPL Goa and 1490 employees at PPL Paradeep. Over 80% of our workforce is above the age of 30 years, evidencing the fact that building long term relationships is a critical priority for us.

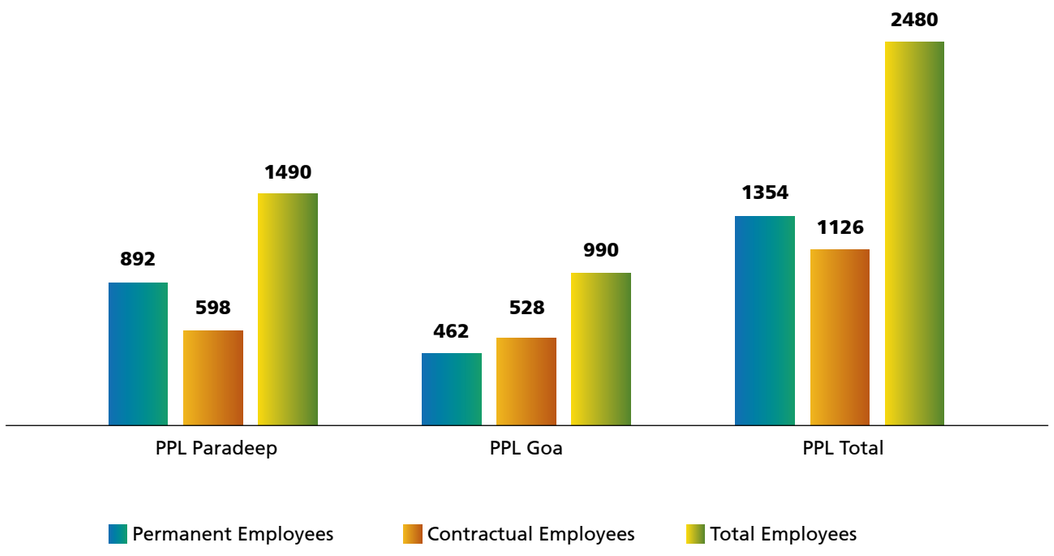
Hiring and Retention

Our hiring and recruitment strategies are intricately linked to our organisational mission. In order to create value and trust among our stakeholders, we are committed to attracting the right talent for the right role. We have formalised a detailed Recruitment Policy that provides clear guidelines of the process to be followed, ensuring that strict alignment is maintained between organisational requirements and characteristics of the talent pool. Aligned to our policy, our channels of hiring are varied in nature, including career platforms, social media, employee referrals, and campus hiring. In FY 2021-22, our total number of new hires was 50 permanent employees

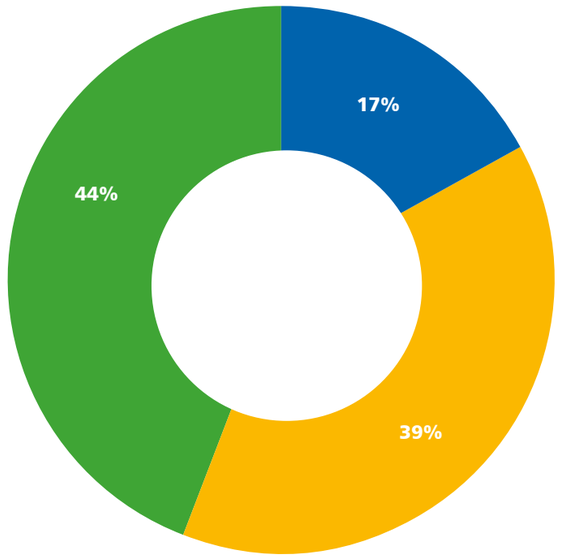
In addition to attracting the best talent, we recognise the importance of creating an enabling environment to retain our human capital. We focus on providing our people with ample opportunities for career growth and enhancement. In order to encourage their best performance ,we provide industry benchmarked rewards offerings, comprising performance-linked incentives, various tax saving allowances, health insurance and access to funding for professional development and upskilling opportunities.,

Moreover, to foster ownership, we offer Employee Stock Ownership Plans (ESOP).This enables the creation of an environment of collaboration where our employees are partners in our journey of business excellence. This is further reflected by our attrition rate of 4.88% for FY 2021-22, one of the lowest in the sector.

PPL Employees Break Up



PPL Age Diversity



Diversity and equal opportunity

We are strongly committed to creating the right culture for our people. This includes providing for a diverse and inclusive workforce and environment wherein our people can seek necessary support to flourish. Moreover, leveraging the potential of our diverse workforce ensures that we remain competitively advantageous, secure economic growth and carry out our duties as a responsible corporate citizen. Our aim is to provide an environment wherein our people can inspire each other to achieve their potential, characterised by transparency, ethics and accountability.

We have further institutionalised this commitment through our Board Diversity Policy that ensures robust and diverse representation within our leadership. It enables fostering of a culture that thrives through diversity and provides for an inclusive space for all. This is also reflected in our approach to hiring and recruitment wherein we focus on the right talent for the right role, irrespective of their gender, religion, and region.

Human capital development

We strive to foster a life-long learning approach for the organisation and our human capital. The aim is to facilitate high-performing teams, facilitate agile and adaptive ways of working, upskill and reskill current employees as per requirements, and engage and prepare all employees for disruptive transformations.

Our people are embedded within our learning process throughout the lifecycle of their employment. On induction, all employees undergo mandatory training on our Code of Conduct, Values and other policies. Additionally, we offer comprehensive technical and behavioural training opportunities to all our employees to enable holistic development and career growth. Furthermore, refresher sessions are conducted on company policies in relation to themes such as anti-money laundering, prevention of sexual harassment, cyber security, and others matters.

Technical training is provided during induction and continues at regular intervals through the year based on individual needs and business requirements. The curriculum is delivered either through partnerships with specialist training providers or by internal teams.

Behavioural training helps employees develop and enhance leadership and interpersonal skills. It includes training on soft skills, values alignment, giving and receiving feedback, and leadership development, amongst others. raining on relevant aspects to equip our employees with the knowledge and know-how to grow and excel in their roles is also provided. At PPL Goa, we offer leadership training sessions to foster managerial skills in all our employees. Our aim is to ensure that our employees have the necessary capacity and skills to ensure their own and support others development and growth. We also conduct annual sessions to foster team building and personal excellence.

We also offer **Self-learning opportunities** to enable employees to further enhance their personal and professional skills. For employees keen to pursue higher education we offer a grant of up to INR 12,000 for graduation/ diploma in engineering or equivalent and INR 30,000 for graduate professionals such as engineering/AMIE/PG/PG diploma. In FY 2021-22, 36 employees were also nominated for leadership programs by Harvard.

Performance Management

Encouraging excellent performance and ensuring our employees are able to achieve their highest potential is critical to our organisational success. Strong focus is provided to individual development and growth. We have adopted a scorecard system that provides for a robust framework for performance management . Every year, the organisational leadership finalises the Balanced Scorecard (BSC) for the year and the same is cascaded down to the rest of the impact levels. Our performance cycle is from April to March, and we employ a 5-scale rating system to measure employee performance. 100% of our employees are part of the career development reviews.

Labour management

Our employees play an instrumental role in making us a value-driven organisation. When employees feel supported, they thrive, both personally and professionally. We are committed to promoting a culture that protects and nurtures every facet of our people's health and wellbeing.

