## **BUSINESS RESPONSIBILITY AND SUSTAINABILITY REPORT**

#### SECTION A: GENERAL DISCLOSURES

#### I. Details of the listed entity

1	Corporate Identity Number (CIN) of the Listed Entity	L23220MH1952GOI008931
2	Name of the Listed Entity	Bharat Petroleum Corporation Limited
3	Date of Incorporation	03-11-1952
4	Registered office address	Bharat Bhavan 4&6, Currimbhoy Road, Ballard Estate, Mumbai-400 001
5	Corporate Address	Bharat Bhavan 4&6, Currimbhoy Road, Ballard Estate, Mumbai-400 001
6	E-mail	ssc@bharatpetroleum.in
7	Telephone	(022) 22713170
8	Website	https://www.bharatpetroleum.in/
9	Financial year for which reporting is being done	2023-24
10	Name of the Stock Exchange(s) where shares are listed	<ol> <li>National Stock Exchange (NSE)</li> <li>Bombay Stock Exchange (BSE)</li> </ol>
11	Paid-up capital	₹2,169.25 crore as on March 31, 2024 i.e., 2,16,92,52,744 equity shares of ₹ 10 each
12	Name and contact details of the person who may be contacted in case of any queries on the BRSR report	Name: Ms. V. Kala Designation: Company Secretary Email: <u>ssc@bharatpetroleum.in</u> Telephone: 022-24173170
13	Reporting boundary - Are the disclosures under this report made on a standalone basis (i.e. only for the entity) or on a consolidated basis (i.e. for the entity and all the entities which form a part of its consolidated financial statements, taken together).	BPCL Standalone Basis (i.e. excluding JV's and Subsidiaries)
14	Whether the company has undertaken reasonable assurance of the BRSR Core?	Yes
15	Name of assurance provider	Intertek India Private Limited
16	Type of assurance obtained	Reasonable

#### II. Products/Services

#### 17. Details of business activities (accounting for 90% of the turnover):

S. No.	Description of the Main Activity	Description of the Business Activity	% of turnover the entity
1	Manufacturing	Coke and refined petroleum products	100%

#### 18. Products/services sold by the entity (accounting for 90% of the entity's turnover):

S. No.	Product/Service	NIC Code	% of total turnover Contributed.
1	HSD	466/473	45%
2	LPG	466/473	16%
3	MS	466/473	20%
4	Bitumen	466	2%
5	ATF	466	4%
6	Naphtha	466	2%
7	RLNG	466/473	2%
8	FO	466	2%
9	Lubes and Greases	466/473	1%

#### III. Operations

#### 19. Number of locations where plants and/or operations/offices of the entity are situated:

Location	Number of Plants
National	1. Refineries: 3 (Mumbai, Bina, and Kochi)
	2. Retail (Installations/Depots/TOPs): 80
	3. LPG Bottling Plants: 54 (Including Mumbai Refinery)
	4. Lube Blending Plants: 5
	5. Aviation: Locations/Fueling Stations/on-wheels: 67
	6. Cross country Pipelines: 3,537 km consisting of 22 Nos. of pipeline locations.
	7. Head Office: 1
	8. Regional Offices: 4
	9. Total = 236
International	Nil

#### 20. Markets served:

#### a. Number of locations

Locations	Number
National (No. of states)(Including Union Territories)	28 States 8 UTs
International (No. of countries)	9 (Nepal, Bhutan, Sri Lanka, Bangladesh, Kenya, Tanzania, Uganda, UAE, Oman)

b. What is the contribution of exports as a percentage of the total turnover of the entity? Total Sales of Lubes: ₹4,053 Cr

Export Sales of Lubes: ₹ 55 Cr

Contribution of exports as percentage of the total turnover of Lubes: 1.36%

#### c. A brief on types of customers

Bharat Petroleum Corporation Limited (BPCL) is a leading company in the Oil and Gas sector, providing services to both retail and bulk customers. Through its extensive network of retail outlets and LPG distributorships, BPCL ensures a consistent and reliable supply of fuel and related services to its diverse customer base. In addition to serving retail customers, BPCL also caters to the energy needs of bulk customers, which include the Defense Forces, Indian Railways, State government organizations, State transport undertakings, power producers, etc. This comprehensive approach allows BPCL to play a crucial role in meeting the energy demands of multiple sectors, which include industries and retail consumers across the country.

#### **IV. Employee**

#### 21. Details as at the end of Financial Year: Details as on March 31, 2024

a. Employees and workers (including differently abled)\*:

s.		Total	M	Male		nale
No.	Particulars	(A)	No. (B)	% (B/A)	No. (C)	% (C/A)
Emp	bloyees					
1	Permanent (D)	5,596	5,069	90.6%	527	9.4%
2	Other than permanent (E)	1	0	0.0%	1	0.0%
3	Total employees (D + E)	5,597	5,069	90.6%	528	9.4%
Wor	kers					
4	Permanent (F)	2,910	2,763	94.9%	147	5.1%
5	Other than permanent (G)**	25,847	25,208	97.5%	639	2.5%
6	Total employees (F + G)	28,757	27,971	97.3%	786	2.7%

\* The permanent employees does not include two Employees on lien.

\*\* Average contract labor strength (includes both Project & Non-Project numbers)

Note: Contract labor are engaged by contractors for non-core, sporadic and peripheral nature of jobs as per "Contract for Services". The number is dynamic and changes depending on projects/works being undertaken.

#### b. Differently abled employees and workers

S.		Total	м	Male		nale
No.	Particulars	(A)	No. (B)	% (B/A)	No. (C)	% (C/A)
Diff	erently abled employees					
1	Permanent (D)	108	97	89.8%	11	10.2%
2	Other than permanent (E)	0	0	0	0	0
3	Total employees (D + E)	108	97	89.8%	11	10.2%
Diff	erently abled workers					
4	Permanent (F)	62	58	93.5%	4	6.5%
5	Other than permanent (G)	NA	NA	NA	NA	NA
6	Total employees (F + G)	62	58	93.5%	4	6.5%

\*We are currently not capturing data for differently abled workers (Other than permanent); however, we are setting up a process for capturing the data in the future.

#### 22. Participation/inclusion/representation of women

	Total	No. and % of females		
	(A)	No. (B)	% (B/A)	
Board of Directors	13	3	23.1%	
Key Management Personnel	6	1	16.7%	

#### 23. Turnover Rate for permanent and workers (Disclose trends for the past 3 years)

	FY 2023-24			FY 2022-23			FY 2021-22					
	Male %	Female %	Other %	Total %	Male %	Female 9	% Other %	Total %	Male %	Female %	Other %	Total %
Permanent employees	6.17	5.50	0.00	6.11	6.01	10.67	0.00	6.41	6.68	10.79	0.00	7.07
Permanent workers	7.49	10.20	0.00	7.63	7.51	8.70	0.00	7.57	8.84	13.79	0.00	9.09

#### 24. (a) Names of holding/subsidiary/associate companies/joint ventures

S. No.	Name of the holding/subsidiary/associate companies/joint ventures (A)	Indicate whether Holdings/ subsidiary/ associate/joint venture	% of shares held by listed entity	Does the entity indicated at column A, participate in the Business Responsibility initiatives of the listed entity? (Yes/No)
1	Bharat PetroResources Limited	Subsidiary	*100%	No
2	Bharat PetroResources JPDA Limited	Subsidiary	*100%	No
3	BPCL-KIAL Fuel Farm Pvt. Ltd.	Subsidiary	**74%	No
4	BPRL International BV	Subsidiary	*100%	No
5	BPRL International Singapore Pte. Ltd.	Subsidiary	*100%	No
6	BPRL International Ventures BV	Subsidiary	*100%	No
7	BPRL Ventures BV	Subsidiary	*100%	No
8	BPRL Ventures Indonesia BV	Subsidiary	*100%	No
9	BPRL Ventures Mozambique BV	Subsidiary	*100%	No
10	Bharat Renewable Energy Ltd.	Associate	33.33%	No
11	Bharat Stars Services Pvt. Ltd.	Associate	50%	No
12	Central U.P. Gas Ltd.	Associate	25%	No
13	Delhi Aviation Fuel Facility Pvt. Ltd.	Associate	37%	No
14	FINO PayTech Ltd.	Associate	^21.1%	No
15	Goa Natural Gas Pvt. Ltd.	Associate	50%	No
16	GSPL India Gasnet Ltd.	Associate	11%	No
17	GSPL India Transco Ltd.	Associate	11%	No

S. No.	Name of the holding/subsidiary/associate companies/joint ventures (A)	Indicate whether Holdings/ subsidiary/ associate/joint venture	% of shares held by listed entity	Does the entity indicated at column A, participate in the Business Responsibility initiatives of the listed entity? (Yes/No)
18	Haridwar Natural Gas Pvt. Ltd.	Associate	50%	No
19	IHB Ltd.	Associate	25%	No
20	Indraprastha Gas Ltd.	Associate	22.50%	No
21	Kannur International Airport Ltd.	Associate	16.20%	No
22	Kochi Salem Pipeline Private Ltd.	Associate	50%	No
23	Maharashtra Natural Gas Ltd.	Associate	22.50%	No
24	Matrix Bharat Pte Ltd.	Associate	50%	No
25	Mumbai Aviation Fuel Farm Facility Pvt. Ltd.	Associate	25%	No
26	Petronet CI Ltd.	Associate	11%	No
27	Petronet India Ltd.	Associate	16%	No
28	Petronet LNG Ltd.	Associate	12.50%	No
29	Ratnagiri Refinery and Petrochemicals Ltd.	Associate	25%	No
30	Sabarmati Gas Ltd.	Associate	49.94%	No
31	Ujjwala Plus Foundation	Associate	N/A (Section 8 Co. Limited by guarantee. Guaranteed obligation of BPCL is ₹ 5 lakh i.e. 25% of total guaranteed obligation)	No

\* Shares are held by Subsidiary

\*\* BPCL-KIAL Fuel Farm Private Ltd. is treated as a Joint venture for consolidation of accounts as per IndAS

^ Shareholding on fully diluted basis

#### **CSR** details

25.	(i)	Whether CSR is applicable as per section 135 of Companies Act, 2013 -	Yes
	(ii)	Turnover (in ₹ crore) -	5,05,475.73
	(iii)	Net worth (in ₹ crore) -	71,934.50

#### Transparency and disclosures compliances

# 26. Complaints/grievances on any of the principles (principles 1 to 9) under the National Guidelines on Responsible Business Conduct (NGBRC):

			FY 2023-24	4		FY 2022-23	3
с	Grievance Redressal Mechanism in Place (Yes/No) If Yes, then provide web-link for grievance redress policy	Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Remarks	Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Remarks
Communities	https://www.bharatpetroleum. in/images/files/BPCL-Citizen's- Charter-Jan-2023.pdf	4100	117	The average Disposal time is 12 day.	4071	79	The average Disposal time is 12 day.
Investors (other than shareholders)	https://www.bharatpetroleum. in/bharat-petroleum-for/ Investors/Contact%20 Information%20for%20 Investor%20Grievances.pdf	0	0	-	0	0	-
Shareholders	https://www.bharatpetroleum. in/Bharat-Petroleum-For/ Investors/Procedure-Related- to-Investor-Service-request. aspx	15	0		52	0	-

			FY 2023-2	4		FY 2022-23	3
с	Grievance Redressal Mechanism in Place (Yes/No) If Yes, then provide web-link for grievance redress policy	Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Remarks	Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Remarks
Employees and workers	<u>https://www.bharatpetroleum.</u> in/images/files/BPCL-Citizen's- Charter-Jan-2023.pdf	3	0	Nil	10	1	Resolved in FY 2023-24
Customers	https://www.bharatpetroleum. in/images/files/BPCL-Citizen's- Charter-Jan-2023.pdf	5,89,594	1022	99.82% of complaints were resolved with closure time of two days and the remaining ones were addressed and closed satisfactorily within 3 days of registration	4,55,565	939	Resolved in FY 2023-24
Value chain partners (Vendors- Bidders)	https://www.bharatpetroleum. in/images/files/BPCL-Citizen's- Charter-Jan-2023.pdf	17	1	The complaint pending resolution was received in last week of March 2024.	9	1	Resolved in FY 2023-24
Others (Please Specify)	https://www.bharatpetroleum. in/vigilance/vigilance.aspx https://www.bharatpetroleum. in/PIDPI-booklet/index.html"	Vig – 62, PIDPI - 1	Vig – 38, PIDPI - 0		Vig - 29	Vig - 34	-

Note:

1. The Company has a well-defined vigilance framework which provides a platform to employees, Directors, vendors, suppliers, and other stakeholders to lodge their grievances/complaints.

2. Shareholders of the Company can send their grievances to the Company Secretary. The Company has created a designated email-ID <u>ssc@</u> <u>bharatpetroleum.in</u> exclusively for investors to raise their grievances.

3. BPCL has in place a robust and easily accessible Customer Care System (CCS), enabling customers to provide their feedback, complaints, or suggestions.

4. BPCL addresses the complaints lodged by citizen on Centralized Public Grievance Redress and Monitoring System (CPGRAMS) portal within the stipulated time.

#### 27. Overview of the entity's material responsible business conduct issues

Please indicate material responsible business conduct and sustainability issues pertaining to environmental and social matters that present a risk or an opportunity to your business, rationale for identifying the same, approach to adapt or mitigate the risk along-with its financial implications, as per the following format:

S. No.	Material issue identified	Indicate whether risk or opportunity (R/O)	Rationale for identifying the risk/opportunity	Approach to adapt or mitigate	Positive/negative implications
1	Economic Performance	Risk	Economic performance is a risk for BPCL as it directly impacts the company's financial strength, including revenue growth, cost optimization, profitability, and shareholder value, which is also impacted due to higher crude oil prices, geopolitical conflicts, and market risks.	To achieve sustainable financial returns and mitigate climate change risks, the company has committed to achieving Scope 1 and Scope 2 Net Zero emissions by 2040.	Negative implications as it will affect the profitability of the company.
2	Being a Responsible Corporate	Risk	Being a responsible corporate organization subjects the business to regulatory risk owing to non-compliance concerns. Ethical business practices, transparency, adherence to legislation, and CSR programs have a substantial impact on external impressions that might have implications for the organization.	Regularly engage with diverse stakeholders to understand their concerns and maintain positive relationships. Implement CSR projects aligned with business goals to contribute positively to communities and enhance reputation. Embed sustainability into decision- making to mitigate environmental and social risks while driving long-term value. Enhance transparency in governance practices to build trust and credibility. Working with industry, government, and non-profits to address shared challenges and promote best practices.	Negative Implication as non-compliance with regulatory requirements would lead to penalties and litigation. Non-compliance can lead to legal penalties, reputational damage, and a loss of investor confidence.
3	Compliance to Governance	Risk	Compliance with governance regulations is crucial for maintaining legal standing, ensuring transparency, upholding ethical business practices, and building trust among stakeholders. Regulatory changes, evolving standards, and global governance frameworks pose risks if not adhered to, affecting BPCL's reputation and financial performance.	Conduct regular compliance risk assessments. Develop and implement remediation plans promptly. Establish clear escalation procedures and whistleblower mechanisms. Strengthening of internal audit functions. Collaborate with legal advisors and industry peers.	as identifying risks and opportunities related
4	Product Security	Risk		BPCL ensures the safe transportation of petroleum products through safety standards and capacity-building programs, high standards of vehicular safety, inclusive development of transport crews, regular training for PCVO crew, DSM, and delivery staff, and identifying opportunities to replace existing modes of transportation with safer alternatives like pipelines.	Negative implications include risks such as tampering, theft, or contamination, which can lead to financial losses and damage to reputation.
5	Efficient Water Management	Risk	•	Efficient water management significantly enhances BPCL's corporate value by reducing environmental impact, lowering operating costs, increasing productivity, and mitigating risks related to water shortages and regulatory compliance. This streamlines manufacturing processes and improves operational efficiency.	Negative implications include risks such as water shortages, pollution incidents, and regulatory non-compliance, which can impact operational continuity and stakeholder perception.

6	Material issue	Indicate whether risk or	Pationalo for identifying the		Positivo/pogativo
S. No.	identified	opportunity (R/O)	Rationale for identifying the risk/opportunity	Approach to adapt or mitigate	Positive/negative implications
6	Energy Use and Transition	Opportunity	BPCL's efforts to transition to sustainable energy sources and optimize energy use are critical for reducing emissions and ensuring long-term resilience. Opportunities include future regulatory changes, market and technological disruptions, and new sources of energy. Failure to adapt to changing energy landscapes could result in increased costs, penalties, and stranded assets.	BPCL's strategic focus on energy resource management and transitioning to sustainable energy sources is crucial for its long-term value creation. This approach ensures environmental sustainability, drives cost efficiency, enhances competitiveness, and positions the company for future growth, demonstrating BPCL's commitment to financial viability, environmental responsibility, and technological advancement.	trends, enhancing BPCL's competitiveness, mitigating climate- related risks, adopting low-carbon technology,
7	Occupational Health & Safety	Risk	to protect employees and maintain productivity. Risks	Conduct comprehensive risk assessments, develop robust safety management systems, provide safety training, foster a proactive safety culture, and monitor safety performance metrics. Identifying occupational health and safety risks enables BPCL to implement robust safety protocols, provide adequate training and personal protective equipment, conduct regular safety audits, and promote a culture of safety awareness.	result in legal liabilities and
8	Managing & Minimizing Environmental Impact	Risk	Minimizing environmental impact is crucial for mitigating climate change and preserving natural resources. Risks include air and water pollution, habitat destruction, and regulatory fines. By integrating environmental considerations into its operations, BPCL can enhance environmental stewardship, mitigate reputational risks, and contribute to sustainable development goals.	BPCL conducts operations with minimal environmental and ecological impacts, focusing on natural resources such as soil, water, air, and biodiversity. Suitable management and mitigation measures are implemented throughout the project lifecycle.	Negative implications include the failure to manage environmental risks, which could result in legal sanctions, community backlash, and operational disruptions.
9	Asset Integrity & Process Safety	Risk	lives and the environment. Risks include equipment failures, leaks, and	BPCL ensures process safety in line with the American Petroleum Institute's (API) recommended practices and standards. Identifying risks in asset integrity and process safety enables BPCL to implement preventive maintenance programs, conduct risk assessments, upgrade infrastructure, and enhance emergency response capabilities.	Negative implications include the failure to ensure asset integrity and process safety, which could result in financial losses and a loss of public trust.
10	Human & Labor Rights	Risk	Upholding human and labor rights within BPCL's operations is fundamental to fostering a culture of ethical responsibility and social accountability. Risks stemming from overlooking human and labor rights encompass potential labor disputes, safety violations, and breaches of fair labor practices.	BPCL adopts a proactive stance towards upholding human and labor rights by integrating them into every facet of its operations. This approach involves fostering a culture of continuous learning and personal development. BPCL has adopted a Human Rights policy based on national and international standards, ensuring non- discrimination based on caste, religion, disability, gender, age, race, color, ancestry, marital status, or affiliation with any religious, union, or minority group.	Negative implications include not only non- compliance with regulations but also the cultivation of a negative work environment as a result of policy violations.

S. No.	Material issue identified	Indicate whether risk or opportunity (R/O)	Rationale for identifying the risk/opportunity	Approach to adapt or mitigate	Positive/negative implications
11	Availability of Raw Materials/ Energy Security	Risk	Securing a dependable supply of raw materials and energy sources is a cornerstone of BPCL's operational resilience and long-term sustainability. Risks related to inadequate supply include import disruptions will lead to loss of production, increased costs, vulnerability to market fluctuations and potentially compromising business continuity.	BPCL takes a comprehensive approach to ensure the availability of raw materials and energy security, recognizing the importance of diversification of supply chain. This involves optimizing current supply chain, seeking out alternative sources and investing in renewable energy solutions. By leveraging technological advancements and forging strategic partnerships, BPCL aims to reduce its reliance on volatile markets and geopolitical factors, thereby safeguarding its operations and maintaining a competitive edge in an ever- changing landscape.	Negative Implication. Reliance on limited global suppliers may expose the company to geopolitical risks and loss of production.
12	Inclusive Development	Risk	Embracing inclusive development practices within BPCL's operations is pivotal for fostering social equity and driving shared prosperity. Risks stemming from inadequate inclusivity measures encompass dissatisfaction among marginalized stakeholders, community unrest, and reputational damage, all of which could hinder the company's social license to operate.	BPCL's commitment to inclusive development goes beyond mere compliance with regulations; it is deeply ingrained in its corporate ethos. Through initiatives that prioritize community engagement, capacity building, and economic empowerment, BPCL seeks to create lasting positive impacts on the societies it operates in.	Negative Implication. Neglecting inclusivity concerns may invite regulatory scrutiny and violation of human rights policy.
13	Talent Management	Risk	attract, retain, and develop a skilled workforce capable of driving innovation and sustaining growth. Risks associated with inadequate talent management include		Negative Implication. Neglecting talent management may lead to loss of skilled manpower, competitive edge and increased recruitment costs.
14	R&D	Opportunity	Investing in research and development (R&D) is imperative for BPCL to stay ahead of market trends, innovate new products, and enhance operational efficiency. Opportunities associated with R&D investment include technological advancements, competitiveness, and increased market relevance.	the evolving needs of its customers.	Positive Implication. By prioritizing R&D, BPCL can foster a culture of innovation, accelerate product development cycles, and deliver solutions that meet ever changing customer demands.
15	Data Integrity & Cyber Security	Risk	Risks stemming from data	BPCL recognizes the critical importance of data integrity and cybersecurity in today's digital landscape and has implemented a comprehensive strategy to safeguard its information assets. BPCL has state-of-the- art cybersecurity tools and protocols which enhances data secuity. Through regular training and simulated cyber-attack exercises, BPCL ensures that its workforce remains vigilant and prepared to respond effectively to potential threats.	Negative Implication. Neglecting data integrity and cybersecurity measures may result in loss of Inytellectual Property, customer data and disruption of business continuity.

S. No.	Material issue identified	Indicate whether risk or opportunity (R/O)	Rationale for identifying the risk/opportunity	Approach to adapt or mitigate	Positive/negative implications
16	Product Stewardship & Customer Satisfaction	Risk	Ensuring product stewardship and delivering customer satisfaction are imperative for BPCL to maintain its competitive edge and foster long-term customer loyalty. Risks associated with lapses in product stewardship includes product quality, communication of safe handling, responsible disposal, meeting regulatory requirements could erode market share and revenue streams.	BPCL's approach to product stewardship and customer satisfaction is driven by a deep understanding of its customers' needs and a relentless pursuit of excellence. By prioritizing quality control and continuous improvement, BPCL ensures that its products and services exceeds customer expectations and meets national and global standards. Through proactive engagement and feedbacks from multiple channels, BPCL remains agile and responsive to changing market dynamics.	Negative Implication. Failing to meet customer expectations may lead to loss of customers and revenue.