The approach to health and wellbeing extends beyond statutory obligations to include a broad range of industry benchmarked benefits such as maternity leave, parenthood leave, work-free days, flexible work arrangements, comprehensive insurance coverage and others. Details of benefits provided to permanent and contractual employees is covered in the ESG Scorecard.

Safety at the workplace

We are strongly committed to the health and safety of our employees as a core value. We have institutionalised this commitment through the provision of a robust Health and Safety policy. All our facilities are designed in accordance with the highest safety standards and state-of-the-art safety controls. Both our sites are ISO 45001:2018 certified.. We implement proactive and preventive measures to manage safety risks and spread awareness on the importance of healthy lifestyles. Various measures such as emergency preparedness action plans, fire safety measures, emergency training, routine electrical safety audits amongst other targeted interventions have also been formalised

We have provided for a well-equipped health care centre in the premises of the Paradeep plant and an accessible Occupational Health Centre at the Goa plant. Additionally, workers in hazardous process areas undergo separate special health checks, and chronic disease follow-ups. To increase awareness and adoption of industrial best practices, we conduct Industrial Hygiene & Ergonomic Surveys in collaboration with external agencies.

During the COVID-19 pandemic , we adhered to all national regulations and took special care of our employees. We have vaccinated 100% of our employees, contractual employees, and dependents. We also vaccinated all the eligible workforce for the booster dose.

Safety Committee

To foster an environment of collaboration and representation, ee have formed safety committees at both our units. These committees have the mandate of promoting health and safety in the workplace and ensure oversight onthe workplace injuries on a regular basis.

At Paradeep plant, there are two safety committees which are known as central safety committee and zonal safety committee. The responsibility of the zonal safety committee is to monitor hazards and implement preventive measures on field while the central safety committee is to promote health and safety activities and formulate strategies to achieve health and safety performance. Committee members and invited guests speak during monthly safety committee meetings, take part in safety audits and report unsafe conditions found across the factory, and attend daily safety message briefings at the gate. We also encourage worker participation in Workers also take part in incident investigation process, job safety analyses and hazard identification & risk analysis and Root Cause Analyses (RCA).

At the Goa plant, there are 4 safety committees: Safe Operations Committee, Works Safety Committee, Central Safety Committee and Contractor Safety Committee. All committees carry out dedicated responsibilities to manage health and safety issues and to create a better workplace. These committees are constituted at the shop floor level.

Central Safety Committee
- 40 Members (Unit Head Level)

↓

Zonal Safety Committee
- 149 Members (Sectional Head Level)

Safe Operations Committee
(12 Members - GM's)

↓

Zonal Safety Committee
(18 Members - CM's)

↓

Central Safety Committee
(14 Members - Management and Non-Management Workers)

↓

Contractor Safety Committee
(14 Members)

Health and Safety Trainings

To further embed our commitment to Health and Safety, we undertake regular training sessions to foster ownership over promoting wellbeing and safety in all operations. , Additionally, all new joining employees and workers undergo a mandatory safety induction process. We have undertaken several trainings that include:

- Basic safety training depending on the nature of the work and safety training on working at heights, gas cutting/ welding safety, handling of chemicals, electrical safety, safety training for confined space entry, safety training on ammonia handling, firefighting training, safety work permit training, machine guarding.

- Annual safety training calendar is prepared to conduct the training periodically. These trainings are conducted both off-site i.e., classroom training and on-site.

Hazard Identification and Risk Management

We undertake periodic risk evaluation of our processes to identify and mitigate hazards, including Activity-Based Risk Assessment (ABRA), Hazard and Operability study (HAZOP) and Exposure Risk Assessment (ERA), Job Safety Analysis (JSA) which cover risk assessment both pre- and post- implementation. The assessment process involves members from several levels, including members of the health and safety committee and representatives from the concerned departments.We have also developed SOP's (Standard Operating Procedures) and OCP's (Operational Control Procedures) for all the possible activities and tasks.

Regular audits are conducted by external safety experts, internal safety audits and through the statutory authorities like factories inspector, central inspection coordination group (CICG) to minimise health and safety risks and improve performance. We have also implemented a **Mobile Safety App** at the Paradeep facility to report unsafe acts and unsafe conditions. Additionally, a well-maintained workplace model AAINAA (Advance Action in Industries to Abate Accidents) ensures creation of a safe working environment. We also undertake root cause analyses to develop corrective and preventive action plans for strong mitigation and prevention of safety incidents.

Awards, Certifications and Achievements:

1. 20th Annual Greentech Effective Safety Culture Award for developing effective safety culture.
2. Received Premium membership Certificate from British Safety Council- UK.
3. Adopted 07 numbers of nearby ammonia handling plants as "Safety Buddies"

Chemical Safety

Safety at Laboratory:

We are committed to maintain the highest standards of safety at our laboratories, as enshrined by our Health and Safety policy. We have developed detailed Standard Operating Procedures (SOPs) and a safety manual to provide for clear instructions on safe behaviour and our employees are mandated to abide by the same. Periodic meetings, training and discussions are undertaken to enable employees to proactively identify hazardous conditions and unsafe practices. We also conduct regular internal and third party audits to ensure laboratory and chemical safety. The feedback and conclusion of the same is shared with management to further improve our safety protocols.

Chemical Safety in Value Chain

We are committed to safety in our value chain partners. While engaging with transporter, we found that they were not aware about safety protocols for chemical spill clean-up. To address this, we engaged with CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur and prepared Standard Operating Procedures (SOP's) for spill clean-up and decontamination of soil arising out of accidental spillages of chemical.

Safety for material storage and handlings

To ensure safety in storage, handling and transportation of chemicals,we provide necessary safeguards measures and Personal Protective Equipment for all involved personnel. We have well-defined SOPs to adopt safe practices while handling glassware, containers and cylinders and all types of hazardous chemicals.

Our safety manual has been prepared in alignment with best practices. The table below presents a summary of some of the key aspects covered in our chemical storage, transportation and handling guidelines:

S.No.	Parameter	Safety Guidelines
1	Storage and handling of Chemicals	We have divided chemicals into categories: Explosive, Toxic, Corrosive, flammables and water sensitive and prepared MSDS and SOPs which sets the requirements to be adhered with, including PPEs, fire and electrical safety requirement.
2	Incompatiblity of Chemicals	There are some chemicals which remain harmless if stored in isolation but upon coming into direct contact with other chemical, or sensitive towards shock, adverse thermal and pressure conditions can pose severe fire and explosion hazards Employees are trained on chemical storage incompatibility and we have also developed mappings to minimize human errors.
3	Flammable solvents and Gas Cylinder	Our SoPs on flammable material contains detailed guidelines on the properties of flammable materials and guidelines for safe storage and use.
4	Handling of Glassware	We have SOPs for handling, storage, cleaning of glassware. It also covers handling of broken glassware and pressurised glasswares.
5	Miscellaneous Hazard	SoPs on miscellaneous hazard covers guidelines on non-chemical burns and electrical hazards.

Chemical Disaster Prevention day at PPL

PPL, Goa Unit observed "Chemical Disaster Prevention Day" on 4th December 2022 as a homage to the victims of the Bhopal Gas Tragedy. Training sessions on 'Industrial Chemical Disaster Prevention' , on-site training sessions on "Onsite Emergency Manage-ment Plan" were conducted for employees. The objective was to emphasise the importance of chemical safety.

Employee Engagement

We have adopted a strong people centric approach to ensure that our employees are given a conducive atmosphere to thrive and grow in. Focused efforts are undertaken to engage with our employees to foster a culture of collaboration and holistic development. We have instituted several touchpoints to enhance employee experience by providing opportunities to participate in team building through weekly team reviews, annual/quarterly goal setting, and monthly town halls.