#### SECTION B: MANAGEMENT AND PROCESS DISCLOSURES

This section is aimed at helping businesses demonstrate the structures, policies and processes put in place towards adopting the NGRBC Principles and Core Elements.

The National Guidelines for Responsible Business Conduct (NGRBC) as prescribed by the Ministry of Corporate Affairs advocates nine principles referred as P1-P9 as given below:

- P1 Businesses should conduct and govern themselves with integrity in a manner that is ethical, transparent, and accountable
- P2 Businesses should provide goods and services in a manner that is sustainable and safe
- P3 Businesses should respect and promote the well-being of all employees, including those in their value chains
- P4 Businesses should respect the interests of and be responsive towards all its stakeholders
- P5 Businesses should respect and promote human rights
- P6 Businesses should respect, protect, and make efforts to restore the environment
- P7 Businesses when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent
- P8 Businesses should promote inclusive growth and equitable development
- P9 Businesses should engage with and provide value to their consumers in a responsible manner

Dis	clos	ure questions	P 1	P 2	P 3	P 4	P 5	P 6	Р7	P 8	Р9
Ро	licy a	and management processes									
1.	a.	Whether your entity's policy/policies cover each principle and its core elements of the NGRBCs. (Yes/No)	Yes	⁄es Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
••••••	b.	Has the policy been approved by the Board? (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c. Web-link of the policies, if available.				•		Web Lii	nks give	n below'	•	-	
2.		nether the entity has translated the policy into procedures. es/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.		the enlisted policies extend to your value chain partners? es/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<ol> <li>Name of the national and international codes/certifications/ labels/standards (e.g. Forest stewardship council, Fairtrade Rainforest alliance, Trustee) standards (e.g. SA 8000, OHSAS, ISO, BIS) mapped to each principle.</li> </ol>				/guidelin ne to tim ot in view 01/1400	ies/rules ne. Indus v while f 1/45001	/policies stry prac ormulati /50001/	etc., iss tices, na ng the p	sued by ational/ir olicies. \$ 01/1406	the Gov ternatio Standarc 4, BIS, (	ent appl ernment nal stan ds such a OISD etc	of India dards as
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5. Specific commitments, goals, and targets set by the entity

6. Performance of the entity against the specific commitments, goals and targets along-with reasons in case the same are not met.

applicable, are widely adopted across the company. BPCL has set forth several goals and targets in line with the NGRBC principles, focusing on energy, community development, and environmental sustainability. The company remains committed to achieving SDG, Net Zero commitments under the Paris Agreement, UNGC, etc. For more details on BPCL's goals and performance please

refer to BPCL's Sustainability Report.

#### Web Links given below\*

- Principle 1: <u>https://www.bharatpetroleum.in/images/files/</u> <u>CodeOfConduct\_BPCL.pdf</u>
- Principle 2: <u>https://www.bharatpetroleum.in/Sustainability/</u> <u>Health-Safety-Security-and-Environment/</u> <u>Policies.aspx</u>
- Principle 3: <u>https://www.bharatpetroleum.in/images/files/</u> <u>Human-Rights-Policy.pdf</u>
- Principle 4: <u>https://www.bharatpetroleum.in/Sustainability/</u> <u>Health-Safety-Security-and-Environment/</u> <u>Policies.aspx</u>
- Principle 5: <u>https://www.bharatpetroleum.in/images/files/</u> <u>Human-Rights-Policy.pdf</u>
- Principle 6: <u>https://www.bharatpetroleum.in/Sustainability/</u> <u>Health-Safety-Security-and-Environment/</u> <u>Policies.aspx</u>
- Principle 7: <u>https://www.bharatpetroleum.in/Sustainability/</u> <u>Health-Safety-Security-and-Environment/</u> <u>Policies.aspx</u>
- Principle 8: <u>https://www.bharatpetroleum.com/Social-</u> <u>Responsibility/Corporate-Social-Responsibility/</u> Visionand-Policy.aspx
- Principle 9: <u>http://www.bharatpetroleum.com/PDF/Citizen\_</u> Charter.pdf

#### Governance, leadership, and oversight

 Statement by director responsible for the business responsibility report, highlighting ESG related challenges, targets and achievements (listed entity has flexibility regarding the placement of this disclosure)

Health, Safety, Security and Environmental initiatives have always been a core business activity of BPCL. All the Business Units and Entities in BPCL adhere to the commanding principle of 'Safety First, Safety Must'. The objective is to achieve zero incidents, effective containment of hydrocarbons and mitigation of associated hazards. The organization's endeavor is to achieve its mission of 'Zero Incidents, Zero Harm and Zero Excuses'.

BPCL has a well-structured Emergency Response Disaster Management Plan (ERDMP) which encompasses Preparedness, Mitigation, Planning and Restoration (PMPR). Mock drills, as per PNGRB guidelines, are regularly conducted and reviewed to ensure emergency preparedness at all locations. Incident Reporting is a very critical activity with respect to disseminating the learnings across the organization. The incidents reported are thoroughly investigated, Root Cause Analysis is carried out and circulated online to all stakeholders, to accelerate collaborative learning for safer operations and greater adoption of best practices. As on March 31, 2024, Kochi Refinery has achieved 83.24 million man-hours without Loss Time Accident (LTA), Bina Refinery has achieved 20.01 million manhours without LTA, and Mumbai Refinery has achieved 14.29 million man-hours without LTA for employees.

Governance practices of the Safety Systems and Standard Operating Practices (SOPs) are regularly monitored and reviewed to ensure safe working conditions and operations across all locations. Safety Culture assessments are carried out at a set periodicity to assess the status and actions are put in place to enhance the safety culture to the generative stage. A Workmen Safety perception survey is on the anvil, using a software tool to analyse the data. Risk Based Process Safety (RBPS) Management was successfully implemented and monitored in all the three Refineries of BPCL.

The Corporate Safety Management System (CSMS), which includes addition of two new technical standards and 12 Life Saving Rules (LSR) across the organization (Refinery and Marketing BUs), was strictly adhered to by BPCL, to achieve standardization and establish uniform understanding. The revised CSMS is being implemented, including regular monitoring of the system effectiveness across the organization through compliance measurement audits, surprise dip stick audits etc. Internal and External Audits are an integral part of the verifying mechanism to ensure safe operations and compliance of audit recommendations has always been our topmost priority. External Safety Audits (ESAs) are frequently undertaken by the Oil Industry Safety Directorate (OISD), Petroleum and Natural Gas Regulatory Board (PNGRB), Factory Inspectorate and other statutory bodies, and recommendations are implemented in a time-bound manner.

Various technological interventions were used like the Industrial Internet of Things (IIoT) based Wireless Asset Monitoring System, robotic cleaning of confined places, cloud-based HSSE portal, Cyber Security System of the IT network, manpower monitoring system, camera feed and drones used in turnaround safety surveillance in refineries. The Electronic Work Permit System (e-WPS), with the Integrated Risk Information System (IRIS) for monitoring all ultra critical activities to augment safety across business units, was also implemented. The technology of the Vehicle Tracking System (VTS)/Electromechanical (EM) Digital locks was also integrated with IRIS at the central command and control center, ensuring Industrial Transport Discipline Guidelines (ITDG) for recording, monitoring and corrective actions against enroute violations, which had an impact on reduction of in-transit accidents collectively (Retail and LPG SBUs). Further, BPCL became the first OMC to introduce e-KYC for LPG customers through face recognition in both, customer and operator applications, clocking 27 lakh registrations to ensure customer integrity.

The Pipeline Entity has implemented an interlock Bypass Online Authorization System to enhance process safety with mapping of the Geographical Information System (GIS), to enable comprehensive data management of all the pipelines on a single platform with concurrent access from anywhere at any time. With the commissioning of the Pipeline Intrusion Detection System (PIDS) in the Cochin Coimbatore Karur Pipeline (CCKPL), all major product pipelines of BPCL are covered under our stateof-the-art technology. Altogether, 13 tapping attempts were averted using this technology across the network. The Pipeline Entity achieved zero LTA and fatalities for 26 years consecutively.

Training and development form an integral part of the organization's competency building program. Corporate HSSE arranged and imparted training on various topics of HSSE for more than 3,930 man-hours, covering 2,794 participants. Besides, self-paced mandatory online training through M/s. Dupont for HSSE role holders on 14 strategic modules was implemented through HR department, on an online portal through the 'My Sphere' application, as a part of the competency building program for management staff. HSSE also organized high impact webinars on Health (mental health and lifestyle improvement), Safety (organizational safety) and Environment (net zero, lifecycle assessment, waste management, sustainability etc.) across BPCL for employees. The Refineries conducted training programs on process safety management, contractor safety management on scaffolding, the e-permit system, turnaround management, maintenance activities etc. Safety talks were delivered to all PCVO crews, which focussed on training them about the importance of adhering to traffic rules, and thorough check of the vehicle before leaving the premises. The drivers are encouraged to be aware of all first aid actions in case of an emergency and are provided with a Transport Emergency Card (TREM).

BPCL is wholly devoted to address the issues of climate change and believes that a comprehensive solution, which includes efficient use of energy, technological advancements, energy transition alternatives like renewable energy, biofuels and Green Hydrogen are the need of the hour for ensuring environmental safety and a sustainable ecosystem.

BPCL has set a target to become Net Zero for its Scope 1 and Scope 2 Greenhouse Gas (GHG) emissions by 2040, in line with the nation's objective of achieving Net Zero emissions by 2070. BPCL has carried out a detailed study of all its business units and identified various short-term and long-term levers to reduce emissions to achieve Net Zero targets. Renewable Energy (RE) has been identified as one of the key thrust areas, with the objective of addressing in-house power requirements through renewable sources.

For setting up major solar projects, land parcels within BPCL and its subsidiaries have been identified and feasibility studies are in progress. A solar project of 18 Megawatt peak (MWp) has been commissioned at Bina Refinery and 4.6 MWp floating solar at Kochi Refinery. Commissioning of another 8.4 MWp is under final stages. Work is in progress for two wind projects of 50 Megawatt (MW) each, in Madhya Pradesh and Maharashtra and 71 MWp DC solar at Prayagraj, with a total investment of ₹ 1,275 crore approximately. About 17,252 ROs have been provided with a solar system/solar lights. BPCL is setting up a pilot plant of 2 TPD Temperature-Programd Desorption (TPD) of Green Hydrogen to study the intricacies, and then to scale up to meet Green Hydrogen requirements in the refineries. BPCL is also setting up a Green Hydrogen refuelling station at Kochi using indigenous Bhabha Atomic Research Center (BARC) technology. BPCL has also been awarded a Green Hydrogen production capacity of 2,000 MTPA through Bio-Mass based pathways under the Strategic Interventions for Green Hydrogen Transition (SIGHT) scheme through a Solar Energy Corporation of India (SECI) tender.

BPCL is in the process of identifying viable Carbon Capture, Utilization and Storage (CCUS) technologies which can be implemented in its refineries to capture  $CO_2$  emissions. These emerging technologies will be adopted gradually with a focus on Scope 1 emissions. In alignment with the Net Zero goals of BPCL, Corporate Research and Development Center (CRDC) is working on various CCUS technologies, such as Carbon Capture from Refinery off gases, Simulated Moving Bed Adsorption (SMB), Methanol production from  $CO_2$  captures and Sustainable Aviation Fuel (SAF).

BPCL has benchmarked its Sustainability Initiatives on Environment, Social and Governance (ESG) parameters on the Dow Jones Sustainability Index (DJSI) platform and was ranked the eighth best Company globally in the Oil and Gas sector for the year 2023-24. BPCL also benchmarked its performance on the Carbon Disclosure Project (CDP) Platform of Sustainability and Climate Change, representing the Company's transition towards environmental stewardship, and maintaining its rating at 'Management Level', which is the best in the Indian Oil and Gas sector and on par with the international peer group. The organization's Sustainability performance and initiatives were recognized during the year by renowned institutions and agencies through a number of awards and accolades such as The Energy and Resources Institute (TERI), Confederation of Indian Industry (CII), Federation of Indian Petroleum Industry (FIPI), Golden Peacock, Economic Times, etc.

The latest report on Sustainability was published for the year 2022-23, following sector specific GRI Standards and other global frameworks, and mapped with United Nations' 17 Sustainable Development Goals. The Sustainable Development Report of BPCL is assured by an independent third party, as per Accounting Ability 1000 AS third edition (AA1000 AS V3) 'Type 2 Moderate level', and International Standards of Assurance Engagement (ISAE) 3000.

The organization is continuously implementing various initiatives in the direction of minimizing the operational impacts on the environment and firmly believes that clean energy alternatives shall help in protecting the

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environment. The capacity of renewable energy was increased from 62.3 MW to 94.89 MW and Energy Efficient Lighting (EEL) capacity was increased from 63.52 MW to 71.05 MW during the year. Mumbai Refinery, Bina Refinery, Pipelines, Retail, LPG and Aviation locations have implemented 100% energy efficient lights and other locations have planned to achieve this target by 2025.

BPCL has blended 166.42 crore litre ethanol with MS in FY 2023-24 and achieved a blending percentage of 11.7%. It has sold 243 TKL of E20 (MS blended with 20% ethanol) through 4,422 ROs across India. BPCL also blended 9.45 crore litre of Biodiesel with HSD and achieved a blending percentage of 0.36 % in FY 2023-24.

BPCL is setting up a 1G and 2G Bio-Ethanol Refinery with a capacity of 100 KL/day each at Baulsingha Village, Bargarh District, Odisha. The plant is in advanced construction, which will be mechanically completed by October 2024 and final commissioning by March 2025. The 2G Ethanol Plant shall utilize around 480 MT of agricultural waste (rice straw) as feedstock, whereas the 1G Ethanol Plant shall utilize around 230 MT of surplus/damaged rice grain as feedstock to produce 100 KL of Ethanol per day each. Both these plants are being designed for Zero Liquid Discharge (ZLD) requirements. Once operational, it shall be a one-of-a-kind bio-refinery in India with both, 2G and 1G Ethanol production and designed for ZLD requirements. The expected total emission reduction from Bargarh Bio-Ethanol refinery at full design capacity will be around 1.1 lakh MTCO<sub>2</sub>e per year.

The initiatives on renewables have resulted in annual reduction of GHG emissions by approximately 376 TMTCO<sub>2</sub>e. Additionally, other sustainable initiatives such as Ujjwala Yojana, transportation of product through pipelines, use of Biofuel in MS and HSD and energy conservation activities, have helped in reduction of emissions by approximately 8.27 MMTCO<sub>2</sub>e, totalling 8.64 MMTCO<sub>2</sub>e for the year 2023-24.

BPCL's primary thrust is on highways to develop Highway Fast Charging Corridors. BPCL has established 120 corridors covering more than 35,000 kms distance on the highways. BPCL has already set up 2,443 EV charging stations at Retail Outlets in FY 2023-24 making it a cumulative total of 3,135 EV charging stations. BPCL has signed an MOU with TATA Motors to share insights and decide locations to set up 7,000 charging stations. BPCL has signed an agreement with Trinity Cleantech for setting up three-wheeler fast chargers in UP. BPCL has also allied with major original equipment manufacturers (OEMs) like Ola, Ather and Hero for two-wheeler fast chargers. Further, BPCL has expanded its CNG network and mechanically completed 435 CNG stations and commissioned 278 CNG stations during FY 2023-24, making it a cumulative total of 2,031 CNG stations across the country. These initiatives will help in reduction of Scope 3 emissions and maintaining a clean environment.

This year, BPCL has planted more than 1,60,000 trees to improve the green cover and enhance biodiversity by using the Miyawaki technique (multi-layered dense forestation), seed bombing and conventional methods. The cumulative total of trees planted at various BPCL locations has crossed the mark of 10.5 lakh, which helped in increasing  $CO_2$  sinks by sequestering 23,600 MTCO<sub>2</sub>e. Bina Refinery and the Forest Department, MP signed a MoU for their partnership to develop a greenbelt on 90 ha forest land at Kanjia range, Khurai, Vanmandal North Sagar, MP with a total investment of ₹ 1.96 crore in 5 years' project duration, starting from July 2024.

BPCL has been proactively and continuously working towards increasing the Rainwater Harvesting (RWH) capacity, to reduce the dependency on other sources of water. The total catchment area under RWH has increased from 11.95 lakh sqm to 13.49 lakh sqm, which helped in saving 640 TKL of water during the year FY 2023-24. BPCL is implementing the recommendations of the RWH study carried out at Mumbai Refinery, to increase the share of fresh water from rainwater and reduce dependency on Brihanmumbai Municipal Corporation.

As a responsible corporate citizen, with an obligation towards prevention of soil contamination, BPCL carried out a third party audit to get its locations certified for 'Zero Waste to Landfill'. Thereafter, all the refineries and marketing locations are certified for 'Zero Waste to Landfill' except KR, which shall complete the certification by September 2024.

BPCL is following the 5R rule of Waste Management, i.e., Refuse, Reduce, Reuse, Repurpose and Recycle waste in all its operations. The Lubricants BU has taken a license for Extended Producer's Responsibility (EPR) under the brand owner category for lubricant packaging plastic containers and disposed of approximately 4,891 MT of plastic waste responsibly during FY 2023-24. The Company has adopted composting in a big way to dispose of organic waste from the refineries and marketing locations in a responsible manner.

BPCL has conducted a pilot Life Cycle Assessment (LCA) study from the cradle to the grave at Wadilube Installation, where blending of Lubricants takes place. The project was carried out by National Institute of Industrial Engineering (NITIE), one of the leading research institutes in Mumbai using Gabi software. This helped in identifying the possible hotspots for improvement and alternatives that could reduce energy consumption, biodiversity and environmental impacts.

BPCL is committed to leverage sustainable development, operational efficiency, and improved processes and technologies, in order to reduce resource consumption, in line with the national policy and in compliance with related regulatory norms, to conserve and sustain the natural and social ecosystems as an integral element of our business.

# 8. Details of the highest authority responsible for implementation and oversight of the business responsibility policy/policies

The Sustainable Development Committee has been established by the Board which is responsible for implementing and overseeing principles identified in NGRBC in line with existing policies at BPCL.

# 9. Does the entity have a specified committee of the Board/Director responsible for decision-making on sustainability-related issues? (Yes/No). If yes, provide details.

Yes, BPCL has a Sustainable Development Committee (SDC) in place responsible for decision-making pertaining to sustainability related issues. The committee examines sustainability initiatives every six months and provides recommendations for further improvement.

The key members of the committee are:

- 1. Dr. (Smt.) Aiswarya Biswal, Chairperson-DIN No.9396589
- 2. Shri. Vetsa Ramakrishna Gupta-DIN No-8188547
- 3. Shri. Ghanshyam Sher-DIN No.9396915
- 4. Shri. Sanjay Khanna-DIN No.-9485131
- 5. Shri. Gopal Krishan Agarwal-DIN No.-226120
- 6. Dr. (Smt.) Sushma Agarwal-DIN No.-10065236

#### 10. Details of review of NGRBCs by the company:

	Indicate whether the review was undertaken by Director/committee of the board/any other committee							ا Frequency(Annually/half-yearly/quarterly any other – please specify)						erly/				
Subject for review	P1	P 2	P3	P4	P5	P6	P7	P8	P9	P1	P2	P3	P4	Ρ5	P6	P7	P8	P9
Performance against above policies and follow up action	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				Ha	lf Yea	arly			
Compliance with statutory requirements of relevance to the principles, and the rectification of any non-compliances	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			As a	and v	vhen	Requ	uired		

# 11. Has the entity carried out independent assessment/evaluation of the working of its policies by an external agency? (Yes/No). If yes, provide the name of the agency.

P1	P 2	P3	P4	P5	P6	P7	P8	P9
No	No	No	No	No	No	No	No	No

# 12. If answer to question (1) above is "No" i.e., not all principles are covered by a policy, reasons to be stated:

Questions	P1	P 2	P3	P4	P5	P6	P7	P8	P9
The entity does not consider the principles material to its business (Yes/No)	NA	NA	NA	NA	NA	NA	NA	NA	NA
The entity is not at a stage where it is in a position to formulate and implement the policies on specified principles (Yes/No)	NA	NA	NA	NA	NA	NA	NA	NA	NA
The entity does not have the financial or/ human and technical resources available for the task (Yes/No)	NA	NA	NA	NA	NA	NA	NA	NA	NA
It is planned to be done in the next financial year (Yes/No)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Any other reason (please specify)	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### SECTION C: PRINCIPLE WISE PERFORMANCE DISCLOSURE

This section is aimed at helping entities demonstrate their performance in integrating the Principles and Core Elements with key processes and decisions. The information sought is categorized as "Essential" and "Leadership". While the essential indicators are expected to be disclosed by every entity that is mandated to file this report, the leadership indicators may be voluntarily disclosed by entities which aspire to progress to a higher level in their quest to be socially, environmentally and ethically responsible.

# Principle 1 - Businesses should conduct and govern themselves with integrity, and in a manner that is ethical, transparent, and accountable.

#### **Essential Indicators**

1. Percentage coverage by training and awareness programs on any of the principles during the financial year:

Segment	Total number of training and awareness programs held	Topics/principles covered under the training and its impact	% of persons in respective category covered by the awareness programs
Board of directors	1	Induction workshop for Independent Directors – where presentation was made on provisions of Companies Act, 2013 pertaining to Board Meetings, Board committees, effective element for engagement with the Board and emerging trends in Board governance and India Energy Week	100%
Key managerial personnel	1	Induction workshop for KMP's – where presentation was made on provisions of Companies Act, 2013 pertaining to Board Meetings, Board committees, effective element for engagement with the Board and emerging trends in Board governance and India Energy Week	100%
Employees other than BoD and KMPs	234	Safety, Behavioral, Functional, Technical, Human Rights and Well-Being	100%
Workers	462	Safety, Technical, Skill Upgradation and Well-Being	100%

2. Details of fines/penalties/punishment/award/compounding fees/settlement amount paid in proceedings (by the entity or by directors/KMPs) with regulators/law enforcement agencies/judicial institutions in the financial year, in the following format (Note: the entity shall make disclosures on the basis of materiality as specified in Regulation 30 of SEBI (Listing Obligations and Disclosure Obligations) Regulations, 2015 and as disclosed on the entity's website):

		Monetary			
	NGRBC Principles	Name of the regulatory/ enforcement agencies/ judicial institution	Amount (INR)	Brief of the Case	Has an appeal been preferred? (Y/N)
Penalty/fine	NA	Nil	Nil	NA	NA
Settlement	NA	Nil	Nil	NA	NA
Compounding Fee	NA	Nil	Nil	NA	NA

Non-Monetary						
	NGRBC Principles	Name of the regulatory/ enforcement agencies/ judicial institution	Brief of the Case	Has an appeal been preferred? (Y/N)		
Imprisonment	Nil	Nil	NA	NA		
Punishment	Nil	Nil	NA	NA		

3. Of the instances disclosed in Question 2 above, details of the Appeal/Revision are preferred in cases where monetary or non-monetary action has been appealed.