Capturing the pulse of our workforce

We provide multiple channels for formal and informal feedback to gauge levels of employee satisfaction and engagement. An annual employee satisfaction survey is implemented to capture employee perceptions and attitudes and identify any area of improvement in a timely manner. s. In 2020, we conducted an extensive Dipstick Survey via a third-party consultant for all our employees. According to the survey 81% of employees agreed that our work positively impacts people's lives and 61% of employees reported I mutual trust between employees and the senior management. Our robust grievance redressal mechanism helps our employees to highlight critical matters and concerns, which are addressed within stipulated timelines.

Beyond the desk

PPL Town Halls: Management led townhalls are conducted to encourage open channels of communication and provide opportunities to address employee questions and concerns. Such engagement fosters transparency and creates a culture of accountability and trust.

PPL clubs: We have formed four clubs at our Paradeep Plant - Paradeep Phosphates Employees Recreation Club (PPERC), Management Recreation Club (PPOC), PPL Ladies Club and Mandir Committee. As a part of these clubs, we organise indoor games, Billiards, table tennis, swimming pool, conduct movie screenings and other indoor recreation facilities. Our employees are invited to become members of these clubs to partake in regular team building and engagement activities which forms an avenue of bonding between employees. At our Goa plant, we have formed Jai Kisaan club, Management club and Jai Kisaan Ladies club.

PPL organises and celebrates safety **campaigns & competitions** like **Road Safety Week, National Safety Week, Fire Safety Week**, **National Electrical Safety Week**, Safety theme of the month, Safety Gathering & Oath taking every month for creating awareness amongst employees on health and safety.

We also undertake celebrations of all festivals to provide for a work environment that celebrates diversity and promotes unity

Social and Relationship Capital

Our business is centred around our stakeholders and delivering and driving long-term shared value for all. Maintaining and upholding a symbiotic relationship with our stakeholders is critical to our operational success. Embedded within our value system as a company, our interactions with all our stakeholders are governed by ethics and transparency. As a responsible corporate citizen, we are strongly cognizant of our duty to protect and empower our people, society at large and the environment. Through focused engagement with our critical stakeholders, we are committed to following through on our responsibilities and duties as a responsible employer, business and social entity. Such engagement ensures timely identification of stakeholder concerns and priorities and adaption of business strategy to address the same. We are committed to maintaining open channels of communication and ensuring transparency and accountability in all stakeholder relations.

Community relations

Fostering and maintaining positive relationships with communities greatly strengthens our social licence to operation and brand value. A Corporate Social Responsibility (CSR) policy, developed in compliance with Section 135 of the Companies Act 2013 and CSR Rules 2014 and subsequent amendments, provides the overall framework to our approach to community relations and development. Thrust areas of our community development framework include Livelihoods, Education, Health (WaSH-Water, Sanitation and Hygiene), and Environment. Our overall CSR expenditure was INR 56.7 million, uniformly distributed in our key thrust areas. Our interventions are designed in line with the requirements of the communities we serve and we also support. We are proactive in responding to ad hoc requests from nearby communities and local authorities to support at critical situations and to address their immediate needs.

In partnership with Harsha Trust and Society for children and Sambhav Foundation we have touched the lives of over **10,000** households at Paradeep plant location and over **3,000 households** in Goa respectively.

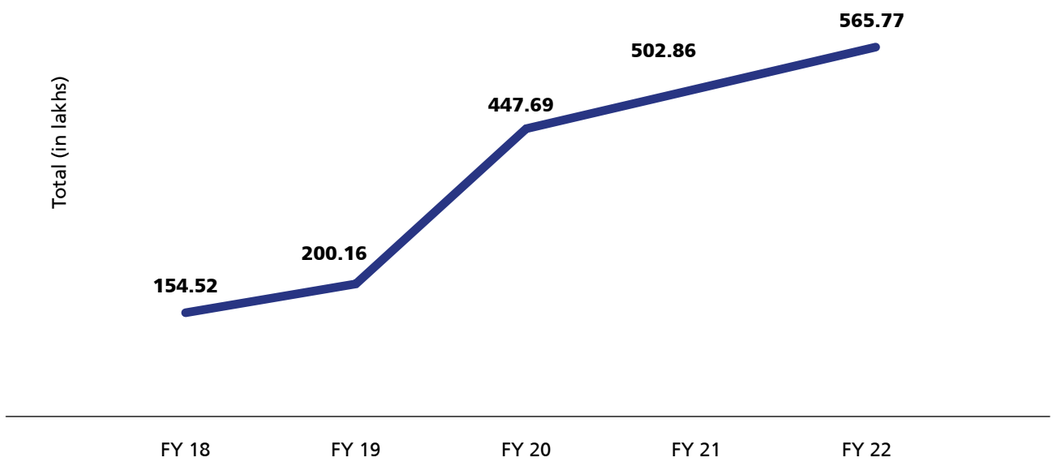
Highlights of FY 2021-22

INR 56.7 million
Total CSR invested

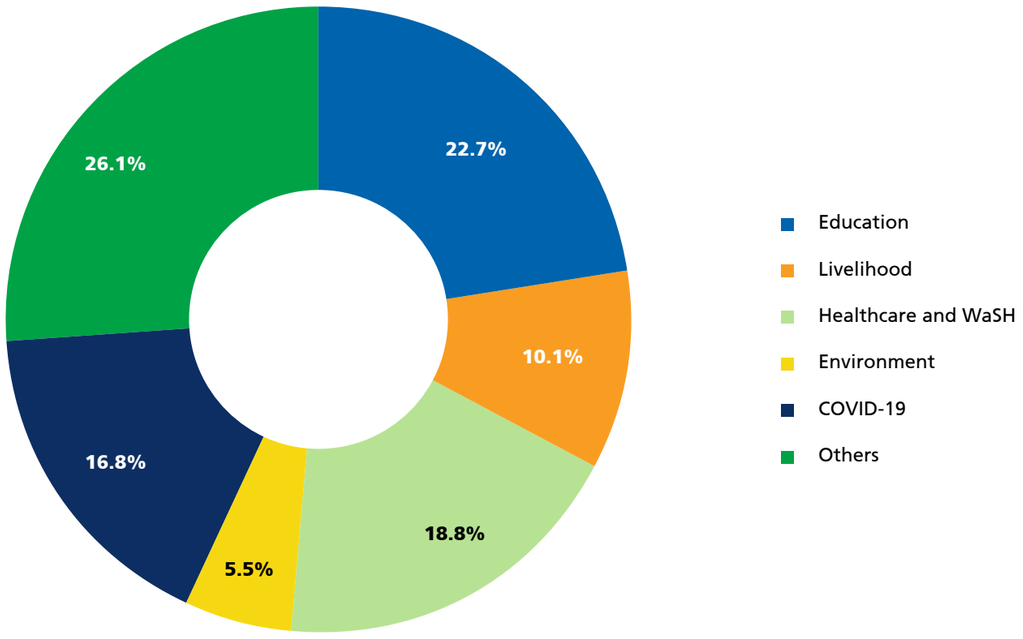
6,553
Total Suppliers

8+ million
Farmers outreach

CSR Expenditure



Thrust Wise Break up FY 21-22



Education

Education is a powerful tool to drive change in society. We invest in initiatives that deliver high-quality education and promote learning opportunities for all with a particular focus on underserved children in rural areas. Our focus is on undertaking initiatives that provide high-quality education and encourage learning opportunities for all.