Case details	Name of the regulatory/enforcement agencies/judicial institutions
NA	NA

4. Does the entity have an anti-corruption or anti-bribery policy? If yes, provide details in brief and if available, provide a web link to the policy.

Yes, The company has an Anti-fraud policy for all employees including part time employees for establishment of various procedures and controls to minimize the chances of fraud, submission of report to competent authority etc. This is an internal policy and available on company's internal website.

5. Number of Directors/KMPs/employees/workers against whom disciplinary action was taken by any law enforcement agency for the charges of bribery/corruption.

	FY 2023-24	FY 2022-23
Directors	Nil	Nil
KMPs	Nil	Nil
Employees	NII	Nil
Workers	NII	Nil

#### 6. Details of complaints with regard to conflict of interest:

	FY 2023-24		FY 2022	2-23
	Number	Remarks	Number	Remarks
Number of complaints received in relation to issues of conflict of interest of the directors	Nil	Nil	Nil	Nil
Number of complaints received in relation to issues of conflict of interest of the KMP's	Nil	Nil	Nil	Nil

 Provide details of any corrective action taken or underway on issues related to fines/penalties/action taken by regulators/law enforcement agencies/judicial institutions, on cases of corruption and conflicts of interest. Not Applicable

#### 8. Number of days of accounts payables

			₹ in crore
Nu	mber of days of accounts payables	FY 2023-24	FY 2022-23
i)	Accounts payable x 365 days <sup>x</sup>	9,545,527.45	99,17,223.38
ii)	Cost of goods/services procured	404,933.67	4,55,163.04
iii)	Number of days of accounts payables	23.58	21.79

9. Open-ness of Business: Provide details of concentration of purchases and sales with trading houses, dealers, and related parties along with loans and advances and investment, with related parties, in the following format:

				₹ in crore
Parameters	Met	trics	FY 2023-24	FY 2022-23
Concentration of	a.	i) Purchases from trading houses	66,593.17	71,831.50
Purchases		ii) Total purchases	3,80,730.35	4,28,973.25
		iii) Purchases from trading houses as % of total purchases	17.49%	16.74%
	b.	Number of trading houses where purchases are made	12	10
	C.	i) Purchases from top 10 trading houses	64,705.23	71,831.50
		ii) Total purchases from trading houses	66,593.17	71,831.50
		<ul> <li>Purchases from top 10 trading houses as % of total purchases from trading houses</li> </ul>	97.16%	100.00%
Concentration of	a.	i) Sales to dealer/distributors	3,61,252.31	3,62,449.21
Sales	•	ii) Total Sales	5,06,911	5,35,651
	-	iii) Sales to dealer/distributors as % of total sales	71.27%	67.67%
	b.	Number of dealers/distributors to whom sales are made	27,746	26,945
	C.	i) Sales to top 10 dealers/distributors	1,994	2,198
		ii) Total Sales to dealer/distributors	3,61,252.31	3,62,449.21
		<li>Sales to top 10 dealers/distributors as % of total sales to dealer/ distributors</li>	0.55%	0.61%

					₹ in crore
Parameters	Me	trics		FY 2023-24	FY 2022-23
Share of RPTs in	a.	i)	Purchases (Purchases with related parties)	13,096.62	35,240.21
		ii)	Total Purchases	3,80,730.35	4,28,973.29
		iii)	Purchases (Purchases with related parties as % of Total Purchases)	3.44%	8.22%
	b.	i).	Sales (Sales to related parties)	979.01	4,133.61
		ii)	Total Sales	5,05,475.73	5,32,104.86
		iii)	Sales (Sales to related parties as % of Total Sales)	0.19%	0.78%
	C.	i)	Loans & advances given to related parties	164.49	612.98
		ii)	Total loans & advances	2,192.73	2,706.39
		iii)	Loans & advances given to related parties as % of Total loans & advances	7.50%	22.65%
	d.	i)	Investments in related parties	8,388.84	8,794.72
		ii)	Total Investments made	14,458.02	13,872.35
		iii) l	Investments in related parties as % of Total Investments made	58.02%	63.40%

#### Leadership Indicators

1. Awareness programs conducted for value chain partners on any of the Principles during the financial year:

Total number of awareness programs held	Topics/principles covered under the training	Category of Value chain partners covered	% of value chain partners covered (by value of business done with such partners) under the awareness programs
30	Conducted Safety training on SOPs, use of firefighting equipment & fire extinguishers etc(P3, 6,9)	Compressor Operators, Dealers, DSMs, LCV/HCV drivers, supervisors & helpers at CNG stations.	100%
356	Conducted Location HSSE Committee Meetings, Conducted Contractor Safety Meetings (P3, 6,9)	PMC, Contractors supervisors & workmen, outsourced contract staff	100%
162	Safety Awareness Programs on safe uses of Natural Gas (P3, 6,9)	PNG-Domestic/Industrial/ Commercial customers	100%
67	Awareness program on sustainability and Net zero (P2,6)	BPCL Officers	100%
3	Catch Them Young Program was Conducted for Educating Young India about Natural Gas. (P8)	School Students	100%
3	HSSE Training for officers on CNG/PNG Operations(P3,6)	BPCL Officers	100%
250	Smart Baney PNG Chuney Program Conducted for Customers as part of PNG Drive(3,6,9)	For Domestic Customers	100%
57	Conducted Health Check up Program(P3,6)	Contract workman and LCV/ HCV operators	100%
1	PESO Workshop at Kharghar (P3,6)	Officers from Ahmednagar & Aurangabad GA	100%
1	GIS Mapping by external trainer Mr. Subhajee Guha (Success Manager from M/s ESRI India Mumbai) at Aurangabad Pipelines office (P3,6	, Aurangabad GA	100%
1	SS Tubing Installation Training by external trainer M/s Swagelok, Pune at Aurangabad pipeline office (P3,6)	Officers from Ahmednagar & Aurangabad GA	100%
1	Gail Gas training on CGD (P3,6)	BPCL Officers	100%
1	Safety at Project Sites – Working with Cranes and on Scaffolding (P3,6)	Officers from Ahmednagar & Aurangabad GA	100%

2. Does the entity have processes in place to avoid/manage conflict of interests involving members of the Board? (Yes/No) If yes, provide details of the same.

Yes, the Company has established a 'Code of Conduct for Board Members and Senior Management Personnel' to prevent conflicts of interest wherein the directors must sign a declaration stating that they will not participate in situations which are directly or indirectly in conflict with the Company's interests. The Code prohibits directors from making decisions on matters where they have a personal conflict of interest or believe there will be one. The Companies Act of 2013 requires Directors to disclose their interests on Form MBP-1, which must be submitted in the board meeting. The Board is informed of any transactions in which a director has an interest, post which the concerned director(if any) is not involved in the discussion. The code can be accessed through the link provided: <a href="https://www.bharatpetroleum.in/images/files/CodeOfConduct\_BPCL%207.3.24.pdf">https://www.bharatpetroleum.in/images/files/CodeOfConduct\_BPCL%207.3.24.pdf</a>

#### Principle 2 - Businesses should provide goods and services in a manner that is sustainable and safe.

#### **Essential Indicators**

1. Percentage of R&D and capital expenditure (capex) investments in specific technologies to improve the environmental and social impacts of product and processes to total R&D and capex investments made by the entity, respectively

	FY 2023-24 (in %)	FY 2022-23 (in %)	Details of improvements in environmental and social impacts
R&D	100%	100%	Expenditure in new and energy efficient refining processes, new formulation developments, green hydrogen implementation, emerging green energy technologies
Capex	0.32%	0.14%	R&D facilities augmentation, Development of new facilities for Biofuels, polymer & Petchem, Alternate energy

#### 2. a. Does the entity have procedures in place for sustainable sourcing? (Yes/No)

The company abides by the Public Procurement Policy for Micro and Small Enterprises (MSE) Order 2012 and its subsequent amendments. The company's total procurement value of Goods and Services during 2023-24, excluding Works Contracts, where MSEs could have participated was ₹9,821.28 crore whereas the actual procurement value from MSEs was ₹3,315.40 crore, i.e., an achievement of 33.76% thereby exceeding the target of 25%. The company also offers Trades Receivable Discounting Scheme (TReDS) to its MSME Vendors.

As an effort to enhance procurement from MSEs, the Company held online Vendor Development Programs for MSE SC/ST and MSE Women, in which over 250 vendors participated and received extensive presentations from MSME and NSSHO (National SC/ST Hub office) authorities. The firm also took part in ten MSME Vendor Development Programs hosted by several MSME DFOs (Development and Facilitation Offices). The company also conducted two workshops for BPCL vendors to enroll them in TReDS platforms. In all of these events, vendors were welcomed, and their expertise was expanded by various presentations on the company's existing and future business requirements, as well as emerging trends.

- b. If yes, what percentage of inputs were sourced sustainably?
   33.76% inputs were sourced sustainably.
- Describe the processes in place to safely reclaim your products for reusing, recycling, and disposing at the end of life, for (a) Plastics (including packaging) (b) E-waste (c) Hazardous waste and (d) other waste.

BPCL R&D is exploring the use of mixed plastic waste in environmentally friendly and sustainable ways, such as road making at refineries and retail outlets. The proposal is to evaluate this through certified bodies for commercial applications, aiming to achieve "Net Zero" goals and meet the "Swachh Bharat Mission" targets.

**The Plastic Waste** Management Rules mandate Extended Producers Responsibility (EPR) for managing plastic waste packaging. In 2023-24, BPCL Lube collected 4891 MT of plastic waste and reprocessed it through an approved party.

**E-Waste** is being disposed as per E-waste Management Rules 2022 requirements. BPCL has also made a waste management manual for the benefit of locations. E-waste disposal is centrally monitored by IS Department.

**Hazardous waste** includes spent catalysts, oily sludge, and oily sludge from refineries. Spent catalysts contain precious metals and are sent to recyclers for recovery, co-processing, or incineration. Oily sludge from storage tanks and Effluent Treatment Plants is treated and blended with finished products. Unused sludge is either bio-remediated or incinerated.

**Kitchen waste**, generated in refinery towns and canteens, is treated in waste management plants to convert it into biogas and manure. Biomedical waste is managed according to the Biomedical Waste Management Rules, 2016, and batteries are disposed off through registered recyclers through a buy back policy.

**Non-hazardous wastes** are managed through the reduction, reuse, and recycling process.

#### Waste Management System at BPCL:

BPCL's waste management system operates on a clear categorization of waste into hazardous and non-hazardous types, each with specific disposal methods and recycling strategies. Within the hazardous category, materials like spent catalysts and slop oil undergo a recycling process, either through authorized recyclers or internal reprocessing for reuse. On the other hand, non-hazardous waste, including light waste, plastic waste, and canteen waste, follows a different route. These materials are either internally recycled or sold to authorized vendors, serving various purposes like the production of bio-manure. Moreover, BPCL ensures the

responsible disposal of hazardous waste like spent clay containing oil or residues containing oil, employing safe landfilling methods facilitated by Treatment, Storage, and Disposal Facilities (TSDF). For critical waste streams like bio-medical waste, BPCL relies on incineration, a process predominantly managed by government hospitals.

4. Whether Extended Producer Responsibility (EPR) is applicable to the entity's activities (Yes/No). If yes, whether the waste collection plan is in line with the EPR plan submitted to Pollution Control Boards? If not, provide steps taken to address the same.

The Plastic Waste Management Rules mandate Extended Producers Responsibility (EPR) for managing plastic waste packaging. BPCL, a lubricant manufacturer and packaging company, has been granted EPR for plastic waste recycling in the Indian market. The policy was notified on February 16, 2022, and the waste collection plan aligns with the EPR plan submitted with the Pollution Control Board. In 2023-24, BPCL Lubes collected 4891 MT of plastic waste and reprocessed it through a CPCB-approved party, which is used in manufacturing various everyday plastic items.

#### Leadership Indicators

1. Has the entity conducted Life Cycle Perspective/Assessments (LCA) for any of its products (for manufacturing industry) or for its services (for service industry)? If yes, provide details in the following format?

NIC Code	Name of product/ service	% of total Turnover contributed	Boundary for which the Life Cycle Perspective/ Assessment was conducted	Whether conducted by an independent external agency (Yes/ No)	Results communicated in the public domain (Yes/No) If yes, provide the web-link.
46610	Blending of lubricants and additives	0.60%	BPCL Wadilube Plant Facility	Yes, National Institute of Industrial Engineering (NITIE)	Yes, Yes results communicated through Annual Report FY 2022-23 (https://www.bharatpetroleum.in/pdf/ OurFinancial/Complete-BPCL-AR- 2022-23English-Final-9fc811.pdf)

2. If there are any significant social or environmental concerns and/or risks arising from production or disposal of your products/services, as identified in the Life Cycle Perspective/Assessments (LCA) or through any other means, briefly describe the same along-with action taken to mitigate the same.

Name of Product/Service	Description of the risk/concern	Action Taken			
Lubricants	<ul> <li>Climate Change-The carbon footprint of producing 1 litre of lubricant at Wadilube is 1.34 Kg CO<sub>2</sub></li> <li>1. 20 kWh Solar plant installed which led to reduction in impact caused</li> <li>2. The Recycling of plastic waste was able the overall impacts due to plastic waste</li> </ul>				
	Metal Depletion-metal depletion was 9.81*10 <sup>-4</sup> Kg Recycling of metals at site has reduced impact Cu equivalent for making 1 litre of lubricant. by 0.39%				
	Freshwater consumption-Fresh water consumption in Wadilube facility for one liter of lubricant is 7.9*10 <sup>-4</sup> m <sup>3</sup>	1. 2.	The percentage reduction of water footprint due to recycling of steam water as condensate accounted for 4.58% Water footprint of the lubricant from cradle to grave is reduced by 14.85%.		

3. Percentage of recycled or reused input material to total material (by value) used in production (for manufacturing industry) or providing services (for service industry).

	Recycled or reused input material to total material			
Indicate input material	FY 2023-24	FY 2022-23		
Oily Sludge, Catalyst and Flare Gas	0.23%	Data not maintained at present and would be provided in subsequent years.		

4. Of the products and packaging reclaimed at end of life of products, amount (in metric tonnes) reused, recycled, and safely disposed of.

		FY 2023-24		FY 2022-23			
	Re-used	Recycled	Safely disposed	Re-used	Recycled	Safely disposed	
Plastics (including packaging)	Nil	Nil	4,891	Nil	Nil	3,172	
E-waste	Nil	Nil	Nil	Nil	Nil	3.63	
Hazardous waste	90,387	1,15,862	5,957	Nil	Nil	28,842	
Other waste (Non-Hazardous waste)	Nil	11,901	Nil	Nil	Nil	9,052	

5. Reclaimed products and their packaging materials (as a percentage of products sold) for each product category.

Indicate Product Category	Reclaimed products and their packaging materials as % of total products sold in respective category.
Packaging Material	Nil

# Principle 3 - Businesses should respect and promote the well-being of all employees, including those in their value chains.

#### **Essential Indicators**

1. a. Details of measures for the well-being of employees.

	% of employees covered by										
			alth rance		ident rance		ernity efits		rnity efits		care lities
Category	Total (A)	Number (B)	% (B/A)	Number (C)	% (C/A)	Number (D)	% (D/A)	Number (E)	% (E/A)	Number (F)	% (F/A)
Permanent employees											
Male	5,069	5,069	100%	5,069	100%	NA	NA	5,069	100%	5,069	100%
Female	527	527	100%	527	100%	527	100%	NA	NA	527	100%
Total	5,596	5,596	100%	5,596	100%	527	100%	5,069	100%	5,596	100%
Other than Permanent employees											
Male	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Female	1	1	100%	1	100%	1	100%	NA	NA	1	100%
Total	1	1	100%	1	100%	1	100%	NA	NA	1	100%

b. Details of measures for the well-being of workers:

	% of workers covered by										
			alth rance		ident rance	Maternity benefits		Paternity benefits		Day care facilities	
Category	Total (A)	Number (B)	r % (B/A)	Numbe (C)	∽ % (C/A)	Numbei ) (D)	% (D/A)	Numbe (E)	r % (E/A)	Numbe (F)	r % (F/A)
Permanent workers											
Male	2,763	2,763	100%	2,763	100%	NA	NA	2,763	100%	2,763	100%
Female	147	147	100%	147	100%	147	100%	NA	NA	147	100%
Total	2,910	2,910	100%	2,910	100%	147	100%	2,763	100%	2,910	100%
Other than Permanent workers											
Male	BPCL,	a respo	nsible gl	obal cor	porate o	citizen, e	nsures t	hat con	ractors	follow ap	plicable
Female						Paymer					dent
Total	Funds Act, Employee State Insurance Act (subject to applicability), Worman's Compenzation Act and Contract Labor (Regulation & Abolition) Act. BPCL provides welfare amenities such as clean drinking water, clean toilets for all contract workers on sites. All contract workers receive annual/half-yearly health check-ups on-site. They receive first-aid training. Regular awareness activities, including Health Talks and Swachhta Pakhwada, are also carried out regularly to educate contract workers on social and personal development concerns.										

c. Spending on measures towards well-being of employees and workers (including permanent and other than permanent) in the following format:

	FY 2023-24	FY 2022-23
Cost incurred on well-being measures as a % of total revenue of the company.	0.0395%	0.0399%

#### 2. Details of retirement benefits.

		FY 2023-24		FY 2022-23					
Benefits	No. of employees covered as a % of total employees	No. of workers covered as a % of total workers	Deducted and deposited with the authority (Y/N/N.A.)	No. of employees covered as a % of total employees	No. of workers covered as a % of total workers	Deducted and deposited with the authority (Y/N/N.A.)			
PF	100%	100%	Yes	100%	100%	Yes			
Gratuity	100%	NA	NA	100%	NA	NA			
ESI	NA	100%	NA	NA	100%	NA			

Note: EPS portion deducted and deposited with RPFC. EPF administered by Corporation's IPF trust.

#### 3. Accessibility of workplaces

Are the premises/offices of the entity accessible to differently abled employees and workers, as per the requirements of the Rights of Persons with Disabilities Act, 2016? If not, whether any steps are being taken by the entity in this regard.

Yes, The company's premises are accessible to differently abled employees and workers.

4. Does the entity have an equal opportunity policy as per the Rights of Persons with Disabilities Act, 2016? If so, provide a web link to the policy.

Yes, The company has an equal opportunity policy in place as per the Rights of Persons with Disabilities Act, 2016. The policy can be accessed through the following link: <u>https://www.bharatpetroleum.in/images/files/EOP%20BPCL(3).pdf</u>

5. Return to work and Retention rates of permanent employees and workers that took parental leave.

	Permanent e	employees	Permanent workers			
Gender	Return to work rate	Retention rate	Return to work rate	Retention rate		
Male	100%	96.62%	100%	99.04%		
Female	100%	100%	NA	NA		
Total	100%	96.84%	100%	99.04%		

6. Is there a mechanism available to receive and redress grievances for the following categories of employees and workers? If yes, give details of the mechanism in brief.

	(If Yes, then give details of the mechanism in brief)
Permanent workers	The Company has always valued open and transparent communication, encouraging employees to share
Other than permanent workers	their concerns with their Line Managers, HODs, HR, ESE Department, or the Senior Leadership Team. The Company has maintained an open-door policy, granting all employees access to the Leadership Team regardless of hierarchy. To address issues, the Company has established systems and processes such as
Permanent employees Other than permanent	the Grievance Management System (Samadhan Portal), Safety Committees, Internal Committee (POSH),
	Whistle-blower Policy, and Human Rights Policy.
employees	The Employee Satisfaction Enhancement (ESE) department aims to proactively engage with employees, understand their concerns, and resolve them while maintaining confidentiality. Employees can register grievances with their line Manager, embedded HR, or directly with the independent Employee Satisfaction Enhancement Department. The process and FAQs for approaching ESE are available on the Company's Intranet.
	New recruits are educated on the Code of Conduct, Discipline and Appeal Rules (CDA Rules)/Standing Orders and the Prevention of Sexual Harassment (POSH) at the workplace. Additionally, the Company provides a Public Grievance Redress Mechanism for customers and the general public, and designates Central Public Information Officers (CPIO) and Appellate Authority under the Right to Information Act, 2005.

#### 7. Membership of employees and workers in association(s) or Unions recognized by the listed entity:

		FY 2023-24			FY 2022-23	
Category	Total employees workers in the respective category (A)	No. of employees/ workers in the respective category, who are part of the association(s) or Union (B)	% (B/A)	Total employees/ workers in the respective category (C)	No. of employees/ workers in the respective category, who are part of the association(s) or Union (D)	% (D/C)
Total permanent employees	5,596	0	0.00%	5,583	0	0.00%
Male	5,069	0	0.00%	5,105	0	0.00%
Female	527	0	0.00%	478	0	0.00%
Total permanent workers	2,910	2,810	96.56%	3,130	3,006	96.04%
Male	2,763	2,687	97.25%	2,969	2,869	96.63%
Female	147	123	83.67%	161	137	85.09%

8. Details of training given to employees and workers:

		FY 2023-24					FY 2022-23				
		On health and safety measures		On s upgrad			On health and safety measures		On skill upgradation		
Category	Total* (A)	No. (B)	% (B/A)	No. (C)	% (C/A)	Total (D)	No. (E)	% (E/D)	No.(F)	% (F/D)	
Employees											
Male	5,069	5,069	100%	5,069	100%	5,105	5,105	100%	5,105	100%	
Female	527	527	100%	527	100%	478	478	100%	478	100%	
Total	5,596	5,596	100%	5,596	100%	5,583	5,583	100%	5,583	100%	
Workers											
Male	27,971	27,971	100%	27,971	100%	26,797	26,797	100%	26,797	100%	
Female	786	786	100%	786	100%	647	647	100%	647	100%	
Total	28,757	28,757	100%	28,757	100%	27,444	27,444	100%	27,444	100%	

9. Details of performance and career development reviews of employees and workers:

		FY 2023-24				
Category	Total (A)	No. (B)	% (B/A)	Total (C)	No. (D)	% (D/C)
Employees						
Male	5,069	5,069	100%	5,105	5,105	100%
Female	527	527	100%	478	478	100%
Total	5,596	5,596	100%	5,583	5,583	100%
Workers						
Male	27,971	2,763	9.88%	26,797	2,969	11.08%
Female	786	147	18.70%	647	161	24.88%
Total	28,757	2,910	10.12%	27,444	3,130	11.41%

10. Health and safety management system:

a. Whether an occupational health and safety management system has been implemented by the entity? (Yes/No). If yes, what is the coverage of such a system?

Yes, BPCL has implemented a comprehensive Health, Safety, and Environment Policy to reduce environmental impact in its operations. The refineries have been certified for ISO 9001, ISO 14001, ISO 45001, and ISO 50001 for Energy Management systems. Risks and opportunities are identified with mitigation strategies and detailed Hazard Identification and Risk Assessment (HIRA) and aspect impact (AI) are prepared and documented. BPCL HSSE policies provide direction to maintain a productive and safe workplace. Every location has a HSSE role holder, with the primary responsibility of ensuring adherence to the HSSE Policy. Safety protocols and SOPs are available to limit incidents, mishaps, injuries, and exposure to hazards. The Corporate Safety Management System (CSMS) and 12 Life Saving Rules (LSR) are adhered to across the organization to achieve standardization and enhance safety culture.

#### b. What are the processes used to identify workrelated hazards and assess risks on a routine and non-routine basis by the entity?

BPCL has developed a Corporate Safety Management System (CSMS) to manage health and safety risks at an "As Low as Reasonably Practical (ALARP)" level and drive improvement across the company. The system prescribes minimum safety management system compliance requirements and is applicable to all operations, assets, facilities, employees, contractors, and stakeholders. A portal has been developed for capturing incident reporting, leading, and lagging indicators, which are critical for learning and disseminating learnings for corrective/ preventive actions. Hazard Identification & Risk Analysis (HIRA) studies have been conducted at all operating locations, along with Threat Vulnerability & Risk Assessment and Security Audits. Risks and Opportunities are identified with mitigation strategies, and a detailed HIRA and Aspect Impact (AI) has been prepared and documented for all refinery and marketing locations. Quantitative Risk Analysis (QRA) and Hazard & Operability study (HAZOP) are also conducted in line with 175 requirements of Oil Industry Safety Directorate (OISD) and Petroleum and Natural Gas Regulatory Board (PNGRB) guidelines.

BPCL has established Process Safety Events identification and System in Measurement accordance with American Petroleum Institute (API) Recommended Practice (RP) 754 Standard, ensuring that process safety events are monitored, recorded. and analyzed. Process Safetv Management (PSM) principles are implemented to create safe workplaces and prevent disasters. BPCL undertakes regular safety audits to identify hazards, ensure compliance with standard operating procedures, and assess the performance of the company's safety measures. External Safety Audits (ESA) are undertaken by the OISD, PNGRB, and the Petroleum & Explosives Safety Organization (PESO), and the Surprise Dip Stick Audit (SDSA) mechanism was further strengthened to ensure compliance with 12 Life Saving Rules (LSR) at locations.

#### c. Whether you have processes for workers to report the work-related hazards and to remove themselves from such risks.

Yes. BPCL encourages employees to report potential risks, hazardous situations, and near misses. Incidents recorded in the portal system are thoroughly examined, Root Cause Analysis is conducted, and the results are shared publicly with all stakeholders to promote collaborative learning and safer operations. Awareness initiatives highlight the need of reporting near misses to both workers and contractors. Safety Committee meetings and Monthly Safety Theme activities are essential for raising awareness, communicating safety problems, and improving practices. Committees are formed with equal participation from workers and management to address safety concerns and audit recommendations, in accordance with legislative requirements.

BPCL urges all functional leaders, supervisors, workers, and contract personnel to implement safe practices in daily routines, operational planning, and development activities. The workforce is encouraged to report safety concerns and provide safety suggestions to enhance overall safety management. BPCL has safety policies and SOPs in place to prevent incidents, injuries, and exposure to risks for employees, contractors, customers, tank truck drivers, and communities where they operate.

#### d. Do the employees/workers of the entity have access to non-occupational medical and healthcare services?

Yes, BPCL focuses on Occupational Health and Safety (OHS) to prevent accidents and hazards in the workplace. The company extends its commitment to customers and communities nearby. As per the Factories Act, BPCL conducts half yearly medical check-ups for employees and contract labors working in operating locations and refineries. Additionally, the company maintains a first-aid kit at all locations, provides 20% of employees with first-aid training and refresher courses, and maintains an OHS center accessible to employees and workers.

11. Details of safety related incidents, in the following format:

		FY 2023-24	FY 2022-23
Safety incident/number	Category	Inside plant	Inside plant
Lost Time Injury Frequency Rate (LTIFR) (per one-million-person hour worked)	Employees	0	0
	Workers	0.038	0.066
No. of incidents	Employees	Nil	Nil
	Workers	100	144
Total recordable work-related injuries	Employees	Nil	Nil
	Workers	3	13
No. of fatalities	Employees	Nil	Nil
	Workers	1	4
High consequence work-related injury or ill-health (excluding fatalities)	Employees	Nil	Nil
	Workers	Nil	Nil

\*Including in the contract workforce

12. Describe the measures taken by the entity to ensure a safe and healthy workplace.

BPCL emphasizes on the safety of all its company personnel and ensures their participation in comprehensive "Safety in the Workplace" training program at operational sites in compliance with legislative standards. The HSE policy emphasizes the use of appropriate technology to reduce the environmental effect of activities. Refineries and marketing business units now have ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018 certifications for their quality, environmental, occupational health, and safety management systems. A safe workplace is achieved through various safety management systems, including Operation and Maintenance Procedure, Work Permit System, Personnel Safety using PPEs, Trainings, Risk Analysis and Management, Process Safety Management, Management of Change, Safety Audit, Employee Participation in building Safety Culture, Incident Investigation and Analysis, Emergency Planning and Response, and Safety in Facility Design/ Construction.

To ensure a healthy workplace, safety aspects are considered during the design stage, with Safety Integrity Level (SIL) 3 being considered in process parameters. Asset integrity is maintained by following the latest applicable standards/guidelines. Firefighting facilities conform to OISD and NFPA standards. Earthing systems are installed according to IS3043, and an Integrated Management System is implemented comprising ISO 9001, ISO 14001, and 45001. Work Permit Systems include Job Safety Analysis, working at height, Incident Reporting System, and Safety Meetings at various levels. Capability building includes training at entry, refresher, and workshops. Emergency Response & Disaster Management Plan (ERDMP) is prepared and approved according to Petroleum and Natural Gas Regulatory Board (PNGRB) guidelines. Regular mock drills assess readiness, and safety audits are conducted to assess compliance levels. Off-the-job safety is also practiced for the welfare of employees and their families.

#### 13. Number of complaints on the following made by employees and workers

	FY 2023-24			FY 2022-23			
	Filed during the year	Pending resolution at the end of year	Remarks	Filed during the year	Pending resolution at the end of year	Remarks	
Working conditions	0	0	Nil	0	0	Nil	
Health & safety	0	0	Nil	0	0	Nil	

#### 14. Assessments for the year

	% of your plants and offices that were assessed (by entity or statutory authorities or third parties)
Health and safety practices	100%
Working conditions	100%

15. Provide details of any corrective action taken or underway to address safety-related incidents (if any) and on significant risks/concerns arising from assessments of health & safety practices and working conditions.

BPCL operating locations follow several regulatory criteria, such as Petroleum and Explosives Safety Organization(PESO), Petroleum and Natural Gas Regulatory Board (PNGRB) rules, BIS, and API standards. They have clear operating procedures, manuals, and verified ERDMP documentation. All safety-related incidents are quickly reported and examined by competent team members, based on their severity. BPCL guarantees that remedial steps are taken to eliminate possible events, while ensuring that they are appropriate to the problem and hazards identified. The lessons learned from these accidents are shared with stakeholders, and remedial measures are monitored and assessed on a regular basis. Safety audits evaluate the efficacy of corrective action implementation. Significant hazards associated with health and safety are mitigated by technological/ digitizal interventions, competency development on safety aspects through workshop/training, periodic monitoring and review.

#### Leadership Indicators

1. Does the entity extend any life insurance or any compensatory package in the event of death of (A) Employees (Y/N) (B) Workers (Y/N).

**Employees** - Yes, The company has internal schemes that cover both accidental and non-accidental deaths, and the compenzation payable is determined according to the scheme's provisions.

**Workers** - Yes, The company has internal policies for permanent workers that cover accidental and non-accidental fatalities, with compenzation provided depending on the scheme terms, whilst indirect workers are protected by ESIC or the Employees Compensation Act.

2. Provide the measures undertaken by the entity to ensure that statutory dues have been deducted and deposited by the value chain partners.

The contractor is responsible for paying wages to all contract workers on a timely basis, and before processing their monthly bills, they must produce a copy of the wage record, PF/ESI challans, and remittances of PF/ESI dues for their contract workers. Wage payout is done electronically through NEFT transfer directly into the contract labour's bank accounts. To ensure 100% compliance with the contract requirements, the contractor must pay electronically/via NEFT transfer. The primary employer's representative authenticates and verifies the disbursement of wages. 3. Provide the number of employees/workers having suffered high consequence work-related injury/ill-health/ fatalities (as reported in Q11 of Essential Indicators above), who have been rehabilitated and placed in suitable employment or whose family members have been placed in suitable employment:

	Total no. of affected	employees/workers	No. of employees/worke and placed in suitable family members have b emplo	employment or whose been placed in suitable
	FY 2023-24	FY 2022-23	FY 2023-24	FY 2022-23
Employees	Nil	Nil	Nil	NA
Workers	1	4	Nil	NA

4. Does the entity provide transition assistance programs to facilitate continued employability and the management of career endings resulting from retirement or termination of employment? (Yes/No)

BPCL is committed towards welfare of its retired employees and has revamped its online portal which offers a practical and user-friendly platform with features like self-updating personal contacts and mobile phone availability. The company also provides comprehensive pre-retirement training programs, focusing on physical health, mental well-being, financial literacy, and personal development. These programs cover health management, fitness regimens, stress management, and coping strategies for emotional resilience. They also equip employees with knowledge on investment strategies, retirement planning, pension schemes, and financial management, ensuring financial stability postretirement. These sessions provide BPCL employees with a holistic toolkit for a rewarding and healthy retired life, demonstrating the company's unwavering commitment to its workforce beyond their tenure.

5. Details on assessment of value chain partners:

% of value chain partners (by value of business done with such partners) that were assessed

	F=,
Health and safety conditions (Dealers, distributors & transporters)	100%
Working conditions (Dealers, distributors & transporters)	100%

6. Provide details of any corrective actions taken or underway to address significant risks/concerns arising from assessments of health and safety practices and working conditions of value chain partners.

Value Chain Partner	Health and Safety Concerns	Major Efforts Undertaken
Contractors Executing various Project Works at Project locations	Life risks due to: 1) Fall from height during work execution. 2) Fall and transact inside	<ol> <li>Contractors and workmen undergo a mandatory induction program prior to commencing work, focusing on safety rules, regulations, SOPs, CSMS objectives, Project HSSE Manager, and Assurance Plan.</li> </ol>
	<ol> <li>Fall and trapped inside Excavated Pit and buried due to soil collapse</li> </ol>	e 2. They are required to use PPE, comply with 12 Lifesaving rules, and have a mitigation plan for construction hazards.
	<ol> <li>Trapped inside confined space &amp; life risk due to suffocation, Fire situation</li> </ol>	<ol> <li>A HIRA/Hazop Study is conducted before work commences, and contractors are required to have a HSSE supervisor before job execution.</li> </ol>
	<ol> <li>Fire accident due to working in Hazardous area (Brown Field locations)</li> </ol>	<ol> <li>Regular safety awareness enhancement activities, such as Toolbox Talks, Safety Committee Meetings, and site visits, are organized to ensure safety and deal with violations through CAPA.</li> </ol>
	<ol> <li>Material handling and accident due to failure of lifting equipment, unconducive site condition</li> </ol>	<ol> <li>A competency building and safety awareness development program was organized for contractor workers at regional, HQ, and site levels. The program included construction safety, first-aid training, and standard operating procedures (SOPs), with 1,661 participants and 4,983 training manhours.</li> </ol>
		<ol> <li>In 2023-24, 83,94,852 man-days were worked at project sites without LTA.</li> </ol>
		<ol> <li>Contractors and employees are encouraged to report any Near- miss and breaches pertaining to Life Saving Rules(LSR). This year, 395 Near misses and 381 LSR breaches were reported across all 58 project locations.</li> </ol>
		<ol> <li>95 health check-up camps were organized, benefiting 1,525 contract workers around the project site.</li> </ol>
Mobile Cascade crew/ CNG stations	CNG leakage during filling LCV cascade at Mother Station	• The maintenance checklist includes a visual inspection of stainless steel tubing and a soap solution test of threaded joints.
		<ul> <li>Advisory note issued regarding the safe transit of CNG cascades via LCV/HCV.</li> </ul>
		<ul> <li>400 safety campaigns were conducted focussing on handling emergency situations involving 4,000 customers including drivers, dealers, compressor operators.</li> </ul>

Value Chain Partner	Health and Safety Concerns	Major Efforts Undertaken
TT Crew	Road Transport of hazardous/ flammable fuels	8,164 TT Crew members received defensive driving instruction (DDT).
		• 7,380 TT crew m embers received simulator-based DDT training
		• 148 Health checkup camps conducted.
Retail Network/Dealers/ Distributors	Fire accidents during product transfer	Mock drills on emergency situations were held at several ROs in accordance with the ERDMP to boost staff confidence and skills.
LPG delivery chain/	Safe delivery and usage of LPG	Safety clinics conducted - 46,381
Customers	cylinders	<ul> <li>Training to Distributor Show room staff - 2,343</li> </ul>
		<ul> <li>Delivery Staff of Distributors for PDC checks - 3,217</li> </ul>
		SOP training to Direct Customers - 335
		<ul> <li>Training to showroom staff - 2,475</li> </ul>

# Principle 4 - Businesses should respect the interests of and be responsive to all its stakeholders.

#### **Essential Indicators**

1. Describe the processes for identifying key stakeholder groups of the entity.

Bharat Petroleum Corporation Limited (BPCL) is committed to upholding a corporate governance philosophy that aims to protect the interests of stakeholders through principles of transparency, comprehensive disclosures, employee empowerment, collective decision-making, and social initiatives. BPCL identifies key stakeholders as those significantly affected by its operations or capable of influencing them. Regular engagement with stakeholders enables BPCL to understand their expectations regarding environmental, social, and governance matters. The company collaborates with stakeholders to promptly address sustainability challenges and communicates through diverse channels, fostering transparent and effective communication to build trust and enduring relationships. Regular engagement assists BPCL in reviewing and integrating stakeholder expectations into strategic planning and business activities.

In addition to routine stakeholder engagement, BPCL conducted a formal survey this year to solicit feedback. The company has devised mechanisms to identify internal and external stakeholders based on their influence and impact on sustainability performance as part of its sustainability reporting process. Internal stakeholders include employees, investors, and shareholders, while external stakeholders encompass government and regulatory bodies, industry associations, customers, competitors, communities and NGOs, dealers and distributors, suppliers and contractors, media, and industry trade associations.

2. List stakeholder groups identified as key for your entity and the frequency of engagement with each stakeholder group.

Stakeholder group	Whether identified as vulnerable & marginalized group (Yes/ No)	$\chi \rightarrow \gamma = -\gamma + -\mu + \mu + \gamma$	Frequency of engagement (Annually/half-yearly/ quarterly/others – please specify) Purpose and scope of engagement includin key topics and concerns raised during such engagement		topics and concerns raised during such
Government & Regulators	No	Official Meetings/MoU Reviews, Monthly/periodic project updates Electronic Communications, Public Disclosures, Conclaves/ Seminars/events etc	Memorandum of Understanding with Regulators Periodic Meetings with Regulators	1. 2. 3. 4.	To understand goals and objectives To engage in official initiatives For undertaking community developments projects For new policy developments and ministry directives
Industry & Trade Associations	No	Emails, Meetings Conferences, events, Seminars, Virtual Platforms	Periodic and need base Meetings	1. 2. 3.	HSE and intercompany product transfer risks, among other industry issues. Collaboration to commercialize technologies/ products or conduct joint research, etc. Grievances and complaints redressal.

Stakeholder group	Whether identified as vulnerable & marginalized group (Yes/ No)	Channels of communication (Email, SMS, Newspaper, Pamphlets, Advertisement, Community meetings, Notice board, Website), Other	Frequency of engagement (Annually/half-yearly/ quarterly/others – please specify)	Purpose and scope of engagement including key topics and concerns raised during such engagement
Suppliers & Contractors	Yes (MSME/ SC/ST vendors)	Contractors Vendor meets, Inspection visits to facility, emails and phone calls, Tenders	As per Requirement	<ol> <li>Sourcing Materials, Equipment, and Services</li> <li>Electronic tendering, HSSE policy training, supply chain advisory notes, contract labor safety, vendor awareness initiatives, etc.</li> </ol>
Dealers and Distributors	No	Award Functions, Meetings and training sessions, Individual Interactions	Periodic and Need based	<ol> <li>Product quality</li> <li>Constant supply</li> <li>Facility maintenance</li> <li>Safety during product handling</li> <li>Technological improvements</li> </ol>
Shareholders & Investors	No	Public disclosures on Financial performance, Annual General Meeting, Press briefing & social media	AGM, Quarterly reports, Quarterly investor meets, Press Releases	Enhancing growth and profitability, integrating sustainable development practices, refining operational efficiencies, and embracing new technologies to uphold ethical governance.
Customers	No	Customer Meeting Customer Satisfaction Survey, telephonic feedback, Online communication survey	Regular	<ol> <li>Innovating processes, embracing eco-friendly technologies, delivering quality products and services, addressing grievances, and soliciting feedback.</li> <li>Offering competitive prices, ensuring product quality and quantity, and maintaining high- quality service standards.</li> </ol>
Employees	Yes (Women/SC/ ST)	Career progression, Occupational Health and Safety requirements	Personal interactions Performance appraisal	Fostering a safe and healthful workplace promotes a culture of ongoing education, provides avenues for career advancement and professional development, and ensures swift resolution of grievances.
Communities & NGOs	Yes	Face to face meetings through implementing partners to execute CSR projects/programs or through district administration, etc.	Periodic	CSR initiatives are put into action to support community progress, offering skill training to enhance livelihood prospects, and establishing an exit strategy to maintain project sustainability.

#### Leadership Indicators

 Provide the processes for consultation between stakeholders and the board on economic, environmental, and social topics or if consultation is delegated, how is feedback from such consultations provided to the board.

Bharat Petroleum Corporation Limited (BPCL) is dedicated to sustainability and ethical business practices. It has instituted procedures to facilitate dialogue between stakeholders and the board regarding Environmental, Social, and Governance (ESG) matters. The company actively engages in surveys, focus groups, and stakeholder meetings to gather input on its sustainability endeavors.

BPCL has established a Board-level Sustainable Development Committee (SDC), composed of two fulltime Directors and four Independent Directors, with an independent director leading the committee. The Sustainable Development Committee is responsible for overseeing strategy and monitoring the implementation of key sustainability initiatives. Twice a year, the Sustainable Development Committee assesses sustainability efforts, reviews material topics, evaluates stakeholder engagement, and examines Environmental, Social, and Governance (ESG) metrics overseen by the Corporate HSSE department.

The board receives regular updates on the company's sustainability performance and progress towards ESG

targets through the SDC. The committee ensures that stakeholder feedback informs decision-making processes, underscoring BPCL's commitment to transparency and responsiveness.

2. Whether stakeholder consultation is used to support the identification and management of environmental, and social topics (Yes/No). If so, provide details of instances as to how the inputs received from stakeholders on these topics were incorporated into the policies and activities of the entity.

Stakeholder consultation plays a pivotal role in identifying areas for enhancement in corporate environmental and social endeavors. For instance:

When engaging in CSR initiatives or environmental conservation projects beyond BPCL's boundaries, input and feedback from stakeholders such as communities and regulatory bodies are actively sought. BPCL consistently takes steps to enhance its products, such as transitioning from BS-IV to BS-VI grade fuels, improving fuel and lubricant efficiency, tailoring fuels for colder climates, incorporating Ethanol blending in petrol, advancing toward renewable energy and biofuels, navigating the Energy Transition, establishing EV charging infrastructure, and developing a roadmap toward Net Zero emissions, all through collaboration with government bodies, customers, and other stakeholders.

3. Provide details of instances of engagement with, and actions are taken to, address the concerns of vulnerable/marginalized stakeholder groups.

BPCL engages with communities through its CSR department and project partners. Issues identified during these interactions are prioritized and presented for management evaluation. The company undertakes initiatives aimed at empowering, uplifting, and fostering overall community development as a result of these interactions.

BPCL focuses on addressing the needs of disadvantaged, vulnerable, and marginalized stakeholders by implementing activities, programs, and initiatives for their welfare, with the goal of achieving holistic and sustainable development. CSR projects and activities target the welfare of Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OBC), and other economically weaker sections.

Additionally, initiatives are carried out for communities in Aspirational Districts identified by NITI Aayog.

The CSR Vision of BPCL is to "Be a Model Corporate Entity with Social Responsibility committed to Energizing Lives through Sustainable Development," aiming to foster enduring relationships with various communities. BPCL emphasizes that its most significant achievements are not solely financial but also those that benefit marginalized communities in small towns and villages.

BPCL's CSR initiatives primarily focus on five core thrust areas:

- Education
- · Environmental Sustainability
- Skill Development
- Health & Sanitation
- · Community Development

#### Principle 5 - Businesses should respect and promote human rights

#### **Essential Indicators**

1. Employees and workers who have been provided training on human rights issues and policy(ies) of the entity, in the following format:

		FY 2023-24			FY 2022-23		
Category	Total (A)	No. of employees/ workers Total (A) covered (B) % (B/A)			No. of employees/ workers Total (C) covered (D) % (		
Employees							
Permanent	5,596	5,596	100%	5,583	5,583	100%	
Other than permanent	1	1	100%	1	1	100%	
Total employees	5,597	5,597	100%	5,584	5,584	100%	
Workers							
Permanent	2,910	2,910	100%	3,130	3,130	100%	
Other than permanent	25,847	25,847	100%	24,314	24,314	100%	
Total workers	28,757	28,757	100%	27,444	27,444	100%	

2. Details of minimum wages paid to employees and workers

		FY 2023-24				FY 2022-23				
			al to m wage	More minimu			Equa minimu		More minimu	
Category	Total (A)	No. (B)	% (B/A)	No. (C)	% (C/A)	Total (D)	No. (E)	% (E/D)	No. (F)	% (F/D)
Employees										
Permanent	5,596	0	0%	5,596	100%	5,583	0	NA	5,583	100%
Other than permanent	1	0	NA	1	100%	1	0	NA	1	100%
Total employees	5,597	0	0%	5,597	100%	5,584	0	NA	5,584	100%
Workers										
Permanent	2,910	0	0%	2,910	100%	3,130	0	NA	3,130	100%
Other than permanent	25,847	0	0%	25,847	100%	24,314	0	NA	24,314	100%
Total workers	28,757	0	0%	28,757	100%	27,444	0	NA	27,444	100%

Note: For other than permanent workers, as per the statutory obligations, it is ensured that contract labor are paid not less than the applicable minimum wages as per the guidelines issued from GOI from time to time. The contractor is primarily responsible to ensure timely payment of wages to all contract labor. As an established process, the contractor submits proof of payment of wages along with their monthly bills.