We have partnered with the Odisha state government under the "**MO School**' initiative, for the transformation of three schools into smart schools in Jagatsinghpur district. We also have contributed to the development of three smart schools in our project villages through upgradation of **E-library, Smart classrooms, Toilets, and school infrastructures**. During the COVID-19 pandemic, we made special efforts to reduce the learning gap for the students, via our TARA initiative that conducted cognitive exchange programs, general knowledge, etc. We **impacted over 700 students** through these initiatives.

PPL has been, in addition to the statutory CSR expenses, sponsoring the DAV school located within the Paradeep Plant premise.

In FY 21-22, PPL subsidized the school with Rs. 4.03 crores. 80% students in the school are from neighbouring vicinity. PPL takes a lot of pride in contributing to the cause of education for the local community.

SDG Goal	SDG Target	CSR Alignment
Quality Education	**Target 4.1** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes **Target 4.2** By 2030, ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education **Target 4a** Build and upgrade education facilities that are child, disability, and gender sensitive and provide safe, non-violent, inclusive, and effective learning environments for all	**Target 4.1** Supported in bridging the learning gap through our initiatives such as: TARA english learning programme, Digital service, Remedial coaching, Computer training, etc. **Target 4.2** Installed safe 'Play Space' for the stimulation of the cognitive learning capacities of children, thereby leading to enhanced classroom engagement and learning. **Target 4a** Transformed schools to 'SMART Schools' through upgradation of E-library, Smart classrooms, Toilets, school infrastructure, etc

Livelihood

Through our livelihood enhancement initiative, we are providing direct input and **technical support to more than 300 farmers**, ensuring a sustainable livelihood for the farm families. Other activities include installation of solar-powered irrigation facilities, establishment of tool banks, creation of poly house nurseries, and establishment of vermi-compost pits that enable the farm groups to increase the productivity of their crops. We also have empowered women by **establishing women-led enterprise i.e., SHG**, that help increase household income and provide women with a platform of representation. This year we have supported the SHGs through hand-over of two community halls, to facilitate SHG training and other business activities, **impacting over 400 female members**.

SDG Goal	SDG Target	CSR Alignment
Decent work and economic growth	**Target 8.3** Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, innovation and encourage the formalisation and growth of micro, small and medium sized enterprises, including through access to financial services	**Target 8.3** Established and promoted livelihood generation activities, with special focus on women empowerment, via SHG formation, grant-support, exposure support and similar training activities and programmes
Gender equality	**Target 5.1** End all forms of discrimination against all women and girls everywhere	**Target 5.1** Addressed social issues via community lead engagement, led by women committee

Healthcare and WASH

In recognition of the right to healthcare as a fundamental human right, we undertake focused initiatives to enhance the access of underserved communities to quality and timely healthcare.

We have **organised 43 training sessions** and events addressing the need of water management and sanitation care. Through our initiative of community **RO installation**, we have benefited more than 3000 households, reducing the risk of water borne diseases. We have **established child friendly WASH compliant Anganwadi centres** with the technical support of UNICEF. We have renovated and developed **15 AWCs** in compliance with child friendly design models, being used as a model centre for the adolescent girls, pregnant & Lactating mothers by providing health & nutrition related programs.

SDG Goal	SDG Target	CSR Alignment
Good health and well-being	**Target 3.8** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all	**Target 3.8** Provided regular basic health facilities via the 'Mobile Health Van' initiative (led by a team of trained doctor and paramedic), covering 24 villages and 22,658 individuals till date
Water and sanitation	**Target 6.1:** By 2030, achieve universal and equitable access to safe and affordable drinking water for all **Target 6.6:** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes **Target 6b:** Support and strengthen the participation of local communities in improving water and sanitation management	**Target 6.1:** Installed high quality RO water set-up at various schools and public spaces, being managed and operated by community members **Target 6.6:** Carried out multiple water body cleaning drives, covering 10 villages, which are now being used for fisheries related interventions **Target 6b:** Initiated 'Youth4Water Campaign' in collaboration with UNICEF (Odisha), focussed on adopting 1000 ponds and maintaining them for water conservation and groundwater recharge

Environment

We strive to conserve and protect our natural environment through our initiatives. We have installed solar panels and LED streetlights at various villages. We also have restored community ponds and other water sources, with the involvement of the stakeholders and beneficiaries, which has led to the formation of a sustainable ecosystem.

SDG Goal	SDG Target	CSR Alignment
Affordable and clean energy	**Target 7.1:** By 2030, ensure universal access to affordable, reliable, and modern energy services	**Target 7.1:** Installed solar and LED streetlights at various villages with low or poor public infrastructure
Sustainable Cities and Communities	**Target 11.7:** By 2030, provide universal access to safe, inclusive, and accessible, green, and public spaces, for women and children, older persons, and persons with disabilities	**Target 11.7:** Developed 'Rural Park' with facilities like a sitting bench, landscaping, walking track, play equipment, open gym equipment, plantation across the boundary and lighting

COVID-19

To combat the ill-effect during the covid waves, we installed **200 LPM PSA** oxygen plants, distributed **1,00,000 N95 masks** and provided dry ration support to 1100 families in distress, provided thermal scanners, oximeters, PPE kits, sanitizer, etc.

Through our CSR engagement, we also focus on employee engagement and volunteering. Volunteering helps businesses build stronger relationships to the local population and communities, which benefits brand recognition. For the current financial year, we were able to successfully involve 60 employees for 4 days with an average time spent of 2 hours at our 'Joy of Giving Celebration'. We also mobilised a team of 50 employee volunteers for the plantation programme.

Self Defense program in slums of Paradeep Municipality

To further promote and foster gender equality, a Judo training program was initiated for adolescent girls from underserved communities in Paradeep. In partnership with Jagatsinghpur JUDO association this initiative was launched in FY 2020-21. The six-month self-defense program, started with enrollment of 22 girls from Balijhara and Bauriapalanda slums. Supporting more than 40 girls in the community.

Awards and Accolades

Our impacting CSR initiatives have demonstrated widespread acceptance at state and national level. In the last few years, we have received recognition in the areas of Corporate Excellence, Sustainability & Leadership. We have been acknowledged by the top industry bodies of the country such as Fertiliser Association of India (**FAI**), Indian Chambers of Commerce (**ICC**), Confederation of Indian Industries (**CII**), Utkal Chamber of Commerce & Industry (**UCCI**), Government Ministries and Departments, prestigious non-government bodies, and leading print/electronic media groups. We have received the best brand award 2021 in Corporate Excellence category.

Fostering long-term relationships with suppliers

We strongly recognize the importance of maintaining a sustainable value chain, thereby enhancing our role as a sustainable business. Ensuring transparency and accountability across our supply chain is critical for smooth operations and to prevent disruptions to business continuity. Our supply chain consists of 6553 suppliers handling new product sourcing, commercial procurement, delivery of raw materials, packing materials, engineering materials, etc. These include 2385 local suppliers, 4168 suppliers from other parts of the country, and including 550 Micro, Small and Medium Enterprise(MSME) suppliers. We sources our raw materials from countries like Morocco, Jordan, Qatar, Saudi Arabia, etc and as part of our efforts to ensure supply chain continuity, we have maintained critical vendor partnerships and created alternative domestic sources.

For onboarding the suppliers we have put in place a vendor evaluation system. All suppliers are required to go through a screening process that includes various ESG criteria, including EHS compliance, safe work practises, the use of personal protective equipment (PPE), accidental records, safety meetings, etc.

On an annual basis, we engage with our vendors through various mediums such as: call, e-mail, virtual meetings, physical meetings, interactions during annual International fairs, vendor visits, vendor audits etc. We have strengthened supplier relationships via our internal grievance redressal mechanism. This enables quick resolution to a raised query and helps reduce the redressal time, thereby enhancing the overall experience of the stakeholders in the supply chain and fostering relationships.

Collaborating with Farmers

As we grow, we continue our efforts for rural upliftment through a host of programs and interventions. We have a dedicated CSR team working for the socio-economic development of our connected communities. We have also partnered with leading national and international organisations working for the benefit of farmers to increase our reach.

We endeavour to build an ecosystem of interaction and dialogue with our farmer communities. We undertake farmer-centric initiatives, regularly exchange knowledge, and strive to innovate in collaboration with farmers. We focus on disseminating the message of balanced fertilisation through farmer connect programs, which focus on sustainability. These programs not only helps improve farmers awareness on soil health and product knowledge, but also aids enhancement of the brand value.

We have an extensive farmer outreach program and a strong connection with farmers and FPOs through 'Serving Farmers, Saving Farming' initiative, across the state of Odisha and the adjacent states. Here, a large-scale farming community is trained on scientific crop management practices, agronomic practices & solutions, to push and eventually raise the contribution of the agricultural sector at state and national level. We have a team of dedicated and specialised field workers across 16 states, and the team undertakes activities such as farmers meetings, seed treatment drives, plant protection campaigns, crop seminars, field demonstrations, field days, kisan mela, exhibitions, mobile campaigns, and retailer's meetings.

Farmer Meetings

Farmer meetings are held in community villages, which get active support and mass participation of the community members.Successful farmers from community villages are recognized. Additionally, we provide farmers with findings of soil tests that were previously voluntarily conducted at their land; and we advise them on how to enhance the quantity of produce, while providing the best quality.In the FY 2021-22 we were successfully able to conduct **3600** farmer meetings.

Crop Seminars

Crop seminars enable the farmers to get in-depth knowledge about the agricultural practices.The scientists and agriculture specialists ensure the involvement of each farmer at the seminar through active engagement activities with most practica examples so that farmer can relate and maximise crop productivity. In FY 2021-22 we conducted **200** crop meetings with the community farmers.

Demonstrations

Demonstrating the effectiveness of our products to farmers in real-time helps us build trust. Prior to the usage of the product or the hand-over of the product to the farmers, demo-farms are set-up at various locations, where-in the farmers can freely visit and witness the quality of the product. In FY 2021-22 we conducted over 300 regular demonstrations and **1700** spot demonstrations

Campiagn days

Campaign Days is an awareness generation initiative where PPL products are marketed to farmers.During the campaign, representatives speak one-on-one with the farmers as well as in groups to address their concerns and raise awareness on PPL's offerings. In FY 2021-22 **2,500** such campaigns were conducted.

Farmer's Training School (FTS)

Together with the Government of Odisha, PPL operates the Farmer's Training School (FTS) to teach the emerging agri-skills to the farmers in a classroom environment. The FTS aims to expose farmers to the best practices and successful replicable models, for enhancing their understanding of current farming practices.

The institution has already trained around 10,000 progressive farmers from various states. Classroom training is followed up by technical team visits at the village, to help farmers in the integration of best techniques at their farms. These often lead to the adoption of newer technologies and advanced practices that increase output, hence boosting their farm revenue.

Agricultural Development Laboratory (ADL)

PPL is committed to the slogan "Healthy Soil, Wealthy Nation" and is educating farmers on the significance of soil health and the advantages of soil testing.

Through a vast network of farming communities across seventeen states, our organisation collaborates closely with farmers for soil testing, awareness campaigns, soil sample collecting, and in-house soil testing. The soil health certificates are then shared with farmers along with the list of recommended practices for soil health improvement. We have developed a fully equipped Agricultural Development Laboratory (ADL) in Bhubaneswar and three other cities and maintains a fleet of Mobile Soil Testing Labs (MSTLs) to cover all of Odisha's districts.

Mobile Soil Testing Labs (MSTL)

PPL has collaborated with the Government of Odisha to operate 30 Mobile Soil Testing Labs (MSTLs) on a PPP basis in all 30 districts of Odisha. Each MSTL has the potential to analyse 5000 soil samples per year, allowing the fleet of PPL MSTLs to analyse up-to 1.5 million soil samples per year. Since the commencement of this initiative, the business has analysed 5,29,584 soil samples and delivered soil health cards to 12,66,067 farmers.

Establishment of tool banks at the PG level

Most of the small and marginal farmers have dependency on neighbouring villages to access farm equipment like tractors, power tiller, threshers, pump sets for ploughing, irrigation and timely harvesting. With the vision that the farmers will aggregate themselves into Farmer Producer Organizations, the establishment of custom hiring centres have been made at the village level. We have adopted and integrated modern machines into agriculture to increase productivity and reduce the drudgery of farmers. Power tillers, Power weeders, Paddy threshers, Pump sets and Sprayers have been provided to farmer producer groups to improve productivity. A sense of collectivization among the members of PGs has been developed. Seeing the advantages and the enhanced productivity of crops and concurrent incomes of the producer groups, more small and marginal farmers are showing interest to be part of the producer groups.

Navratna Samachar

'Navratna Samachar' is a quarterly agricultural journal that is published in Hindi, Bengali, Oriya, Telugu, and Marathi. The magazine is sent at 'Zero Cost' to the farmers. The publication provides information on complete agronomic solutions for various types of crops, state government subsidies, fertiliser recommendations and various income-generating schemes announced by respective states.

GOA Agri Initiative (GAIN)

The program's goal is to support farmers in adopting the appropriate technology and removing barriers to production in order to increase farm outputs and transform agriculture into a business that generates income. The key thrust areas of the program include precision farming , crop production, farm mechanization, water management, market linkage and agricultural employment. This program is run in collaboration with Govt, ICAR, KVKs, marketing facilties and lead farmers.

Special events

To celebrate the success our farmers farmers achieve, we conduct nation wide celebrations that attract widescale participation. Some of our prime events are mentioned below:

Celebration of "Jai Jawan, Jai Kisaan"

Many farmers join farming after fulfilling their duty during their formative years. In addition to maintaining a regimented daily schedule, they serve as mentors and advisors for the village's young people. PPL organised "Jai Jawan, Jai Kisaan" ceremonies to honour their contributions to the nation both, when they were in the military and as prosperous farmers after retiring.

The theme of the event was - '**जय जवान जय किसान - तिरंगा फहराकर, बढ़ाएंगे देश का मान**!', wherein 128 events were held across India and 231 Soldier Farmers were honoured. As a token of love and appreciation, our products promoting balanced fertilisation (Bio 20/ Farm Gold/ Navratna Power/ Zypmite Plus/ C Vamax) were presented to them.

World Soil Day

On 'World Soil Day', PPL organised and celebrated the event with the theme of 'soils where food begins', which urges focus below the ground, which contribute to processes essential to life on Earth. 159 camps were organised across India, which was attended by 10,530 farmers and 270 retailers. At each of these sites, the success stories of the participants were highlighted and a total of 795 progressive farmers were felicitated.