#### 3. Details of remuneration/salary/wages

#### a. Median remuneration/wages:

	r	Male		emale
	Number	Median remuneration/ salary/wages of respective category	Number	Median remuneration/ salary/wages of respective category
Board of Directors (BoD)	5	50,25,019.71	0	NA
Key managerial personnel*	0	NA	1	38,47,200.00
Employees other than BoD and KMP	5,064	22,32,154.50	527	21,74,767.13
Workers	2,763	10,74,239.95	147	17,77,801.50

\*All BoDs are KMPs and their median remuneration/salary/wages has been disclosed in the above section. Therefore not considered

#### b. Gross wages paid to females as % of total wages paid by the entity, in the following format:

	FY 2023-24	FY 2022-23
Gross wages paid to females as % of total wage*	8.63%	8.59%

\*This is exclusive of wages paid to KMP.

Note 1: For computing the compensation, we have considered only regular heads of compensation (one-time payments and perquisites are excluded). The major components are – Basic Pay, Stagnation Increments, Dearness allowance, HRA, Cafeteria Allowance.

Note 2: The Companies Act, 2013 contains a provision relating to calculation of median salaries of employees. However, the requirements is exempt for Government Companies. In view thereof, the median salaries of employees and permanent workers has not been computed.

#### Do you have a focal point (individual/committee) responsible for addressing human rights impacts or issues caused or contributed to by the business? (Yes/No)

Yes, BPCL has a Human Rights Policy duly approved by the Board recently. Corporation believes in equal opportunity for its employees and ensures that there is no discrimination based on caste, tribe, religion, or region in providing various welfare facilities (including but not limited to) to employees health, efficiency, financial well-being, social status, satisfaction, employment, growth, remuneration, or development. BPCL, being a responsible organization, complies by all the national and international Human Rights standards. Our philosophy of an energized workplace has resulted in best-in-class HR practices which incorporate state of the art facilities for rightful working and joyful living infusing high energy. All employees are treated with dignity and BPCL has developed a strong and mutually beneficial association with its workforce.

Employee Satisfaction Enhancement (ESE) department is a unique and innovative initiative taken by the Company in our endeavor to make BPCL 'A Great Place to Work'. ESE also strives to protect human rights of all employees and resolve cases of violation of human rights. ESE's primary focus area is to reach out to maximum number of employees in a proactive manner, to listen to them, to understand their issues and concerns and aim to resolve them. All issues/ grievances brought to the notice of ESE are dealt with utmost confidentiality. The 'Samadhan' portal is also available to resolve HR related queries online. As a law-abiding corporate citizen, we ensure that the contractors fully comply with their obligations under various statutes including Minimum Wages Act, Payment of Wages Act, Employee Provident Funds Act, Employee State Insurance Act, Contract Labor (Regulation & Abolition) Act etc. as applicable. Provisions of welfare amenities including clean drinking water, clean toilet facilities, rest rooms etc. are extended to all contract labor working in the premises of BPCL. Annual/Half Yearly Onsite Health Check-Up Camps are conducted for all contract labor. They are also provided training in first-aid on a continuous basis. Additionally, several awareness programs such as Health Talks, Swachhta Pakhwada etc. are conducted on a regular basis to educate the contract labor on various social as well as personal development aspects.

In addition, all our vendor contracts include explicitly stated terms and conditions (under General Conditions of Contract) for protection of human rights. Furthermore, the Company has a public grievance system/grievance redressal system for the general public. Grievance Mechanism is also available in public domain and can also be accessed online as given in Chapter 14 of Citizen Charter on BPCL website for customer complaints.

5. Describe the internal mechanisms in place to redress grievances related to human rights issues.

BPCL is committed to preventing unlawful discrimination and harassment of its employees and value chain partners. The company conducts human rights reviews and impact assessments throughout the value chain. A Grievance Redressal Procedure is in place to record and resolve grievances, with all issues

handled with confidentiality. ESE aims to address genuine grievances and provide feedback for system and policy improvements. Employees can approach ESE in various ways, including face-to-face, telephonic, letter, or email. Unresolved issues are escalated to the relevant SBU or Entity Head, and employees are informed before closing of cases. The entire process flow and FAQs regarding the ESE procedure are published on the company's Intranet for ease of access to all employees.

6. Number of complaints on the following made by employees and workers:

		FY 2023-24			FY 2	022-23
	Filed during the year	Pending resolution at the end of year	Remarks	Filed During the year	Pending resolution at the end of year	Remarks
Sexual harassment	3	2	1 upheld & closed.	1	0	1 upheld & closed.
Discrimination at workplace	Nil	Nil	NA	Nil	Nil	-
Child labor	Nil	Nil	NA	Nil	Nil	-
Forced labor/Involuntary labor	Nil	Nil	NA	Nil	Nil	-
Wages	Nil	Nil	NA	Nil	Nil	-
Other human rights-related issues	3	0	Nil	10	1	Grievances are recorded through igloo platform over the Company's intranet

7. Complaints filed under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, in the following format:

	FY 2023-24	FY 2022-23
Total Complaints reported under Sexual Harassment on of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (POSH)	3	1
Complaints on POSH as a % of female employees/workers	0.23%	0.09%
Complaints on POSH upheld	1	1

8. Mechanisms to prevent adverse consequences to the complainant in discrimination and harassment cases.

In accordance with the 'Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013', BPCL established an Internal Committee (IC) in each Region/Refinery. The Regional/Refinery IC is supervised by the Central Internal Committee. The identities of the complainant, respondent, witnesses, and evidence acquired throughout the inquiry process, as well as committee recommendations and employer actions, are kept secret and not disclosed to the public or media. Violations of confidentiality agreements may result in disciplinary action under the said Act.

- 9. Do human rights requirements form part of your business agreements and contracts? (Yes/No) Yes, the Human rights requirements are part of the business agreements and contracts.
- 10. Assessments of the year

	% of your plants and offices that were assessed (by the entity or statutory authorities or third partie		
Child labor	100%		
Forced/involuntary labor	100%		
Sexual harassment	100%		
Discrimination at workplace	100%		
Wages	100%		
Others – (Compliance of different statutory provisions as per CLRA)	100%		

11. Provide details of any corrective actions taken or underway to address significant risks/concerns arising from the assessments at Question 9 above.

BPCL has established a defined Grievance Redressal Procedure for employees, which allows them to file grievances within certain time frames. All units/regions/ head offices have an internal committee established under the Sexual Harassment of Women at Workplace Act, 2013. BPCL also has an Employee Satisfaction Enhancement team that communicates with employees through multiple channels, including online, to better understand their concerns and frustrations. Plans are in place to improve employee satisfaction via wellness, employee connection, and timely grievance resolution.

#### Leadership Indicators

 Details of a business process being modified/ introduced as a result of addressing human rights grievances/complaints.

The Public Grievance Redressal framework within BPCL extends across various business units, providing a robust online platform for receiving, escalating, and

4. Details on assessment of value chain partners:

promptly resolving public complaints. These complaints are consistently overseen through the Centralized Public Grievance Redress and Monitoring System (CPGRAMS), an online web-based system accessible at <u>https://www.pgportal.gov.in/</u>. CPGRAMS was developed by the National Informatics Center (NIC) in collaboration with the Department of Administrative Reforms and Public Grievances (DARPG). It's worth noting that there were no alterations to the business processes during the fiscal year 2023-24.

2. Details of the scope and coverage of any human rights due diligence conducted

All sites uphold full compliance with statutory regulations, a commitment reinforced by routine internal inspections that ensure thorough due diligence in this regard.

3. Is the premise/office of the entity accessible to differently abled visitors, as per the requirements of the Rights of Persons with Disabilities Act, 2016?

Yes.

	% of value chain partners (by value of business done with such partners) that were assessed
Sexual harassment	
Discrimination at workplace	**
Child labor	
Forced/involuntary labor	··· Nil
Wages	
Others – please specify	

5. Provide details of any corrective actions taken or underway to address significant risks/concerns arising from the assessments at Question 4 above.

#### NA

#### Principle 6: Businesses should respect and make efforts to protect and restore the environment.

#### **Essential Indicators**

1. Details of total energy consumption (in Joules or multiples) and energy intensity:

Parameter(in TJ)	FY 2023-24	FY 2022-23
For Renewable Sources		
Total electricity consumption (A)	181.62	125.26
Total fuel consumption (B)	0	0
Energy consumption through other sources (C)	0	0
Total energy consumed from renewable sources (A+B+C	181.62	125.26
From non-renewable sources		
Total electricity consumption (D)	4,135.52	3,655.68
Total fuel consumption (E)	122,619.99	123,668.40
Energy consumption through other sources (F)	-	0
Total energy consumed from non-renewable sources (D+E+F)	126,755.51	127,324.08

Parameter(in TJ)	FY 2023-24	FY 2022-23
Total energy consumed (A+B+C+D+E+F)	126,937	127,449
Energy intensity per rupee of turnover (Total energy consumed / Revenue from operations) (TJ/ Cr ₹)	0.25	0.24
Gross Revenue from operations in Cr	506,911.00	533,467.55
Energy intensity per rupee of turnover adjusted for Purchasing Power Parity (PPP) (Factor for multiplication: Using Worldbank conversion factor of 20.22 as per 2023) (Total energy consumed / Revenue from operations adjusted for PPP) ( TJ/ Cr ₹)	5.06	4.83
Sales Throughput MMT	51.04	48.92
Energy intensity in terms of physical output(TJ / MMT)	2,487	2,605
Energy intensity (optional) – the relevant metric may be selected by the entity.	-	-

 Does the entity have any sites/facilities identified as designated consumers (DCs) under the performance, achieve, and trade (PAT) Scheme of the Government of India? (Y/N) If yes, disclose whether targets set under the PAT scheme have been achieved. In case targets have not been achieved, provide the remedial action taken if any.

All BPCL Refineries have been identified as Designated consumers under PAT(Perform Achieve Trade) Scheme. PAT Cycle II was completed in FY 2018-19 and PAT VI Cycle was completed in FY 2022-23. No new PAT Cycle has been declared by Bureau of Energy Efficiency (BEE) for FY 2023-24. A time-bound action plan is being developed by Refineries to achieve PAT objectives.

3. Provide details of the following disclosures related to water, in the following format:

Parameter	FY 2023-24	FY 2022-23
Water withdrawal by source (in '000 kilolitres)		
(i) Surface water	27,553	28,186.32
(ii) Groundwater	483	658.12
(iii) Third-party water (municipal, tanker and AAI water supplies)	4,564	4,647.83
(iv) Seawater/desalinated water	25,652	28,329.60
(v) Others (RCF and Rainwater)	2,829	2,831.91
Total volume of water withdrawal (in '000 kilolitres) (i + ii + iii + iv + v)	61,081	64,654
Total volume of water consumption (in '000 kilolitres)	34,684	35,309
Gross Revenue from operations in Cr	5,06,911.00	5,33,467.55
Water intensity per rupee of turnover (water consumed/turnover) (KL/Cr)	68.42	66.19
Water intensity per rupee of turnover adjusted for Purchasing Power Parity (PPP) (Total water consumption / Revenue from operations adjusted for PPP) (KL/CR ₹)	1,383.50	1,338.33
Sales Throughput MMT	51.04	48.92
Water intensity in terms of physical output (KL/MMT)	680	722
Water intensity (optional) – the relevant metric may be selected by the entity	-	-

#### 4. Provide the following details related to water discharged:

Parameter	FY 2023-24	FY 2022-23
Water discharge by destination and level of treatment (in 000 kiloliters)		
(i) To Surface water	1,993	2,397
- No Treatment	Nil	Nil
- With treatment-please specify level of treatment	1,993	2,397
(ii) To Groundwater	18	15
- No treatment	0	Nil
- With treatment – please specify level of treatment	18	15
(iii) To Seawater	24,370	26,913
- No treatment	-	Nil
- With treatment-please specify level of treatment	24,370	26,913
(iv) Sent to third parties	0	Nil
- No treatment	0	Nil
- With treatment-please specify level of treatment	0	Nil
(v) Others	16	8
- No treatment	16	8
- With treatment-please specify level of treatment	0	Nil
Total water discharged (in kiloliters)	26,396	29,333

5. Has the entity implemented a mechanism for Zero Liquid Discharge? If yes, provide details of its coverage and implementation.

**Mumbai Refinery:** ZLD is not implemented in MR, although certain efforts have been made, such as 100% recycling of processed water from the Effluent Treatment Plant (ETP) and purified water from the sewage treatment facility is utilized as raw cooling water.

**Kochi Refinery:** ZLD is not implemented in KR, however the process effluent water at Kochi Refinery is processed in effluent treatment plants before being recycled to a reverse osmosis-based demineralisation facility (RODM). Domestic sanitary water is processed in two Sewage Treatment Plants (STP), with the treated water recycled back to the effluent treatment plant.

**Bina Refinery:** Yes, BR has implemented mechanism for Zero Liquid Discharge (ZLD). The initiatives taken for the same are given below:

- Effluent generated is treated in Latest technology membrane-based Effluent Treatment Plant (ETP) of 9000 KLD capacity which includes Sequential Batch Reactor (SBR) and Membrane Bio Rector (MBR) having physical, chemical and biological treatment of wastewater. Treated effluent is further treated in Reverse Osmosis Demineralization plant (RO-DM) and used in boilers.
- 2. Robust waste water treatment, enabling to achieve 100% recycling of ETP treated water to RO plant
- 3. Recycling and treatment of storm channel water
- 4. Segregating and utilizing high TDS stream in DFDS system
- 5. Utilizing low TDS (<1500 ppm) RO reject water for green belt watering.
- 6. Please provide details of air emissions (other than GHG emissions) by the entity:

Parameter	Unit	FY 2023-24	FY 2022-23
NOx	Metric Tonnes	6,293	7232
SOx	Metric Tonnes	14,993	8596
Particulate matter (PM)	Metric Tonnes	905	776
Persistent organic pollutants (POP)	Metric Tonnes	0	0
Volatile organic compounds (VOC)	Metric Tonnes	0	0
Hazardous air pollutants (HAP)	Metric Tonnes	0	0
Others – Please specify.	Metric Tonnes	0	0

7. Provide details of greenhouse gas emissions (Scope 1 and Scope 2 emissions) and its intensity:

Parameter	Unit	FY 2023-24	FY 2022-23
Total Scope 1 emissions (Break-up of the GHG into $CO_2$ , $CH_4$ , $N_2O$ , HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , if available)	million Metric tonnes of CO <sub>2</sub> equivalent	9.71	9.68
Total Scope 2 emissions (Break-up of the GHG into $CO_2$ , $CH_4$ , $N_2O$ , HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , if available)	million Metric tonnes of CO <sub>2</sub> equivalent	0.82	0.72
Total Emissions (Scope 1 + Scope 2)	million Metric tonnes of CO <sub>2</sub> equivalent	10.53	10.40
Gross Revenue from operations	crore ₹	506,911.00	533,467.55
Total Scope 1 and Scope 2 emissions per rupee of turnover (Total Scope 1 and Scope 2 GHG emissions/Revenue from operations	2 .	20.77	19.50
Total Scope 1 and Scope 2 emission intensity per rupee of turnover adjusted for Purchasing Power Parity (PPP) (Total Scope 1 and Scope 2 GHG emissions/Revenue from operations adjusted for PPP)	Metric Tonne of CO <sub>2</sub> equivalent per crore Rupees	420.05	394.36
Sales Throughput	ММТ	51.04	48.92
Total Scope 1 and Scope 2 emission intensity in terms of physical output	million Metric tonnes of CO <sub>2</sub> equivalent per million Metric Tonne of Throughput	0.206	0.213
Total Scope 1 and Scope 2 emission intensity (optional) – the relevant metric may be selected by the entity		-	-

8. Does the entity have any project related to reducing greenhouse gas emission? If yes, then provide details.

#### Mumbai Refinery: Energy Conservation Measures

Sr.		MR: Capital Investment —	Energy	Savings
Sr. No.	Description of Schemes for FY 2023-24	(₹ crore)	Fuel MT/Year	Power MWh/Year
1	Stripping steam optimization in C3/C4 Splitter in CCU	NIL	262	-
2	DHDS De-aerator pressure optimization	NIL	238	-
3	Replacement of 1 no. BCW CT fan blades in CPP BCW cooling towers with new generation energy efficient E-FRP blades	0.03	-	62.3
4	NHGU PSA adsorbent replacement impact	As part of PDR	8,533	-
5	Boiler House (BH) BFW pump offloading	NIL	300	-
6	Tank 116 (VLSFO service) steam to coils isolated for steam savings	NIL	714	-
7	DM water/Pure condensate routing optimization in DHDS/CCR and CDU3 through NHGU	1.65	952	_
8	BH De-aerator pressure optimization	NIL	3,633	-
9	Electrical Heat Tracing (EHT) Phase-1 in offsites congealing lines	31.25	4,829	-5,954
10	CDU3 crude column top pressure optimization	NIL	1,000	-
11	Tank 117 (VLSFO service) steam to coils isolated for steam savings	NIL	714	-
12	Replacement of AFC fan blades in CCR (6 nos.) with new generation energy efficient E-FRP blades	0.16	-	332.4
13	Replacement of fan blades in BCW cooling towers (CPP 2 nos., FCCU 1 no., GTU 1 no.) with new generation energy efficient E-FRP blades	0.16	-	205.9
14	Replacement of fan blades in RCW cooling towers (CCR 3 nos., DHT 2 nos.) with new generation energy efficient E-FRP blades	0.16	-	409.3
15	Replacement of fan blades in SCW cooling towers (MOC 4 nos., CDU4 7 nos., RMP 2 nos.) with new generation energy efficient E-FRP blades	0.43	-	4,542.7
16	CCR revamp	As part of TA	2,200	-
17	NHT shutdown impact and feed maximization	As part of TA	733	-
18	CDU4 shutdown initiative impact	As part of TA	11,667	-
19	Diversion of VDU hotwell gases to flare instead of local venting (isolation of steam-to-steam ring)	As part of TA	48	-
20	CCU shutdown initiative impact	As part of TA	4,233	-
21	FCCU shutdown initiative impact	As part of TA	2,419	-
22	GTU shutdown initiative impact	As part of TA	233	-
23	Steam traps & Leak Management in CDU4, CCU, FCCU, CCR, GTU, DHDS, ARU units & Utility area (SD jobs)	NIL	1,614	-
24	Hot feed to RFU ex CDU4	NIL	1,071	-
25	CDU4 crude column top pressure optimization	NIL	2,267	-
26	86-P-03 Turbine in DM Plant area offloaded	NIL	1,786	-
Tota	al	33.84	49,446	-401.4