Jai Kisaan Diwas

In keeping with the company's "Farmer First" attitude, PPL observes "Jai Kisaan Divas" on December 23, the day set aside by the Indian government as Farmers' Day to commemorate the anniversary of the birth of former Indian Prime Minister Ch. Charan Singh. All the PPL's operating regions observed 'Jai Kisaan Divas' and the program was attended by 3975 farmers, 714 progressive farmers, 55 dealers and 107 retailers.

PPL's ESG Scorecard FY 2021-22

Governance

Economic Value Generated (GRI 201-1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Total Revenue	INR million	78587.19	25251.28	103838.47

Economic Value Distributed and Retained (GRI 201-1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Total Operating cost	INR million	71002.92	23424.52	94427.44
Total employee related expenses (salaries + benefits)	INR million	1385.04	714.71	2099.75
Payments to providers of capital	INR million	855.414	1157.33	2012.74
Payment to government	INR million	1,365.39	0	1365.39
Community investments	INR million	0	0	0
Economic Value Retained	INR million	3978.42	-45.28	3933.14

CSR and other Philanthropic Contributions (DJSI)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
CSR expense	INR million	56.77		56.77
Political contributions	INR million	0	0	0

Research and Development (DJSI)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Research & Development spending	INR million			11.22
R&D spending as of Sales	%			
No. of R&D positions	No.			31
No. of patent filed	No.	0	0	0

Fines/Settlements/Complaints (GRI 206-1) (SASB, RT-CH-140a.2)

Category	Unit	PPL Total
Confirmed cases of Corruption & Bribery	No.	Nil
Current involvement in any ongoing corruption and bribery cases	No.	Nil
Contributions to and spending for political campaigns, political organizations, lobbying, trade associations, tax-exempt entities	INR	Nil
No. of complaints related to Sexual Harassment	No.	Nil
Complaints concerning breaches of customer privacy and losses of customer data	No.	Nil
Number of incidents of non-compliance		
associated with environment related,		
standards, and regulations	No.	Nil

Environment

Material Consumption* (GRI 301-1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Raw materials				
Sulphur	MT	284925.03	-	284925.03
Rock Phosphates	MT	921122.08	-	921122.08
Muriate of Potash	MT	43193.80	-	43193.80
Sweet sand	MT	36536.88	-	36536.88
Natural Gas	SCM	-	157029281	157029281
Associated materials				
Furnace Oil	MT	-	609.63	609.63
LSHS	MT	-	3.63	3.63
Semi-manufactured materials				
Ammonia (DAP Plant)	MT	247579.86	-	247579.86
Ammonia (Sul. Acid Plant)	MT	340.19	-	340.19
Phosphoric Acid	MT	149558	55301	1550859
Sulphuric acid	MT	10000	2607	12607
Captive Ammonia	MT	-	242375.34	242375.34
CO2	MT	-	331240	331240
Purchased Ammonia	MT	-	8912.19	8912.19
Potash	MT	-	59079.52	59079.52
Filler	MT	-	6291.33	6291.33
Packaging materials				
Total Packaging Material	MT	3028.90	1615.34	4644.24

Energy Consumption (GRI 302-1, 302-3) (SASB, RT-CH-130a.1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Natural Gas as fuel	GJ	0	8037121	8037121
Diesel	GJ	5802.20	0	5802.20
Furnace oil	GJ	316607.98	25407.75	342,015.73
Electricity purchased from GRID	GJ	65997.68	49325.29	115322.97
Renewable energy	GJ	995.42	0	995.42
% Grid electricity (renewable)	%	6	-	
Electricity produced from captive power plants	GJ	818338	198855	1017193
Steam Produced from boilers / co-generation power plants	GJ	4750473	3480895	8231368

GHG Saving initiatives (GRI 305-5)

Category	Unit	PPL
Insulation and refractory revamp of primary reformer in Ammonia Plant and other areas	tCO_2	1303.94
Steam Trap Replacement	tCO_2	846.20
Cooling Tower make-up water optimization	tCO_2	5751.99
Total	tCO_2	7902.13

GHG emissions (GRI 305-1, 305-2, 305-3, 305-4) (SASB, RT-CH-110a.1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total*
Scope 1: Direct emissions	tCO_2 eq	49527.65	376138.24	425708.92
Scope 2: Indirect emissions	tCO_2 eq	13016.21	9728.04	22744.25
Scope 3: Value Chain				2,404,286
Total GHG emissions	tCO_2 eq	62543.86	385866.28	448453.17
GHG emission intensity (Scope 1 and Scope 2)	tCO_2 eq/Revenue in INR million	0.28	16.25	16.53

Emissions of ozone-depleting substances (ODS) (GRI 305-6)

Category	Unit	PPL Paradeep	PPL Goa	Total (TCO_2)
HCFC-22 or R-22	Kgs	NIL	2240	4416.40

Air Pollutant Management (GRI 305-7) (SASB RT-CH-120a.1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Particulate matter (PM)	MT	9.34	418.29	427.63
Nitrogen Oxide (NOx)	MT	NA	380.95	380.95
Sulphur Oxide	MT	1094.7	43.08	1137.78

Emissions of Ammonia (NH3) and Hydrogen fluoride (HF) remain well below the prescribed standards.

Water Sourcing and discharge (GRI 303-3, 303-4, 303-5), (SASB, RT-CH-140a.1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Municipal water supplies (or from other water utilities)	million m^3	NIL	3.29	3.29
Fresh surface water (lakes, rivers, etc.)	million m^3	7.15	NIL	7.15
Fresh groundwater	million m^3	NIL	NIL	NIL
Total Withdrawal	million m^3	7.15	3.29	10.44
Water Discharged	million m^3	0.06	0	
Water Recycled and reused	million m^3	0.27		

Waste Generation (GRI 306-3) (SASB, RT-CH-150a.1)

Waste Generation	Unit	PPL Paradeep	PPL Goa	PPL Total
Hazardous Waste	MT	3275.88	84.18	3360.06
Non-hazardous Waste	MT		644.67	644.67
Phosphogypsum		1505250		1505250
Total Waste Generation	MT	1508525.88	728.85	1509254.73

Waste Generation (GRI 306-3)

Waste Category - Hazardous Waste

Waste Type	Unit	PPL Paradeep	PPL Goa	PPL Total
Used Oil/ Spent Oil	MT	4.38	25.45	29.83
Spent Resin	MT	1.95	NIL	1.95
Discarded Containers	MT	1.36	NIL	1.36
Sulphur Muck	MT	1871.52	NIL	1871.52
Spent Catalyst	MT	44.09	1.88	45.97
Chemical Sludge from Wastewater Treatment Plant	MT	1048.52	37.19	1085.72
Oil Tank Residue/Sludge	MT	NIL	11.21	11.21
Waste Or Residue Containing Oil	MT	NIL	0.62	0.62
Total Hazardous Waste	MT	**2971.82**	**76.36**	**3048.18**

Waste Category - Non-Hazardous				
Waste Type	**Unit**	**PPL Paradeep**	**PPL Goa**	**PPL Total**
Phosphogypsum	MT	1505250	NIL	1505250
Waste Resin Material from Dm Plant	MT	NIL	3.18	3.18
Waste Sand from Wtp Filters	MT	NIL	16.33	16.33
Waste Activated Carbon from Wtp Filters	MT	NIL	2.00	2.00
Sludge From STP	MT	NIL	1.81	1.81
Metal Scrap	MT	NIL	482.62	482.62
Rubber Scrap	MT	NIL	17.24	17.24
Packaging Material	MT	NIL	6.35	6.35
Plastic Scrap	MT	NIL	55.66	55.66
Total Non-Hazardous Waste	MT	**1505250**	**585.19**	**1505835.19**

Mode of disposal	Unit	Generation	Reused in Zypmite Production	Sold to cement/ Agro industries
Phosphogypsum	MT	1505250	30325	1583132

(GRI 306-3) (SASB, RT-CH-150a.1)

Type of waste	Mode of disposal	Unit	PPL Paradeep	PPL Goa	PPL Total
Hazardous Waste	Landfill	MT	50.75	0	50.75
	Recycled	MT	4.83	2.078	6.908
	Incinerated	MT	0	41.106	41.106
	Reused	MT	3220.30	41	3261
Hazardous Total		MT	84.184	3275.88	3360.064
Non-Hazardous Waste	Recycled	MT	0	619	619
	Reused	MT	30425	25.700	30450.700
Non-Hazardous Total*		MT	30425	644.670	31069.670
Grand Total		MT	33700.88	728.854	34429.734

*Not including Phosphogypsum. Phosphogypsum is reported seperately.