Note: Total MTOE savings includes Fuel and Power savings

#### **KOCHI REFINERY**

No.         Description of Schemes for FY 2023-24         (tracere)         Fueld MTVFace         Power MWn/Yeau           1         Proheat Improvement in CDUS parsing LK and HK ra-boling medium         NL         3.266           2         Routing of CDU3 Mot VGO to VGOHDS unit thereby reducing steam         NIL         2.168           3         DCU heater A & heater B pass headers modification         0.25         1,901         -           4         Various APC initiatives implementation in FY 23-24:         0.255         1,901         -           4         Autous APC initiatives implementation in FY 23-24:         0.25         1,901         -           4         ADD CD tass section, BuOH and 2EH section         -         -         -         -           4         Debt of Xis Staam and FG optimization         - <t< th=""><th>Sr.</th><th></th><th>KR: Capital Investment —</th><th>Energy</th><th>Savings</th></t<>	Sr.		KR: Capital Investment —	Energy	Savings
2       Routing of CDU3 Hot VCO to VGOHDS unit thereby reducing steam       NIL       2.116         1       Peding in VGOHDS unit       0.25       1.901         4       Various APC Initiatives implementation in FY23-24.       .         1       . PDO L Pox section, BuOH and 2EH section       .         2       UB10 & HRSG for steam reduction       .         3.       . NHD S for steam and FG ophinization       .         4.       . DHDT and VGO HDT Preheal Improvement       .         5.       . APC revamp of CDU2 and FCC units       .         6.       . Dynamic SOX limit in DCU and CDU3 thereby increasing heater efficiencies       .         7       Fuel gas connectivity to old Refinery fom IREP thereby reducing the anti-ang and reducing fuel oil consumption in refinery finitate and reducing texcess Fuel Gas in CEMP-II       .         7       Fuel gas connectivity to old Refinery fom IREP thereby reducing the anti-ang and reducing fuel oil consumption in refinery finitate and reducing texces Fuel Gas.       .       .         9       Use of Nitrogen as stipping medium instead of steam in KHDS       NIL       .       .         9       Use of Newimproved Catalystin place of old catalystin NOHDS       NIL       2.604       .         10       Routing KHDS       .       .       .       .       .      <		Description of Schemes for FY 2023-24		Fuel MT/Year	Power MWh/Year
heating in VGOHDS unit       0.25       1,901         3       DCU heater A & heater B pass headers modification       0.25       1,901         4       Various APC Initiatives implementation in FY23-24:       1.       PD0.LP Oxo section, BuOH and 2EH section         2.       UB10 & HRSG for steam reduction	1	Preheat Improvement in CDU3 by passing LK and HK re-boiling medium	NIL	3,256	-
4       Various APC Initiatives implementation in FY23-24:         1.       PD0 LP Oxo section, BuOH and 2EH section         2.       UB10 & HRSG for steam reduction         3.       KHDS for steam and FG optimization         4.       OHDT and VGO HDT Preheat Improvement         5.       APC revamp of CDU2 and FCC units         6.       Dynamic SX limit In DUC and CDU3 thereby increasing heater efficiencies         7       Fuel gas connectivity to old Refinery from IREP theety reducing D28         8       Routing KHDS of gases to Blucox incinerator to avoid flaring: Approx.reducind of 2TBO of CBMP-II         7       Fuel gas connectivity to old Refinery from IREP theety reducing D28         9       Use of Nitrogen as stripping medium instead of steam in KHDS       NIL         7       Fuel gas connectivity to old Catalyst in place of old catalyst in CMOIDS       NIL         8       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45         9       Use of Newimproved Catalyst in place of old catalyst in DHDS       NIL         10       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.47         11       Use of Newimproved Catalyst in place of old catalyst in DHDS       NIL       2.604         12       Use of Newimproved Catalyst in place of old catalyst in DHDS       NIL       2.604	2	, , , , , , , , , , , , , , , , , , ,	NIL	2,116	-
1.       PD0 LP Oxo section, BuOH and 2EH section         2.       UB10 & HRSG for steam reduction         3.       KHD5 for steam and F6 optimization         4.       OHDT and VGO HDT Preheat Improvement         5.       APC revamp of CDU2 and FCC Units         6.       Dynamic SOx limit in DCU and CDU3 thereby increasing heater efficiencies         7.       Installation of sour water coalescer on sour water line in DCU for oil       6       999         6.       Codit Flash drum off-gas from VGOHDS routed to NHT-1 reducing H2       NIL       950         7.       Fuel gas connectivity to oil Refinery from IREP thereby reducing flaring and reducing fuel oil consumption in refinery       0.28       950         8.       Routing KHDS off gases to Biturox incinerator to avoid flaring: 0.09       770       70         9.       Use of New/improved Catalyst in place of oid catalyst in NGOHDS       NIL       229         10.       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45       500         11.       Use of New/improved Catalyst in place of oid catalyst in DHDS       NIL       2,664         13.       IDHDT Unit, 55 AFC metallic blades have been replaced with       0.47       1,704         e-Giass Epony FRP type blades       0.4       1,276       6         14.       Stopping FU C	3	DCU heater A & heater B pass headers modification	0.25	1,901	-
2.       UB10 & HRSG for steam reduction         3.       KHDS for steam and FG optimization         4.       DHDT and VGO HDT Preheat Improvement         5.       APC reverap of CDU2 and FCC units         6.       Dynamic SXL limit in DCU and CDU3 thereby increasing heater efficiencies         5       Installation of sour water coalescer on sour water line in DCU for oil recovery.       6       999         6       Cold Flash drum off-gas from VGOHDS routed to NHT-1 reducing H2 null.       950       6         7       Fuel gas connectivity to old Refinery from IREP thereby reducing Aprox reduction of 2 TPO of HC gas.       0.09       770         7       Fuel gas connectivity to old Refinery from IREP thereby reducing Aprox reduction of 2 TPO of HC gas.       0.109       770         8       Routing Mittogen as stripping medium instead of steam in KHDS       NIL       729         9       Use of New/Improved Catalyst in place of old catalyst in VGOHDS       NIL       2,604         11       Use of New/Improved Catalyst in place of old catalyst in VGOHDS       NIL       2,604         12       Use of New/Improved Catalyst in place of old catalyst in VGOHDS       NIL       2,604         13       In DHDT Unit, 55 AFC metallic biades have been replaced with       0.47       1,704         4       Gtopping FME Upe biades       0.4	4	Various APC initiatives implementation in FY'23-24:			-
3. KHDS for steam and FG optimization       NIL       6.324         4. DHDT and VEO HDT Preheat Improvement       6.324         5. APC revamp of CDU2 and FCC units       6.324         6. Dynamic SXL limit In CDU and CDU3 thereby increasing heater efficiencies       6.334         7. Installation of sour water coalescer on sour water line in DCU for oil recovery.       6.3999         6. Cold Flash drum off-gas from VGOHDS routed to NHT-1 reducing H2       NIL       950         7. Fuel gas connectivity to oil Refinery from IREP thereby reducing flaring and reducing texces Fuel Gas in CEMP-11       0.28       950         7. Puel gas connectivity to oil Refinery from IREP thereby reducing flaring and reducing texces FG from IREP to CEMP-11 to reduce flare loss       0.45       500         10. Routing of excess FG from IREP to CEMP-11 to reduce flare loss       0.45       500       11         12. Use of New/Improved Catalyst in place of old catalyst in OGDS       NIL       2,864       17.04         2.10. DIDT Unit, 56 AFC metallic blades have been replaced with 0.47       0.47       1.704       633         2.51. In DHD Unit, 56 AFC metallic blades have been replaced with 0.47       0.4       1.274       633         3.51. In DHD Unit, 56 AFC metallic blades have been replaced with 0.47       1.704       633       511         3.61. In DUA Unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher ratin		1. PDO LP Oxo section, BuOH and 2EH section			
4.       DHDT and VGO HDT Preheat Improvement       0.324         5.       APC revamp of CDU2 and FCC Units       Second Secon		2. UB10 & HRSG for steam reduction			
4.       DHDT and VGO HDT Preheat Improvement         5.       APC revamp of CDU2 and FCC units         6.       Dynamic SOX limit in DCU and CDU3 thereby increasing heater efficiencies         5       Installation of sour water coalescer on sour water line in DCU for oil recovery.       6       999         6       Cold Flash drum off-gas from VGOHDS routed to NHT-1 reducing H2 intake and reducing fue oil consumption in refinery       0.28       950         7       Fuel gas connectivity to old Refinery from IREP thereby reducing flaring and reducing fuel oil consumption in refinery       0.99       770         8       Routing KHDS off gases to Bilurox incinerator to avoid flaring: 0.09       0.770       74         9       Use of Nicrogen as stripping medium instead of steam in KHDS       NIL       729         10       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45       500         11       Use of New/Improved Catalyst in place of old catalyst in VGOHDS       NIL       3.906       1         12       Use of New/Improved Catalyst in place of old catalyst in place of old catalyst in 0.47       -       1.704         e-Glass Epoxy FRP type blades       0.47       -       1.704       e-Glass Epoxy FRP type blades       631         15       In DHJ Unit, 55 AFC metallic blades have been replaced with owin planer trating which has helped in running only one		3. KHDS for steam and FG optimization	NII	6 324	_
6.       Dynamic SOX limit in DCU and CDU3 thereby increasing heater efficiencies         7.       Fold Flash forum off-gas from VGOHDS routed to NHT-1 reducing H2       NIL       950         8.       Cold Flash forum off-gas from VGOHDS routed to NHT-1 reducing H2       NIL       950         7.       Fuel gas connectivity to old Refinery from IREP thereby reducing flaring and reducing fuel oil consumption in refinery       0.28       950         8.       Routing KHDS off gases to Biturox incinerator to avoid flaring: Approx. reduction of 2 TPD of HC gas.       0.09       770       70         9.       Use of Nitrogen as stripping medium instead of steam in KHDS       NIL       729       71         10.       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45       500       71         11.       Use of New/improved Catalyst in place of old catalyst in VGOHDS       NIL       3,906       71         12.       Use of New/improved Catalyst in place of old catalyst in DHDS       NIL       2,604       71         13.       In DHD TUNIt, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       -       1,704         14.       Stopping Fuel Oli circulation in MSBP after fuel gas rationalization NIL       2,74       638       635       511         15.       In DPA unit, replacing smail rating motors (P		4. DHDT and VGO HDT Preheat Improvement		0,024	
efficiencies         5       Installation of sour water coalescer on sour water line in DCU for oil       6       999         6       Cold Flash drum off-gas from VGOHDS routed to NHT-1 reducing H2       NIL       950         7       Fuel gas connectivity to old Refinery from IREP thereby reducing       0.28       950         7       Fuel gas connectivity to old Refinery from IREP thereby reducing       0.28       950         8       Routing KHDS off gases to Bitrox inclinerator to avoid flaring:       0.09       770         9       Use of Nitrogen as stripping medium instead of steam in KHDS       NIL       729         9       Use of Nitrogen as stripping medium instead of steam in KHDS       NIL       3.906         11       Use of New/improved Catalyst in place of old catalyst in OHDS       NIL       2.604         13       In DHDT Unit, 55 AFC metallic blades have been replaced with       0.47       -         14       Stopping Fuel Oli circulation in MSBP after fuel gas rationalization       NIL       2.74       633         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B)       0.35       -       511         with higher rating and change (humps)       0.35       -       1.278       RO Ump)         16       In CDU unit, replacing small rating motors (P-13A/B and P-17A/B)		5. APC revamp of CDU2 and FCC units			
recovery.       Cold Flash drum off-gas from VGOHDS routed to NHT-1 reducing H2       NIL       950         6       Cold Flash drum off-gas from VGOHDS routed to NHT-1 reducing H2       NIL       950         7       Fuel gas connectivity to old Refinery from IREP thereby reducing flaring and reducing totel oil consumption in refinery       0.09       770         8       Routing KHDS off gases to Bitturx cincinerator to avoid flaring: Approx. reduction of 2 TPD of HC gas.       0.09       770         9       Use of Nitrogen as stripping medium instead of steam in KHDS       NIL       729         10       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45       500         11       Use of New/improved Catalyst in place of old catalyst in VGOHDS       NIL       3.096         12       Use of New/improved Catalyst in place of old catalyst in OHDS       NIL       2.604         13       In DHDT Unit, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       -       1.704         14       Stopping Fuel Oil circulation in MSBP after fuel gas rationalization of two parallel pumps       0.35       -       5111         15       In PDA unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       -       1.276					
intake and reducing excess Fuel Gas in CEMP-II         7       Fuel gas connectivity to old Refinery from IREP thereby reducing fraining and reducing fuel ol consumption in refinery       0.28       950         8       Routing KHDS off gases to Biturox incinerator to avoid flaring: Approx. reduction of 2 TPD of HG gas.       0.09       770         9       Use of Nitrogen as stripping medium instead of steam in KHDS       NIL       729         10       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45       500         11       Use of New/Improved Catalyst in place of old catalyst in VGOHDS       NIL       3,906         12       Use of New/Improved Catalyst in place of old catalyst in VGOHDS       NIL       2,604         13       In PHDT Unit, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       1,704         14       Stopping Fuel Oli circulation in MSBP after fuel gas rationalization scheme implementation       NIL       274       633         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating and change in implemel diameter has helped in running only one pump instead of two parallel pumps.       0.4       1,276         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       2,282     <	5		6	999	-
Baring and reducing fuel oil consumption in refinery         Routing KHDS off gases to Biturex incinerator to avoid flaring:       0.09       770         Approx: reduction of 2 TPb of HC gas.       0.11       729         Image: transmission of the transmission of transmission of the transmission transmissis the transmission of the transmissis the transmission	6		NIL	950	-
Approx. reduction of 2 TPD of HC gas.         9       Use of Nitrogen as stripping medium instead of steam in KHDS       NIL       729         10       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45       500         11       Use of New/improved Catalyst in place of old catalyst in OGOHDS       NIL       3,906         11       Use of New/improved Catalyst in place of old catalyst in DHDS       NIL       2,604         13       In DHDT Unit, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       -         14       Stopping Fuel Oil circulation in MSBP after fuel gas rationalization scheme implementation       NIL       274       639         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating which has helped in running only one pump instead of two parallel pumps       0.35       -       511         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       -       1.278         17       Energy conservation initiatives in CDU2: Stopping FO firing in furnaces, direct routing of Raffinate for SBP production, feed pump impeller trimming et       0.05       577       2.113         19       Energy conservation initiatives in CDU3: Replacing small rating which has helped in running only one pum	7		0.28	950	-
10       Routing of excess FG from IREP to CEMP-II to reduce flare loss       0.45       500         11       Use of New/improved Catalyst in place of old catalyst in VGOHDS       NIL       3,906         12       Use of New/improved Catalyst in place of old catalyst in DHDS       NIL       2,604         13       In DHDT Unit, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       -       1,704         14       Stopping Fuel Ol circulation in MSBP after fuel gas rationalization scheme implementation       NIL       274       633         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating which has helped in running only one pump instead of two parallel pumps       0.35       -       511         16       In CDU2 unit, replacing small rating motors (Pumps CP32A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       -       1.276         17       Energy conservation initiatives in CDU2: Stopping FO firing in furmaces, direct routing of Raffinate for SBP production, feed pump impeller trimming etc       NIL       388       213         19       Energy unprovement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of five parallel pumps, bringing CDU3 heater ID fan in VFD mode.       0.05       1,405       -      <	8		0.09	770	-
11       Use of New/improved Catalyst in place of old catalyst in VGOHDS       NIL       3,906         12       Use of New/improved Catalyst in place of old catalyst in DHDS       NIL       2,604         13       In DHDT Unit, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       -       1,704         14       Stopping Fuel Oli circulation in MSBP after fuel gas rationalization scheme implementation       NIL       274       633         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating which has helped in running only one pump instead of two parallel pumps       0.35       -       511         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       -       1.276         17       Energy conservation initiatives in PDPP: (a) AFC Power optimization in PDO unit (b) Diversion of PDO Recycle compressor purge to FG system impeller trimming et       NIL       388       213         18       Energy conservation initiatives in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.       0.05       1,405         20       Reduction in size of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines	9	Use of Nitrogen as stripping medium instead of steam in KHDS	NIL	729	-
12       Use of New/improved Catalyst in place of old catalyst in DHDS       NIL       2,604         13       In DHDT Unit, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       -       1,704         14       Stopping Fuel Oli circulation in MSBP after fuel gas rationalization scheme implementation       NIL       274       639         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating which has helped in running only one pump instead of two parallel pumps       0.35       -       511         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       -       1,276         17       Energy conservation initiatives in CDU2: Stopping FO firing in furnaces, direct routing of Raffinate for SBP production, feed pump impeller timming get       NIL       388       213         19       Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.       0.05       1,405       -         20       Reduction in Size of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities       0.40       984       2,190         21       Operational improv	10	Routing of excess FG from IREP to CEMP-II to reduce flare loss	0.45	500	-
13       In DHDT Unit, 55 AFC metallic blades have been replaced with e-Glass Epoxy FRP type blades       0.47       1,704         14       Stopping Fuel Oli circulation in MSBP after fuel gas rationalization scheme implementation       NIL       274       635         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating which has helped in running only one pump instead of two parallel pumps       0.35       511         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       1,278         17       Energy conservation initiatives in PDPP: (a) AFC Power optimization in PDO unit (b) Diversion of PDO Recycle compressor purge to FG system       NIL       388       213         18       Energy conservation initiatives in CDU3: Stopping FO firing in furnaces, direct routing of Rafinate for SBP production, feed pump impeller trimming etc       0.05       577       2,113         19       Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.       0.05       1,405       2         20       Reduction in SIZe of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities       0.3       665       2         <	11	Use of New/improved Catalyst in place of old catalyst in VGOHDS	NIL	3,906	-
e-Glass Epoxy FRP type blades         14       Stopping Fuel Oli circulation in MSBP after fuel gas rationalization scheme implementation       NIL       274       633         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating which has helped in running only one pump instead of two parallel pumps       0.35       511         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       1,278         77       Energy conservation initiatives in PDPP: (a) AFC Power optimization in PDO unit (b) Diversion of PDO Recycle compressor purge to FG system       NIL       388       213         18       Energy conservation initiatives in CDU3: Stopping FO firing in furnaces, direct routing of Rafinate for SBP production, feed pump impeller trimming etc       0.05       577       2,113         19       Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.       0.05       1,405       2         20       Reduction in SIZe of Stam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities       0.3       665       2         21       Operational improvements: VGO HDS recycle gas Antisurge opening reduction, MSBP RGC (MNC01) loadin	12	Use of New/improved Catalyst in place of old catalyst in DHDS	NIL	2,604	-
scheme implementation       -         15       In PDA unit, replacing small rating motors (P-13A/B and P-17A/B) with higher rating which has helped in running only one pump instead of two parallel pumps       0.35       -       511         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       -       1,278         17       Energy conservation initiatives in PDPP: (a) AFC Power optimization in PDO unit (b) Diversion of PDO Recycle compressor purge to FG system       NIL       388       213         18       Energy conservation initiatives in CDU2: Stopping FO firing in furnaces, direct routing of Raffinate for SBP production, feed pump impeller trimming etc       0.05       577       2,113         19       Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.       0.05       1,405         20       Reduction in size of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities       NIL       984       2,190         21       Operational improvements: VGO HDS recycle gas Antisurge opening reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS PRT inline, routing of hot lean amine from SRU3 to VGO HDT thereby stoppage of amine preheater in VGO HDT.       0.3	13	· · · · ·	0.47	-	1,704
with higher rating which has helped in running only one pump instead of two parallel pumps       0.4       -       1,278         16       In CDU2 unit, replacing small rating motors (Pumps CP232A&B - RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       0.4       -       1,278         17       Energy conservation initiatives in PDPP: <ul> <li>(a) AFC Power optimization in PDO unit</li> <li>(b) Diversion of PDO Recycle compressor purge to FG system</li> </ul> NIL       388       213         18       Energy conservation initiatives in CDU2: Stopping FO firing in furnaces, direct routing of Raffinate for SBP production, feed pump impeller trimming etc       0.05       577       2,113         19       Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.       0.05       1,405       -         20       Reduction in size of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities       0.1       984       2,190         21       Operational improvements: VGO HDS recycle gas Antisurge opening reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS RT inline, routing of not lean amine from SRU3 to VGO HDT thereby stoppage of amine preheater in VGO HDT.       0.3       665       -	14		NIL	274	639
RCO Pump) with higher rating and change in impeller diameter has helped in running only one pump instead of two parallel pumps.       Image: State	15	with higher rating which has helped in running only one pump instead	0.35	-	511
Image: Constraint of the constra	16	RCO Pump) with higher rating and change in impeller diameter has	0.4	-	1,278
(b)Diversion of PDO Recycle compressor purge to FG system18Energy conservation initiatives in CDU2: Stopping FO firing in furnaces, direct routing of Raffinate for SBP production, feed pump impeller trimming etc0.055772,11319Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.1.53-2,98220Reduction in size of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities0.051,405-21Operational improvements: VGO HDS recycle gas Antisurge opening reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS PRT inline, routing of hot lean amine from SRU3 to VGO HDT thereby stoppage of amine preheater in VGO HDT.0.3665-22Energy conservation initiatives in MSBP: installation of FRIC insulation on Hot oil system valves, Routing of condensate to DHDS Utility boiler De-aerators0.3665-	17	Energy conservation initiatives in PDPP:			
18       Energy conservation initiatives in CDU2: Stopping FO firing in furnaces, direct routing of Raffinate for SBP production, feed pump impeller trimming etc       0.05       577       2,113         19       Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.       1.53       -       2,982         20       Reduction in size of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities       0.05       1,405       -         21       Operational improvements: VGO HDS recycle gas Antisurge opening reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS PRT inline, routing of hot lean amine from SRU3 to VGO HDT thereby stoppage of amine preheater in VGO HDT.       0.3       665         22       Energy conservation initiatives in MSBP: installation of FRIC insulation on Hot oil system valves, Routing of condensate to DHDS Utility boiler De-aerators       0.3       665		(a) AFC Power optimization in PDO unit	NIL	388	213
furnaces, direct routing of Raffinate for SBP production, feed pump impeller trimming etc1.532.98219Energy Improvement Schemes in CDU3: Replacing small rating motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps, bringing CDU3 heater ID fan in VFD mode.1.53-2,98220Reduction in size of steam systems: Stoppage of SCAPH in DHDT, Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities0.051,405-21Operational improvements: VGO HDS recycle gas Antisurge opening reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS PRT inline, routing of hot lean amine from SRU3 to VGO HDT thereby stoppage of amine preheater in VGO HDT.0.3665-22Energy conservation initiatives in MSBP: installation of FRIC insulation on Hot oil system valves, Routing of condensate to DHDS Utility boiler De-aerators0.3665-		(b) Diversion of PDO Recycle compressor purge to FG system			
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Steam optimization in NHTCCR SCAPH, Removal of redundant lines in SRU3 and utilities         21       Operational improvements: VGO HDS recycle gas Antisurge opening reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS PRT inline, routing of hot lean amine from SRU3 to VGO HDT thereby stoppage of amine preheater in VGO HDT.       NIL       984       2,190         22       Energy conservation initiatives in MSBP: installation of FRIC insulation on Hot oil system valves, Routing of condensate to DHDS Utility boiler De-aerators       0.3       665       -	19	motors (Heavy Naphtha and HVGO pumps) with higher rating which has helped in running only one pump instead of two parallel pumps,	1.53	-	2,982
reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS PRT inline, routing of hot lean amine from SRU3 to VGO HDT thereby stoppage of amine preheater in VGO HDT.         22       Energy conservation initiatives in MSBP: installation of FRIC insulation on Hot oil system valves, Routing of condensate to DHDS Utility boiler De-aerators       0.3       665	20	Steam optimization in NHTCCR SCAPH, Removal of redundant lines	0.05	1,405	-
insulation on Hot oil system valves, Routing of condensate to DHDS Utility boiler De-aerators	21	reduction, MSBP RGC (MNC01) loading reduction to 50% from 75%, Taken VGO HDS PRT inline, routing of hot lean amine from SRU3 to	NIL	984	2,190
Total 10.22 29,298 11.630	22	insulation on Hot oil system valves, Routing of condensate to DHDS	0.3	665	-
	Tota	al	10.22	29,298	11,630

Note: Total MTOE savings includes Fuel and Power savings

#### **BINA REFINERY**

	. En-con measures implemented in 2023-24	BR: Capital  — Investment (₹ crore)	Energy saving	
S.N.			Fuel (MTOE/year)	Power (MWH/Year)
1	14MWp Solar Power plant	91.68	-	25,760
2	Installation of Micro Turbine in SRU MP to LP Let-down with power generator	12.14	-	9,600
3	Replacement of conventional lamps with LED lamps	5.86	-	3,490
4	Energy efficient FRP blades in AFC's of Refinery process units	2.56	-	6,013
5	RCT turbine on hot standby to reduces CPP PRDS losses	NIL	-	9,760
6	Stopping the standby seal pot blower in Boiler-2 achieved through pulley resizing of seal pot blowers	NIL	-	160
7	VGO Pump impeller trimming to save power	NIL	-	200
8	CAPH Replacement in HCU Fired heater to reduce fuel consumption	NIL	685	-
9	Replacement of orifice flowmeter of by ultrasonic flow meter in CDU/ VDU & DCU (9 nos)	NIL	261	-
10	ARU and SWS Reboiler steam reduction by 10 TPH by cleaning of tube bundle	NIL	7,143	-
11	Installation of new globe valves in STG LP extraction header which will facilitate the LP steam optimization and increase waste heat recovery in HGU unit	NIL	3,571	-
Total		112.24	11,660	54,983

Note: Total MTOE savings includes Fuel and Power savings

#### Mumbai Refinery

# (i) Steps taken for impact on conservation of energy

Energy conservation and transition towards Net Zero was a major business goal during the year for BPCL. MR successfully completed various energy conservation initiatives, which were instrumental in achieving Specific Energy Consumption (SEC) of 60.9 MBN for the financial year. The performance is attributed to sustained operation at higher intake level of energy efficient CDU4, (Crude Distillation Unit) higher capacity utilization of secondary process units, energy champion schemes and various energy conserving efforts undertaken during the year. A total of 26 numbers of Energy Conservation (ENCON) schemes were implemented, which saved 49374 MTOE/year and reduced CO<sub>2</sub> emission by 15528 MT/Year. These achievements were possible due to the following steps taken:

- Unit wise daily monitoring of steam leaks to achieve zero steam leaks.
- Continuous monitoring & control of all parameters of Furnaces & Boilers.
- Improvement in Preheat, Furnace Efficiency & Operational performance of Crude Distillation Unit-4 (CDU4), Catalytic Cracking Unit (CCU), Fluid Catalytic Cracking Unit (FCCU), Continuous Catalyst Regeneration unit (CCR) & Gasoline Treating Unit (GTU) during Turnaround 2023.