Social

Employee Information (GRI 102-8) (SASB, RT-CH-320a.1)

Employment	PPL Paradeep	PPL Goa	PPL Total
Permanent Employees	892	462	1354
Contractual employees	598	528	1126
Total employees	1490	990	2480

(GRI 306-3) (SASB, RT-CH-150a.1)

Category	Employees	Unit	PPL Paradeep	PPL Goa	PPL Total
Management Staff	Male	No.	525	39	564
	Female	No.	18	1	19
	<30	No.	52	0	52
	30-50	No.	316	22	338
	>50	No.	175	18	193
Non-Management Staff	Male	No.	332	305	637
	Female	No.	17	13	30
	<30	No.	0	158	158
	30-50	No.	84	130	214
	>50	No.	265	30	295
Permanent Workmen	Male	No.	0	101	101
	Female	No.	0	3	3
	<30	No.	0	0	0
	30-50	No.	0	53	53
	>50	No.	0	51	51
Contractual employees	Male	No.	593	506	1099
	Female	No.	5	22	27
	<30	No.	15	30	45
	30-50	No.	97	369	466
	>50	No.	486	129	615

New Employee hires (GRI 401-1)

Category	Employees	Unit	PPL Paradeep	PPL Goa	PPL Total
Management Staff	Male	No.	54	0	54
	Female	No.	2	0	2
	<30	No.	22	0	22
	30-50	No.	31	0	31
	>50	No.	3	0	3
Non-Management Staff	Male	No.	0	51	51
	Female	No.	0	1	1
	<30	No.	0	46	46
	30-50	No.	0	6	6
	>50	No.	0	0	0

Category	Employees	Unit	PPL Paradeep	PPL Goa	PPL Total
Permanent Workmen	Male	No.	0	0	0
	Female	No.	0	0	0
	<30	No.	0	0	0
	30-50	No.	0	0	0
	>50	No.	0	0	0
Contractual employees	Male	No.	15	31	46
	Female	No.	3	3	6
	<30	No.	18	33	51
	30-50	No.	0	1	1
	>50	No.	0	0	0

Employee Turnover (GRI 401-1)

Category	Employees	Unit	PPL Paradeep	PPL Goa	PPL Total
Management Staff	Male	No.	61	1	62
	Female	No.	1	0	1
	<30	No.	8	0	8
	30-50	No.	30	0	30
	>50	No.	24	1	25
Non-Management Staff	Male	No.	19	34	53
	Female	No.	3	2	5
	<30	No.	0	21	21
	30-50	No.	1	9	10
	>50	No.	21	6	27
Permanent Workmen	Male	No.	0	11	11
	Female	No.	0	0	0
	<30	No.	0	0	0
	30-50	No.	0	0	0
	>50	No.	0	11	11
Contractual employees	Male	No.	49	20	69
	Female	No.	0	4	4
	<30	No.	6	24	30
	30-50	No.	0	0	0
	>50	No.	43	0	43

Trainings Man Hours (GRI 404-1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Management Staff	Hours	9253	850	10103
	Average training hours	17	21	17
Non-Management Staff	Hours	3165	19368	22533
	Average training hours	9	60	34
Male	Hours	18050	4119	-
	Average training hours			
Female	Hours	3339	320	-
	Average training hours			

Parental Leave (GRI 401-3)

Category	Unit	PPL Paradeep		PPL Goa	
		Male	Female	Male	Female
Employees entitled for parental leave	No.	868	38	413	17
Employees that took parental leave	No.	17	1	13	1
Employees that returned to work in the reporting period after parental leave ended	No.	17	1	13	1
Employees that returned to work after parental leave ended that were still employed 12 months after their return to work	No.	17	1	13	1
Rate of Return to work that took parental leave	%	100	-	1.00	1.00
Retention rates of employees that took parental leave	%	100	-	100	100

Health and Safety (GRI-403) (SASB, RT-CH-320a.1)

Category	Unit	PPL Paradeep	PPL Goa	PPL Total
Fatalities	No.	1	0	1
Near miss incidents	No.	37	12	49
Occupational disease cases	No.	0	0	0
Man hours worked	No.	71,40,000	22,20,000	93,60,000
Total working days scheduled to be worked by the workforce	No.	300	365	300/365
Injuries (Total) Note: Only lost time injuries will be considered here.	No.	1	5	6
Lost time injury frequency rate (LTIFR)	Rate	0.14	2.25	0.64

Benefits provided to Permanent employees and Temporary employees* (GRI 401-2)

Category/Types of benefits provided	Paradeep		Goa	
	Permanent Employees	Temporary/ Part time Employees	Permanent Employees	Temporary/ Part time Employees
Life insurance	Yes	No	Yes	No
Health care	Yes	Yes	No	Yes
Disability	Yes	Yes	No	No
Parental leave (maternity leave or paternity leave)	Yes	No	Yes	No
Marriage leaves (additional to Normal leaves allotted)	No	No	No	No
Retirement provision	Yes	Yes	Yes	No
Stock ownership	No	No	No	No
Transportation	Yes	No	No	No
Housing	Yes	No	Yes	No
Food allowance	Yes	Yes	Yes	No
Extra paid holidays	Yes	Yes	No	No
Joining leave	Yes	No	No	No
Marriage Gift	Yes	No	No	No

SASB Index

SASB Indicator	Section/ Sub-Section	Pg. No.
RT-CH-110a.1. Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	ESG Scorecard	86
RT-CH-110a.2. Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Natural Capital	57-59
RT-CH-120a.1. Air emissions of the following pollutants: (1) NOX (excluding N2O), (2) SOX, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	ESG Scorecard	52
RT-CH-130a.1. (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	ESG Scorecard	49
RT-CH-140a.1. (1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	ESG Scorecard	51
RT-CH-140a.2. Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Water Management	51
RT-CH-140a.3. Description of water management risks and discussion of strategies and practices to mitigate those risks	Sustainability at PPL and Natural Capital	51
RT-CH-150a.1. Amount of hazardous waste generated; percentage recycled	ESG Scorecard	53-54
RT-CH-210a.1. Discussion of engagement processes to manage risks and opportunities associated with community interests	Stakeholder Engagement and Materiality Assessment	25-27
RT-CH-320a.1. (1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	ESG Scorecard	91
RT-CH-320a.2. Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Human Capital	67
RT-CH-530a.1. Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Sustainability at PPL – Risk Management	79
RT-CH-540a.2. Number of transport incidents		68

GRI Content Index

GRI Standards	Disclosures	Report Section/ Chapters	GRI index (reference pages)
GRI 2 - General Disclosures (2021)			
2-1	Organizational details	About PPL	05-07
2-2	Entities included in the organization's sustainability reporting	About the report	03
2-3	Reporting period, frequency, and contact point	About the report	03
2-6	Activities, value chain and other business relationships	About PPL	05-07
2-7	Employees	Human Capital	89
2-8	Workers who are not employees	ESG scorecard	89
2-9	Governance structure and composition	Governance	15
2-10	Nomination and selection of the highest governance body	Governance	17
2-11	Chair of the highest governance body	Governance	15
2-12	Role of the highest governance body in overseeing the management of impacts	Governance	18
2-13	Delegation of responsibility for managing impacts	Governance	18
2-14	Role of the highest governance body in sustainability reporting	Governance	18
2-15	Conflicts of interest	Governance	21
2-16	Communication of critical concerns	Governance	18
2-17	Collective knowledge of the highest governance body	Governance	15
2-18	Evaluation of the performance of the highest governance body	Governance	15
2-19	Remuneration policies	Governance	17
2-20	Process to determine remuneration	Governance	17
2-21	Annual total compensation ratio		Pg 68 of AR 2021-22
2-22	Statement on sustainable development strategy	ESG journey	24
2-23	Policy commitments	Governance	17
2-24	Embedding policy commitments	Governance	17
2-25	Processes to remediate negative impacts	Governance	17

GRI Standards	Disclosures	Report Section/ Chapters	GRI index (reference pages)
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2-28	Membership associations	Intellectual Capital	37
2-29	Approach to stakeholder engagement	Stakeholder engagement	25
2-30	Collective bargaining agreements	Labour Management	65
GRI 3 – Material Topics (2021)			
3-1	Process to determine material topics	Materiality assessment	26-27
3-2	List of material topics	Materiality assessment	26-27
3-3	Management of material topics	Description of topics is added in respective chapters on six capitals	27
GRI 201 – Economic Performance (2016)			
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201-2	Financial implications and other risks and opportunities due to climate change	Risk management framework	20
201-3	Defined benefit plan obligations and other retirement plans	ESG scorecard	84
201-4	Financial assistance received from government	ESG scorecard	84
GRI 203 - Indirect Economic Impacts (2016)			
203-1	Infrastructure investments and services supported	Social capital – CSR	84
203-2	Significant indirect economic impacts	Social capital	84
GRI 204 – Procurement Practices (2016)			
204-1	Proportion of spending on local suppliers	Social and relationship capital – fostering relationships with suppliers	79
GRI 205 - Anti-corruption (2016)			
205-1	Operations assessed for risks related to corruption		17
205-2	Communication and training about anti-corruption policies and procedures		17
205-3	Confirmed incidents of corruption and actions taken		17
GRI 206 - Anti-competitive Behaviour (2016)			
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices		17

GRI Standards	Disclosures	Report Section/ Chapters	GRI index (reference pages)
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301-2	Recycled input materials used	ESG scorecard	85
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GRI 302 – Energy (2016)			
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302-3	Energy intensity	ESG scorecard	86
302-4	Reduction of energy consumption	ESG scorecard	86
302-5	Reductions in energy requirements of products and services	ESG scorecard	86
GRI 303 - Water and Effluents (2018)			
303-1	Interactions with water as a shared resource	ESG scorecard	87
303-2	Management of water discharge related impacts	ESG scorecard	87
303-3	Water withdrawal	ESG scorecard	87
303-4	Water discharge	ESG scorecard	87
303-5	Water consumption	ESG scorecard	87
GRI 304 - Biodiversity (2016)			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Natural capital - Biodiversity	56
304-2	Significant impacts of activities, products, and services on biodiversity	Natural capital - Biodiversity	56
304-3	Habitats protected or restored	Natural capital - Biodiversity	56
GRI 305 - Emissions (2016)			
305-1	Direct (Scope 1) GHG emissions	ESG scorecard	86
305-2	Energy indirect (Scope 2) GHG emissions	ESG scorecard	86
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305-4	GHG emissions intensity	ESG scorecard	86
305-5	Reduction of GHG emissions	ESG scorecard	86
305-6	Emissions of ozone-depleting substances (ODS)	ESG scorecard	86
305-7	Nitrogen oxides (NOx), sulphur oxides (Sox), and other significant air emissions	ESG scorecard	86

GRI Standards	Disclosures	Report Section/ Chapters	GRI index (reference pages)
GRI 306 - Effluents and Waste (2016)			
306-1	Water discharge by quality and destination	ESG scorecard	87
306-2	Waste by type and disposal method	ESG scorecard	87
GRI 306 - Waste (2020)			
306-1	Waste generation and significant waste-related impacts	ESG scorecard	87
306-2	Management of significant waste related impacts	Natural Capital	87
306-3	Waste generated	Natural Capital	87
306-4	Waste diverted from disposal	Natural Capital	87
306-5	Waste directed to disposal	Natural Capital	87
GRI 308 - Supplier Environmental Assessment (2016)			
308-1	New suppliers that were screened using environmental criteria	Social and relationship capital	79
308-2	Negative environmental impacts in the supply chain and actions taken		79
GRI 401 – Employment (2016)			
401-1	New employee hires and employee turnover	ESG scorecard	89
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	ESG scorecard	91
401-3	Parental leave	ESG scorecard	91
GRI 403 - Occupational Health and Safety (2018)			
403-1	Occupational health and safety management system	Human capital – safety at workplace	67-69
403-2	Hazard identification, risk assessment, and incident investigation	Human capital – safety at workplace	67-69
403-3	Occupational health services	Human capital – safety at workplace	67-69
403-4	Worker participation, consultation, and communication on occupational health and safety	Human capital – safety at workplace	67-69
403-5	Worker training on occupational health and safety	Human capital – safety at workplace	67-69
403-6	Promotion of worker health	Human capital – safety at workplace	67-69
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Human capital – safety at workplace	67-69
403-8	Workers covered by an occupational health and safety management system	Human capital – safety at workplace	67-69
403-9	Work-related injuries	ESG Scorecard	67-69
403-10	Work-related ill health	Human capital – safety at workplace	67-69
GRI 404 - Training and Education (2016)			
404-1	Average hours of training per year per employee	ESG Scorecard	90
404-2	Programs for upgrading employee skills and transition assistance programs	ESG Scorecard	90
404-3	Percentage of employees receiving regular performance and career development reviews	ESG Scorecard	90
GRI 405 - Diversity and Equal Opportunity (2016)			
405-1	Diversity of governance bodies and employees	Governance	63
405-2	Ratio of basic salary and remuneration of women to men	Our compensation and benefits policies are gender neutral, role-based, and performance-linked.	63
GRI 406 - Non-discrimination (2016)			
406-1	Incidents of discrimination and corrective actions taken	We have zero tolerance towards any kind of discrimination	65
GRI 407 - Freedom of Association and Collective Bargaining (2016)			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		65
GRI 408 - Child Labour (2016)			
408-1	Operations and suppliers at significant risk for incidents of child labour		65
GRI 409 - Forced or Compulsory Labour (2016)			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour		65
GRI 410 - Security Practices (2016)			
410-1	Security personnel trained in human rights policies or procedures		65

GRI Standards	Disclosures	Report Section/ Chapters	GRI index (reference pages)
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413-2	Operations with significant actual and potential negative impacts on local communities	Social and relationship capital	75-77
GRI 414 - Supplier Social Assessment (2016)			
414-1	New suppliers that were screened using social criteria	Social and relationship capital	79

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