- Continuous recovery of flare gas with the help of Flare Gas Recovery System (FGRS) and stringent monitoring of process conditions to control flare loss.
- Continuous Survey of Pressure Safety Valves (PSV)/Pressure Control Valves (PCV) to identify passing valves and rectification to reduce flare loss.
- Periodical Survey of Compressed air and Nitrogen leaks and rectification.
- Implementation of various Advance Process Control (APC) strategies in process units to reduce energy consumption.
- Usage of "Energy Analytics Dashboard" & "Unit Daily EII Monitoring" for on-line monitoring of Refinery process Performance along with MBN/EII.
- Replacement of conventional cooling tower fan blades in all the Cooling towers and various process units with new energy efficient eFRP. (e Glass epoxy Fibre Reinforced Plastic)
- Implementation of Electric heat tracing in offsite Pipelines.
- De-aerator pressure optimization of the Boiler House.

# (ii) Steps taken by the Company for utilizing alternate sources of energy

Cumulative solar power generation for 2023-24 was 1195.884 MWH/Annum from Solar Power Plant installed at Mumbai Refinery.

#### Kochi Refinery

(i) Steps taken for impact on conservation of energy

Specific energy consumption (MBN) has reduced up to 62.6 at KR. BPCL-KR implemented 22 nos. of Major Energy Conservation Schemes, having the potential savings of 31345 MTOE per year with potential reduction of  $CO_2$  emission by 97169 MT per year. The following were the areas of major improvement.

- Integration of refinery fuel gas system across all blocks to avoid flare loss and minimize fuel oil consumption.
- Maximizing hot feed from Crude Distillation Unit 3 (CDU3) to downstream units.
- Delayed Coker Unit (DCU) heater pass modifications.
- Implementation of Advanced Process Control (APC) in all Refinery Units, Petrochemical Units and Utilities.
- Use of nitrogen as stripping medium instead of steam in Kerosene Hydrodesulphurization Unit (KHDS).
- Conversion of Air fin Cooler fan blades from metallic to e-Glass Epoxy Reinforced Plastic (e-FRP).
- Impeller modifications and motor replacement for pumps to avoid 2 pumps operation in parallel due to higher load.

#### (ii) Steps taken for utilizing alternate sources of energy

- 3.2 MWp Solar plant at Rainwater Harvesting Pond was commissioned in February 2024.
- 6.0 MWp Solar plant at CISF Colony was commissioned in March 2024.
- 3.7 MWp solar plant at Shore Tank Farm under construction and expected to be commissioned by June 2024.

#### **Bina Refinery**

(i) Steps taken for impact on conservation of energy

"Specific Energy Consumption" was 66 MBTU/ BBL/NRGF (MBN) in 2023-24 as against 67.2 MBN in the previous year. A Total of 11 Encon schemes were implemented which helped BR to save 24,156 MTOE/year and to reduce  $CO_2$ emission by 89,071 MT/Year.

The following are the measures taken up at BR for energy conservation.

- Steam Network Management and Quarterly surveys of flare control valves and PSVs passing by ultrasonic leak detector were continued through external expert agencies.
- Continuous monitoring & control of all parameters of Furnaces & Boilers, continuous recovery of flare gas through Flare Gas Recovery System, optimization of process unit parameters through Advance Process Control (APC) to sustain energy performance at optimum level.
- Installation of Micro Turbine in SRU MP to LP Let-down with power generating capacity of 2.5 MW.
- Energy efficient blades installed in place of conventional blades in process fin fan coolers for power saving.
- Replacement of conventional lamps with LED lamps for power saving in refinery.
- Refinery Cooling Tower turbine kept on hot standby to reduces CPP PRDS losses.
- CAPH Replacement in HCU Fired heater to reduce fuel consumption.
- Replacement of orifice flowmeter of by ultrasonic flow meter in CDU/VDU & DCU.
- (ii) Steps taken for utilizing alternate sources of energy
  - 14MW Solar Power project commissioned in August 2023 as a part of Net Zero initiative.
  - Setting up a 2.15 MT/day Green Hydrogen plant utilizing 5 MW electrolyzer, engineering work for the same is under progress.

#### Marketing Business Units

**CNG:** Further BPCL has expanded its CNG network and mechanically completed 435 CNG stations and commissioned 278 CNG stations during FY 2023-24, making it a cumulative total of 2031 CNG stations across the country.

**Solarization:** BPCL has around 5700 number of Retail outlet where minimum 1 KwP solar capacity has been provided. Solar lights have been provided at 17252 Retail outlets which is 80% of total Retail Outlets of BPCL. Approx. 41 GWh of electricity is generated from Solar energy during FY 2023-24. As an incentive BPCL is providing subsidy of ₹ 2 lakh or 50% of invoice value whichever is lower to Dealer for setting up Solar systems at ROs. BPCL target is to install additional 2500 solar systems at ROs with installed capacity of minimum 1 KW each during FY 2024-25.

**EV charging:** BPC has installed 3135 EV charging stations including 14 Battery Swapping Station across

country. This also includes 894 fast charging stations for 4-wheelers on 120 highway corridors and around 106, 2-wheeler fast charging stations, covering around 35,000 km. BPCL has also made alliance with Tata Motors, MG Motors, Ola Electric, Hero Motocorp, Ather Energy, RACEnergy and Voltup for developing EV infra ecosystem. BPCL has planned to add another 3,500 fast charging stations for 4-wheelers on 150 highway fast charging corridors during FY 2024-25.

Aviation BU: Laying of ATF pipeline from Piyala to Jewar Airport at the cost of ₹ 138 crore to obviate any need of Tank Lorry movement for product replenishment.

9. Provide details related to waste management by the entity, in the following format:

Parameter	FY 2023-24	FY 2022-23
Total waste generated (in metric tonnes)		
Plastic waste (A)	4,891.00	5,000.00
E-waste (B)	0.00	3.63
Bio-medical waste (C)	0.00	0.00
Construction and demolition waste (D)	61.88	-
Battery waste (E)	41.84	-
Radioactive waste (F)	0.00	NA
Other Hazardous waste. Please specify, if any. (G)	2,12,206.00	1,53,794.78
Other Non-hazardous waste generated (H). Please specify, if any.	11,901.00	9,052.22
(Break-up by composition i.e. by materials relevant to the sector)		
Total (A+B + C + D + E + F + G + H)	2,29,102	1,67,851
Gross Revenue from operations in Cr ₹	5,06,911.00	5,33,468
Waste intensity per rupee of Turnover (Total waste generated /Revenue from operations) (MT/ Cr ₹)	0.45	0.32
Waste intensity per rupee of turnover adjusted for Purchasing Power Parity (PPP) (Total waste generated / Revenue from operations adjusted for PPP) (MT/ Cr ₹)	9.14	6.38
Sales Throughput MMT	51.04	48.92
Waste intensity in terms of physical output(MT/MMT)	4,489	3,431
Waste intensity (optional) – the relevant metric may be selected by the entity.	-	-

# For each category of waste generated, total waste recovered through recycling, re-using or other recovery operations (in metric tonnes)

Parameter	FY 2023-24	FY 2022-23	
Category of waste			
(i) Recycled	1,27,763	1,58,143	
(ii) Re-used	90,387	0	
(iii) Other recovery operations	137	0	
Total	2,18,287	1,58,143	

For each category of waste generated, total waste disposed of by nature of disposal method (in metric tonnes)

Parameter	FY 2023-24	FY 2022-23
Category of waste		
(i) Incineration	1,280	2,390
(ii) Landfilling	3,057	4,143
(iii) Other disposal operations	6,374	3,176
Total	10,711	9,709

10. Briefly describe the waste management practices adopted in your establishments. Describe the strategy adopted by your company to reduce the usage of hazardous and toxic chemicals in your products and processes and the practices adopted to manage such wastes.

### 1. Plastics (including packaging)

BPCL, a lubricant manufacturer and packaging company, is required to establish a system for managing plastic waste generated for product sales under Extended Producers Responsibility (EPR). In 2023-24, BPCL's Lubricant business unit collected 4891 MT of plastic waste and reprocessed it through a CPCB-approved party, which used the processed plastic for various everyday use products.

### 2. E-waste

BPCL follows e-waste disposal guidelines as per E-waste Management Rules 2022. BPCL has also made a waste management manual for the benefit of locations. E-waste disposal is centrally monitored by IS Department. In FY 2023-24, 0 tons of e-waste was disposed.

### 3. Hazardous waste

### a. Spent Catalyst

BPCL refineries comply with CPCB regulations and recycle recoverable catalysts through licensed re-processors for metal recovery. Solid hazardous waste is disposed of in an approved SPCB facility, with safety features like impermeable liners and rain protection, and groundwater pollution levels are periodically monitored.

### b. Slop oil

Oily sludge waste from equipment transfers, turnarounds, and routine operations is collected from refineries and sent to a weathering pit for oil recovery. The balance sludge quantity is either sent for Bioremediation/incineration or as per guidelines of Hazardous Waste Management. Slop oil from process units is reprocessed in a crude distillation column. Slop oil at marketing and pipeline locations is recycled before blending in the product system after ensuring product quality norms.

### c. Oily Sludge

In refineries, oily sludge waste generated during handing over of equipment/tankages, turnarounds or routine operations etc. is collected and sent to weathering pit. After recovery of oil by chemical and mechanical methods, residual sludge from weathering pit is sent for Bioremediation which is a process that uses naturally occurring microorganizms to transform harmful substances to non-toxic compounds. As per Hazardous Waste Rules, 2016, oil content in sludge waste should be less than 0.5% before it can be disposed-off.

In marketing locations oily sludge is disposed off either through incineration or bioremidiation as per Hazardous Waste Management Rules.

## 4. Kitchen waste

BPCL refineries have installed a biogas plant to process kitchen waste and generate biogas, which is used in kitchens. The residue is then used as compost for gardening.

Marketing locations also compost organic waste using mechanical or vermicompost methods. In 2023-24, 400 tonnes of compost was generated for gardening purposes.

### 5. Biomedical waste

The Bio-Medical Waste Management Rules, 2016 are followed for storage and treatment of biomedical waste, which is primarily generated in the Occupational Health Centers. The disposal of the biomedical waste is done through SPCB approved outsourced agency.

# 6. Batteries

Batteries are disposed of through a registered recycler through a buy back policy.

## 7. Fly Ash Waste

Fly Ash wastes generated at Bina Refinery due to Petcoke/Coal is disposed through cement plants/ Brick manufacturers who further use it for cement/ brick manufacturing in line with PCB guidelines.

11. If the entity has operations/offices in/around ecologically sensitive areas (such as national parks, wildlife sanctuaries, biosphere reserves, wetlands, biodiversity hotspots, forests, coastal regulation zones, etc.) where environmental approvals/clearances are required, please specify details in the following format:

S. No.	Location of operations/ offices	Type of operations	Whether the conditions of environmental approval/clearance are being complied with? (Y/N) If no, the reasons thereof and corrective action taken, if any.	If no, the reasons thereof and corrective action taken, if any.
1	Mumbai Refinery	Refinery operations	Yes, and compliance report is being sent to MoEFF&CC periodically	NA
2	Krishnapatnam Coastal Installation	Additional Tankage provision at Installation	CRZ and EC approvals vide Letter no 80/ APCZMA/CRZ/2018 CRZ(III), and EC order no. SEIAA/AP/NLR/IND/02/2018/505 were obtained.	NA
3	Vizag Jetty	"Laying new 20″ pipeline (service HSD) at Vizag Jetty	Consent For Operations (CFO) from APPCB and PESO approval has been obtained. Online application for CRZ approval from MoEF was submitted by E&P on 18.10.2023 after obtaining NOC from local APPCB on 09.10.2023. Approval is still awaited.	NA
4	Rasayani Mumbai	New Lubricant plant under commissioning	CTE obtained dated 22.12.21	NA
5	Uran Terminal	Augmentation of Cryogenic project at Uran Terminal	<ul> <li>Clearance from MPCB (Maharashtra Pollution Control Board)</li> <li>Clearance from MCZMA (Maharashtra Coastal Zone Management Authority)</li> <li>Clearance from MOEF&amp;CC (Ministry of Environment Forest &amp; Climate Change)</li> <li>Approval from APCCF (Additional Principal Chief Conservator of Forest) Mangrove Cell, Maharashtra</li> <li>Approval from Hon. Mumbai High Court</li> </ul>	NA
6	Kochi Refinery_ Jetty area	Laying heat traced pipeline from South Tanker Berth to kochi Refinery.	Yes, and compliance report is being sent to MoEFF&CC periodically	NA
7	Kochi Refinery_Shore Tank Farm	Installation of additional tanks to store crude oil.	Yes, and compliance report is being sent to MoEFF&CC periodically	NA
8	Kochi Refinery_ Jetty area	Extending 20" pipeline from North Jetty Reclamation pit (NJRP) to Cochin oil terminal (COT) & North Tanker Berth (NTB), along with associated facilities at cochin Port Trust Jetty area and modification within within Refinery for loading white oil products like Reformate, Naphtha, MS, HSD etc.	Yes, and compliance report is being sent to MoEFF&CC periodically	NA
9	Jammu CUF	Construction of POL Terminal for OMCs	EC not required for the location hence was not taken. EIA study was conducted by M/s ABC Techno Labs.CTE Obtained vide PCB/ digital/20011379065 dated 03 11.2020. NOC from Department of Wildlife vide WLWJ/2932- 34 dated 09.01.2020.	NA

12. Details of Environmental Impact Assessments of projects undertaken by the entity based on applicable laws, in the current financial year:

				Results communicated	
Name and brief details of project	EIA Notification No.	Date	Whether conducted by an external agency?(Yes)/No)	in public domain (Yes/No)	Relevant weblink
Jammu Commun User Facility (CUF)	SEIAA/2017/26/413-15	11.12.2017	Yes, by ABC Techno Labs	No	Nil

13. Is the entity compliant with the applicable environmental law/regulations/guidelines in India; such as the Water (prevention and control of pollution) Act, Air (prevention and control of pollution) Act, Environment Protection Act, and rules there under (Y/N). If not, provide details of all such non-compliances, In the following format:

S. No	Specify the law/ regulation/guidelines which was not complied with	Provide details of the non-compliance	Any fines/penalties/ action taken by regulatory agencies such as pollution control boards or by courts	Corrective action taken if any
1	CPCB Guidelines ref. B-13011/1/2019-20/ AQM/10802-10847 dated 7.1.2020	BPCL has been directed to pay Environmental compensation of ₹ 2 crore by CPCB vide their letter ref no. EQ-11099/20/2021-AQM-	2 crore by CPCB	BPCL has provided VRS compliance details as per directions of Hon'ble SC. We have represented to CPCB for waiver of ₹2 crore environmental compensation, which is pending for disposal.
		HO-CPCB-HO5361 dated 12.10.2023 for not installing VRS within the timelines		BPCL has provided documentary proof that VRS was installed within the Time lines for all ROs.
		prescribed by the Hon'ble Supreme Court and CPCB.		One DODO RO where VRS was not installed on time by the dealer, MS sale was stopped.
				In case of penalty the same would be recovered from Dealer.
2	Under Environment Protection Act	Unscientific greenbelt developed by Kochi Refinery	National Green Tribunal (NGT) judgment, Southern Zone, Chennai imposed ₹2 crore for environmental compensation of unscientific greenbelt developed by Kochi Refinery and the Hon'ble Supreme Court granted stay for imposing the BPCL to deposit a penalty of ₹2 crore.	NA

# Leadership Indicators

1. Water withdrawal, consumption and discharge in areas of water stress (in kilolitres):

For each facility/plant located in areas of water stress, provide the following information:

- (i) Name of the area: NIL
- (ii) Nature of operations: NA
- (iii) Water withdrawal, consumption and discharge: NIL

Parameter	FY 2023-24	FY 2022-23
Water withdrawal by source (in kilolitres)		
(i) Surface water	-	-
(ii) Groundwater	-	-
(iii) Third party water	-	-
(iv) Seawater/desalinated water	-	-
(v) Others	-	-
Total volume of water withdrawal (in kilolitres)	-	-
Total volume of water consumption (in kilolitres)	-	-
Water intensity per rupee of turnover (Water consumed/turnover)	-	-
Water intensity (optional) – the relevant metric may be selected by the entity	-	-
Water discharge by destination and level of treatment (in kilolitres)		
(i) Into surface water	-	-
- No treatment	-	-
- With treatment – please specify the level of treatment	-	-

Par	ameter	FY 2023-24	FY 2022-23
(ii)	Into groundwater	-	-
-	- No treatment	-	-
-	- With treatment – please specify the level of treatment	-	-
(iii)	Into seawater	-	-
	- No treatment	-	-
	- With treatment – please specify the level of treatment	-	-
(iv)	Sent to third parties	-	-
-	- No treatment	-	-
	- With treatment – please specify the level of treatment	-	-
(v)	Others	-	-
	- No treatment	-	-
	- With treatment – please specify the level of treatment	-	-
Tot	al water discharged (in kilolitres)	-	-

2. Please provide details of total Scope 3 emissions & their intensity:

Parameter	Unit	FY 2023-24	FY 2022-23
Total Scope 3 emissions (Break-up of the GHG into $CO_2$ , $CH_4$ , $N_2O$ , HFCs, PFCs, $SF_6$ , $NF_3$ , if available)	Thousand Metric tonnes of CO <sub>2</sub> equivalent	151,749	141,175.24
Gross Revenue from operations	crore	506,911.00	533,467.55
Total Scope 3 emissions per rupee of turnover	MTCO <sub>2</sub> e / Cr ₹	299.36	264.64
Total Scope 3 emission intensity (optional) – the relevant metric may be selected by the entity		-	-

Note: Scope 3 emission also included in Rail movement of product for FY 2023-24.

3. With respect to the ecologically sensitive areas reported at Question 11 of essential indicators above, provide details of significant direct & indirect impact of the entity on biodiversity in such areas along with prevention and remediation activities.

There is no significant impact on neighborhood ecology and biodiversity because of the refineries operations as BPCL has suitably designed ETP and taken all other necessary measures to remain within permissible limits of treated effluent quality as per Minimum National Standards (MINAS).

To prevent any impact in Coastal Regulation Zone (CRZ) areas, the following are ensured:

- · There is no process-water discharge from refinery in creek area.
- Sea discharge of sea-cooling water and storm water is done in compliance with the CRZ conditions.
- Pipelines corrosion control, painting and Operation & Maintenance practices are ensured.
- Further, in case of remote likelihood of any leak, suitable mitigation measures (spill response containment and recovery) are in place.

4. If the entity has undertaken any specific initiatives or used innovative technology or solutions to improve resource efficiency, or reduce impact due to emissions/effluent discharge/waste generated, please provide details of the same as well as the outcome of such initiatives:

S.N	o Initiative undertaken	Details of the initiative (Web-link, if any, may be provided along-with summary)	Outcome of the initiative
1	Setting up of 2G Bio-Ethanol Plant	BPCL is constructing a plant in Bargarh District, Odisha to produce 100 Kilo Liters per Day of 2 <sup>nd</sup> Generation (2G) Bio-Ethanol and 1 <sup>st</sup> Generation (1G) Bio-Ethanol. The plant will produce fuel grade Ethanol for blending in petrol, in line with the Government of India's Ethanol Blended Petrol (EBP) Program and achieving 20% blending by 2025. The plant is in advanced stage of construction, which will be mechanically completed by October 2024 and final commissioning by March 2025. The 2G plant will use 480 tons of agricultural waste (Rice straw) as feedstock, while the 1G plant will use 230 tons of surplus/damaged Rice grain. The plant will also use 300 tons of Rice straw daily as fuel in the boiler.	Expected total emission reduction from Bargarh Bio-refinery (at full design capacity) shall be around 1.1 lakh tons CO <sub>2</sub> eq. per Year.
2	Development of High efficiency PNG Stove	LPG stoves available in the market gives a thermal efficiency of 68%. When the LPG stove is used for Piped Natural Gas (PNG) without any modification, its efficiency drops down to <45%. Hence, the PNG operator retrofits LPG stove for PNG use (change of injector only!). Although it improves the efficiency, it doesn't regain the efficiency to full extent and remains at 55-60%. This calls for requirement of modification in burner top, pan support and the mixing tube. With this objective, BPCL Corporate R&D Center has developed a domestic stove of 74% efficiency for PNG use, tested at standard conditions.	An average household consumes 180- 200 SCM of NG annually, and a 15% efficiency increase can save 30 SCM of gas annually which is equivalent to reduction of 50-55 kg $CO_2$ per household annually.
3	Waste Plastic Road	As part of Corporations initiative to address the EPR targets, CRDC developed a product from end-of-life plastic waste and developed a process for its environmentally friendly application in roads, RO's, footpaths and allied applications. The product and process has been patented by BPCL. In view of getting the accreditation from competent authority, BPCL has signed an Memorandum of Agreement (MoA) with Central Road Research Institute, New Delhi (CSIR-CRRI) to undertake the feasibility study to use waste plastic in road construction. The report will assit in getting accreditation for BPCL process.	reduction of carbon emission to the
4	Scale up of indigenous alkaline electrolyzer technology jointly with BARC.	Currently, electrolyzer technology for Green hydrogen production is available with only few foreign suppliers. BPCL has taken up a very ambitious initiative of scaling up India's first and most efficient alkaline electrolyzer technology for Green Hydrogen production in collaboration with Bhabha Atomic Research Center (BARC). BPCL has led the initiative by entering into technology licensing with BARC, scaling up the electrolyzer components through third parties.	The technology demonstration of a 500 kW electrolyser system is under construction and later shall be scaled up. This technology will help in genereation of green hydrogen and reduction of carbon emissions.
5	Setting up EV charging stations	To promote the faster adoption of EVs in India market, BPCL is developing an EV charging ecosystem. BPCL has already set up 3135 EV charging stations till March 2024.	A robust charging network spread across country would address discovery and range anxiety of the EV customers and thus would lead to faster adoption of EVs. It will further lead to reduction in tailpipe emission from the vehicles.

S.No Initiative undertaken			ails of the initiative (Web-link, if any, may be vided along-with summary)	Outcome of the initiative	
6	Setting up MSW based Compressed Bio Gas (CBG) plant in Brahmapuram Kochi		oject will be completed by February 2025	5.6 TPD CBG, 28 TPD Fermented Organic manure and 100 TPD Liquid Fermented Organic Manure shall be produced. CBG shall be used as a partial replacement of RLNG to produce hydrogen.	
7	Renewable energy	a) b)	Installation of 6.9 MW floating solar power plant at Kochi Refinery Installation of 6 MW solar power plant at Kochi Refinery CISF Colony	The renewable power produced from solar plant will directly reduce fossil fuel based electricity and Scope-2 emissions.	

5. Does the entity have a business continuity and disaster management plan? Give details in 100 words/web link.

BPCL has developed a comprehensive Emergency Response Disaster Management Plan (ERDMP) that complies with the PNGRB ERDMP Regulation 2010 (as amended in September 2020) and certified by a PNGRBaccredited third party. Preparedness, Mitigation, Planning, and Restoration (PMPR) are all included in this plan. The Board of Directors' approval of the ERDMPs shows BPCL's dedication to compliance with PNGRB Regulations.

- In order to provide a comprehensive framework for readiness, the ERDMPs cover road transportation, retail outlet network, and city gas distribution in addition to refineries, pipelines, and marketing operating locations.
- BPCL performs comprehensive pre-emergency planning, which includes hazard identification,

risk assessment and consequence analysis, prior to finalizing the ERDMPs. In accordance with PNGRB Regulations, the company has mutual aid agreements with nearby industries to strengthen cooperative disaster response activities.

- Regular three-tier mock drills are an essential component of BPCL's strategy for emergency readiness. These drills are conducted regularly and undergo periodic reviews to enhance response strategies based on insights and suggestions. BPCL is equipped with both stationary and mobile firefighting equipment and systems at its facilities, supported by trained firefighting teams ready to manage emergencies proficiently.
- BPCL has implemented a Pandemic Emergency Response Plan (PERP) at multiple sites to ensure uninterrupted operations and efficient crisis management during health-related emergencies.
- 6. Disclose any significant adverse impact to the environment, arising from the value chain of the entity. What mitigation or adaptation measures have been taken by the entity in this regard.

S.No	o Initiative undertaken	Details of the initiative (Web-link, if any, may be provided alongwith summary	Outcome of the initiative
1	Promoting Pipeline Transportation	BPCL operates large Cross Country Pipelines network with total Pipelines lengths of approx. 3537 Km. Cumulative throughput of petroleum products as per this financial year was 25.731 MMT against target of 26.285 MMT.	Pipeline reduced the stress on overworked rail and road infrastructure besides reducing environmental consequences associated with rail and vehicle transportation. Presently, pipelines are the most sustainable mode of transportation and helps in reduction of approx. 75% of emissions as compared to rail trasportation.
2	Sustainable Aviation Fuel(SAF)	BPCL's R&D centers are working on Sustainable Aviation Fuel (SAF) from captured CO <sub>2</sub> and green hydrogen, aiming to meet the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) mandate. The Sustainable Aviation Fuel (SAF) is under approval stage.	The introduction of SAF will ensure emission reduction and carbon neutrality.
3	Ethanol Blending	BPCL has undertaken the initiative of ethanol blending to reduce the consumption of fossil fuels. BPCL is actively working on blending ethanol with petrol as part of its commitment to promote cleaner fuel alternatives. The initiative involves sourcing ethanol from various feedstocks, including sugarcane, agricultural residues, etc. and blending it with petrol to create a more sustainable fuel option. This initiative aligns with the government's target of achieving a 20% ethanol blend (E20) by 2025.	<ol> <li>The ethanol blending initiative by BPCL has multiple positive outcomes.</li> <li>It contributes to the reduction of greenhouse gas emissions and air pollution, thereby supporting environmental sustainability.</li> <li>It decreases the reliance on imported crude oil, enhancing the country's energy security.</li> <li>It benefits the agricultural sector by providing farmers with an additional revenue stream and promoting rural development.</li> <li>The use of ethanol-blended petrol results in lower vehicular emissions, leading to improved air quality and public health.</li> </ol>

S.No	o Initiative undertaken	Details of the initiative (Web-link, if any, may be provided alongwith summary	Outcome of the initiative
4	Solarization of RO	BPCL has around 5,700 number of Retail outlet where minimum 1 kWp solar capacity has been provided. Solar lights have been provided at 17,252 Retail outlets which is 80% of total Retail Outlets of BPCL. Approx. 41 GWh of electricity is generated from Solar energy during FY 2023-24. As an incentive BPCL is providing subsidy of ₹ 2 lakh or 50% of invoice value whichever is lower to Dealer for setting up Solar systems at ROs. BPCL target is to install additional 2,500 solar systems at ROs with installed capacity of minimum 1 KW each during FY 2024-25.	
5	EV charging station	BPCL has installed 3,135 EV charging stations including 14 Battery Swapping Station across country. This also includes 894 fast charging stations for 4-wheelers on 120 highway corridors and around 106, 2-wheeler fast charging stations, covering around 35,000 km. BPCL has also made alliance with Tata Motors, MG Motors, Ola Electric, Hero Motocorp, Ather Energy, RACEnergy and Voltup for developing EV infra ecosystem. BPCL has planned to add another 3,500 fast charging stations for 4-wheelers on 150 highway fast charging corridors during FY 2024-25.	The installation of EV charging stations by BPCL reduces greenhouse gas emissions and promotes contribution to a sustainable future. The development of fast-charging highway corridors ensures that EV users can travel long distances with ease, promoting greater EV adoption and enhancing BPCL's reputation as a leader in sustainable energy solutions.

7. Percentage of value chain partners (by the value of business done with such partners) that were assessed for environmental impacts.

Nil

# PRINCIPLE 7: Businesses, when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent.

## **Essential Indicators**

- a. Number of affiliations with trade and industry chambers/associations.
   11
  - b. List the top 10 trade and industry chambers/associations (determined based on the total members of such a body) the entity is a member of/affiliated to.

S. No.	Name of the trade and industry chambers/associations	Reach of trade and industry chambers/ associations State/National
1	Center for High Technology (CHT)	National
2	Oil Industry Development Board (OIDB)	National
3	Federation of Indian Chambers of Commerce & Industry(FICCI)	National
4	Federation of Indian Petroleum Industry (FIPI)	National
5	National Research Development Corporation (NRDC)	National
6	Society of Indian Automobile Manufacturers (SIAM)	National
7	The Advertising Standards Council of India	National
8	Confederation of Indian Industries (CII)	State and National
9	Standing Conference of Public Enterprises (SCOPE)	National
10	World LPG Forum	International

2. Provide details of corrective action taken or underway on any issues related to anti-competitive conduct by the entity, based on adverse orders from regulatory authorities.

Name of authority	Brief of the case	Corrective action taken
	been taken	

# Leadership Indicators

1. Details of public policy positions advocated by the entity:

S. No.	Public policy advocated	Method resorted for such advocacy	Whether information available in the public domain? (Yes/No)	Frequency of review by board(Annually/half yearly/quarterly/others – please specify)	Web-link, if available
1	Compressed Biogas under the Sustainable Alternative towards Affordable Transportation (SATAT)	Through interactions with government, Financial Institutions, Regulatory Authorities and other related agencies	Yes	As and when basis	<u>https://satat.co.in/</u> <u>satat/</u>
2	National Policy on Biofuels	Though representations in inter-governmental committees	Yes	As and when basis	https://mopng.gov. in/en/page/11

BPCL ensures compliance to the applicable Legislations, policies, standards and guidelines laid down by various authorities and MoP&NG. BPCL participates in consultative committee meetings for setting up policy frameworks by Government or regulatory departments. Besides BPCL also participates in the development of standards, guidelines by providing inputs to various Ministries of Government of India and other bodies e.g. MoP&NG, MoEF&CC, CPCB, Oil Industry Safety Directorate (OISD), Petroleum and Natural Gas Regulatory Board (PNGRB), Center for High Technology (CHT), Bureau of Indian Standards (BIS) etc. towards advancement of public good and nation building.

## PRINCIPLE 8: Businesses should promote inclusive growth and equitable development.

## **Essential Indicators**

1. Details of Social Impact Assessments (SIA) of projects undertaken by the entity based on applicable laws, in the current financial year.

Name and brief details of project	SIA notification No.	Date of notification	Whether conducted by independent external agency (Yes/No)	Results communicated in public domain. (Yes/No)	Relevant weblink
NIL					

2. Provide information on the project(s) for which ongoing Rehabilitation and Resettlement (R&R) is being undertaken by your entity:

s	Name of project for	No. of p		No. of project affected families	% of PAFs covered	Amounts paid to PAFs
No.		State	District	(PAFs)	by R&R	in the FY (In ₹)
				NIL		

3. Describe the mechanisms to receive and redress grievances of the community.

BPCL is committed to social responsibility and has implemented CSR initiatives in areas such as health, education, women's empowerment, vocational skill development, cleanliness, and sanitation to help target populations. The company conducts frequent monitoring, evaluation, and impact assessment studies on its CSR initiatives to resolve any objections from communities, even though no complaints have been reported. Feedback and concerns from evaluations are reviewed and addressed as needed.

4. Percentage of input material (inputs to total inputs by value) sourced from suppliers:

	FY 2023-24	FY 2022-23
Directly sourced from MSMEs/small producers	33.76% (PAN BPCL)	36.66% (PAN BPCL)
Directly from within India	Not Available	Not Available

5. Job creation in smaller towns – Disclose wages paid to persons employed (including employees or workers employed on a permanent or non-permanent/on contract basis) in the following locations, as % of total wage cost

		FY 2023-24	FY 2022-23
1. F	Rural		
i)	Disclose wages paid to persons employed (including employees or workers employed on a permanent or non-permanent/on contract basis)	2,19,61,085.67	7,65,145.72
ii)	Total Wage Cost	73,49,19,051.4	81,55,41,828.8
iii)	% of Job creation in Rural areas	2.99	0.09
2.	Semi-urban		
i)	Disclose wages paid to persons employed (including employees or workers employed on a permanent or non-permanent / on contract basis)	1,07,86,991.66	68,516.11
ii)	Total Wage Cost	42,55,69,366.10	46,87,96,087.30
iii)	% of Job creation in Semi-Urban areas	2.53	0.01
3.	Urban		
i)	Disclose wages paid to persons employed (including employees or workers employed on a permanent or non-permanent / on contract basis)	7,65,03,779.87	45,93,521.55
ii)	Total Wage Cost	4,18,63,45,937.00	4,22,68,35,882.00
iii)	% of Job creation in Urban areas	1.83	0.11
4.	Metropolitan		
i)	Disclose wages paid to persons employed (including employees or workers employed on a permanent or non-permanent / on contract basis)	14,59,72,115.40	74,83,541.97
ii)	Total Wage Cost	12,41,00,19,137.00	12,71,12,89,662.00
iii)	% of of Job creation in Metropolitan area	1.18	0.06

Note: Information on wages paid is only provided for management staff as no workers were recruited during FY 2022-23 and FY 2023-24.

## Leadership Indicators

1. Provide details of actions taken to mitigate any negative social impacts identified in the social impact assessments (Reference: Question 1 of essential indicators above):

Details of negative social impact identified	Corrective action taken	
	Nil	

2. Provide the following information on CSR projects undertaken by your entity in designated aspirational districts as identified by government bodies:

S. No.	State	Aspirational district	Amount spent (In ₹)
1	Assam	Darrang	9,15,515
2	Bihar	Purnia, Begusarai, Aurangabad	1,23,76,462
3	Jharkhand	Bokaro	13,23,763
4	Madhya Pradesh	Damoh, Chhatarpur, Rajgarh, Singrauli, Barwani, Guna, Vidisha, Khandwa	99,03,249
5	Meghalaya	Ribhoi	11,96,860
6	Odisha	Dhenkanal	79,65,000
7	Rajasthan	Karauli	24,50,240
8	Tamil Nadu	Ramanathapuram	1,89,83,470
9	Uttar Pradesh	Chitrakoot, Shrawasti, Sonbhadra	71,64,217
10	Multiple States	Barwani, Ramnathanpuram, Shrawasti, Mewat, Balangir	1,10,000
Tota	ıl		6,23,88,777

Note: In addition to above mentioned expenditure spent on projects undertaken partially at Aspirational Districts/other districts -

\* ₹ 1.21 crore spent on Aspirational Districts/other districts.

3. (a) Do you have a preferential procurement policy where you give preference to purchase from suppliers comprising marginalized/vulnerable groups?

The company abides by the Public Procurement Policy for Micro and Small Enterprises (MSE) Order 2012 and its subsequent amendments. The company's total procurement value of Goods and Services during 2023-24, excluding Works Contracts, where MSEs could have participated was ₹ 9,821.28 crore whereas the actual procurement value from MSEs was ₹ 3,315.40 crore, i.e., an achievement of 33.76% which exceeds the target of 25%. The company also offers Trades Receivable Discounting Scheme (TReDS) to its MSME Vendors.

- (b) From which marginalized/vulnerable groups do you procure? BPCL procures from marginalized/vulnerable groups such as Micro & Small Enterprises (MSE), (MSMEs), MSE (SC/ST, Women), and Start-ups.
- (c) What percentage of total procurement (by value) does it constitute? Procurement from MSE = ₹ 3,315.40 crore, 33.76% Procurement from MSE SC/ST = ₹ 111.63 crore, 1.14% Procurement from MSE Women = ₹ 129.07 crore, 1.31%
- 4. Details of the benefits derived and shared from the intellectual properties owned or acquired by your entity (in the current financial year), based on traditional knowledge:

S.		Owned/acquired	Benefit shared	Basis of calculating
No.	Intellectual property based on traditional knowledge	(Yes/No)	(Yes/No)	benefit share
Nil	Nil	Nil	Nil	Nil

5. Details of corrective actions taken or underway, based on any adverse order in intellectual property-related disputes wherein usage of traditional knowledge is involved.

Name of the authority	Brief the Case		Corrective action taken
		N.A	

6. Details of beneficiaries of CSR projects:

S.No CSR project		No. of persons benefited from CSR projects	Amount of money Spent in Cr	% of beneficiaries from vulnerable and marginalized groups	
1	Health and Sanitation	58,92,602	98.47	64%	
2	Education	5,63,854	14.96	72%	
3	Environmental Sustainability	2,500	1.11	100%	
4	Skill Development	2,791	20.62	100%	
5	Community Development and Others	6,90,263	17.05	54%	

# PRINCIPLE 9: Businesses should engage with and provide value to their consumers in a responsible manner.

## **Essential Indicators**

1. Describe the mechanisms in place to receive and respond to consumer complaints and feedback.

BPCL created an AI-powered chatbot called 'Urja' to provide its clients with a pleasant self-service experience and faster resolution of complaints. Urja is the first chatbot of its sort in the Indian oil and gas business, supporting 13 languages. To improve BPCL's client experience through digital integration, the chatbot Urja is now available on the company's website to answer questions from both types of consumers such as Business-to-Business (B2B) and Business-to-Consumer (B2C). As part of Project Anubhav Urja, a unified communication platform connects all BPCL communication across numerous platforms, harmonizing all customer interactions with a consistent and single voice.

BPCL has established the Customer Care SmartLine (1800 22 4344), a single window system to listen to queries, suggestions, feedback and compliments related to any of our products and offerings. SmartLine is our all India contact center for consumers across five marketing SBUs i.e. Retail (Petrol Pumps), LPG, Lubes, I&C, Aviation. SmartLine also functions as a 24x7 Emergency Helpline(Gas Leakage) to provide immediate assistance. This Toll-Free number is a direct connect between our customers and field teams through which customers can connect with BPCL anytime. The system is so configured that an SMS/Email confirmation is triggered at the time of registration and closure of a customer interaction.

2. Turnover of products and/or services as a percentage of turnover from all products/services that carry information about:

	As a % to total turnover
Environmental and social parameters relevant to the product	100%
Safe and responsible usage	100%
Recycling and/or safe disposal	100%

Note: Material safety data sheets (MSDS) are published online and disseminated to all stakeholders on a regular basis to ensure safe material handling throughout transportation and use.

3. Number of consumer complaints in respect of the following:

	FY 2023-24			FY 2022-23		
	Received during the year	Pending resolution at end of year	Remarks	Received during the year	Pending resolution at end of year	Remarks
Data privacy	Nil	Nil	Nil	Nil	Nil	Nil
Advertising	Nil	Nil	Nil	Nil	Nil	Nil
Cyber-security	Nil	Nil	Nil	Nil	Nil	Nil
Delivery of essential services	Nil	Nil	Nil	Nil	Nil	Nil
Restrictive trade practices	Nil	Nil	Nil	Nil	Nil	Nil
Unfair trade practices	Nil	Nil	Nil	Nil	Nil	Nil
Other	Nil	Nil	Nil	Nil	Nil	Nil

4. Details of instances of product recalls on account of safety issues.

	Number	Reason for Recall
Voluntary recalls	NIL	NIL
Forced recalls	NIL	NIL

5. Does the entity have a framework/policy on cyber security and risks related to data privacy? If available, provide a web link to the policy.

Yes, BPCL has a privacy policy in place which clearly states the purpose of collecting personal information of users with detailed description of what kind of information is collected and purpose for the same along with the various ways for which the information is used. The company has taken various steps to ensure that personal information shared by various users including dealers, vendors, distributors, customers is accurate and updated and also ensures that user rights are adhered to through following measures:

- a) Data Access: The user has the right to inspect, amend, and delete their personal information.
- b) Consent Withdrawal: the user has the right not to reveal any Personal Information that he/she consider confidential and can withdraw his/her consent from the company if one has previously submitted such data. If the user declines to

disclose any information or withdraw consent to process any Personal Information that has already been provided, then the company will retain the right to restrict or prohibit the provision of any services that need such information.

 c) Grievance Officer: To exercise any of these rights, please contact Mr. Saurabh Jain, DGM, (PR & Brand) (jains4512@bharatpetroleum. in). The inquiry will be addressed within reasonable timeframe.

The privacy policy also encompasses various policies for user data privacy and confidentiality of information which highlights the commitment of the company towards adhering to user rights and maintaining confidentiality of data received.

The policy can be accessed through the following link: <u>https://www.bharatpetroleum.in/images/files/bpcl%20</u> <u>-%20privacy%20policy%20-%20corporate%20</u> <u>website%20final.pdf</u>"

6. Provide details of any corrective actions taken or underway on issues relating to advertising, and delivery of essential services; cyber security and data privacy of customers; re-occurrence of instances of product recalls; penalty/action taken by regulatory authorities on the safety of products/services.

No consumer complaint received with respect to Cyber Security or Data Privacy. Hence there is no corrective action taken or underway on issues related to it.

- 7. Provide the following information relating to data breaches:
  - a. Number of instances of data breaches NIL
  - b. Percentage of data breaches involving personally identifiable information of customers NIL
  - c. Impact, if any, of the data breaches NIL

## Leadership Indicators

 Channels/platforms where information on products and services of the entity can be accessed.

The details about the company's product portfolio and services provided can be accessed through the website:<u>https://www.bharatpetroleum.in/</u>

- 2. Steps taken to inform and educate consumers about safe and responsible usage of products and/ or services.
  - LPG Panchayats are organized in rural areas.
  - LPG Safety Clinics are held throughout businesses. unit on an All-India basis.
  - Videos on safety are demonstrated in cinema halls, public places like bus stops, railway stations, metros, and airports.
  - Stickers regarding 1906 (leakage call center) are placed in consumers' kitchens.
  - Specialized surveys, such as lubricant surveys, are conducted.

- Important instructions are printed on the body/cover of products like LPG and lubricants.
- BPCL's SAKSHAM project aims to encourage sustainable consumption through awareness campaigns, competitions, debates, and consultations with consumers, employees, and dealer representatives.
- 3. Mechanisms in place to inform consumers of any risk of disruption/discontinuation of essential services.

BPCL maintains regular communication with bulk/retail customers via offices and channel partners on product availability and disruption. The company also employs several communication channels, including press, media, social media, app platforms, SMS, and physical notices, to alert customers.

4. Does the entity display product information on the product over and above what is mandated as per local laws?

BPCL displays product information prominently on the lubricant product's package label wherever feasible. The information provided on the product labels are as per National/International Standards as applicable e.g., BIS, API, DIN. etc. Another feature has also been added on lubricant label i.e., QR Code to trace and track the product movement. Furthermore, BPCL's final products comply with all essential product requirements and standards, with transparent information regarding their manufacture, safe handling, and consumption. Material Safety Data Sheet (MSDS) of all products has been published on the BPCL website. BPCL handles and disposes of all sorts of waste in accordance with legislative norms and recommendations.

a) Did your entity carry out any survey with regard to consumer satisfaction relating to the major products/services of the entity, significant locations of operation of the entity, or the entity as a whole? (Yes/No)

The Customer Engagement Platform (CEP) is being implemented by the Project Anubhav team and it provides a comprehensive overview of the customers across the organization to the respective strategic Business Units and Entities.

The BPCL Customer Care System (CCS) did not perform any structured surveys in 2023-24. However, BPCL receives consumer input on a regular basis through a various methods and channels.



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# Independent Reasonable Assurance Statement to Bharat Petroleum Corporation Limited on their Business Responsibility & Sustainability Report (BRSR) FY2023-24-Core Disclosures.

Τo,

The Management and Board of Directors of Bharat Petroleum Corporation Limited (BPCL) Bharat Bhawan, Currimbhoy Road, Ballard Estate, Mumbai – 400001

### Introduction

Intertek India Private Limited ("Intertek") was engaged by Bharat Petroleum Corporation Limited ("BPCL") to provide an independent reasonable assurance on its consolidated BRSR (Business Responsibility & Sustainability Report) core disclosures for FY2023-24 as part of their Annual Report ("the Report").

### Scope

The scope of the Report comprises the reporting period of FY2023-24. The Report is prepared by BPCL based on SEBI's (Securities and Exchange Board of India) BRSR guidelines. The assurance was performed in accordance with the requirements of International Federation of Accountants (IFAC) International Standard on Assurance Engagement (ISAE) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information.

### Objective

The objective of this reasonable assurance exercise was by reviewing objective evidence and confirming whether any evidence existed that the sustainability related disclosures in alignment with BRSR requirements, as declared in the Report, were not accurate, complete, consistent, transparent and free of material error or omission in accordance with the criteria outlined below.

### **Intended Users**

This Assurance Statement is intended to be a part of the Annual Report of Bharat Petroleum Corporation Limited.

### Responsibilities

The management of BPCL is solely responsible for the development of the Report and its presentation. Management is also responsible for the design, implementation and maintenance of internal controls relevant to the preparation of the Report so that it is free from any material misstatement or error.

Intertek's responsibility, as agreed with the management of BPCL, is to provide assurance and express an opinion on the data and assertions in the Report based on our verification following the assurance scope and criteria given below. Intertek does not accept or assume any responsibility for any other purpose or to any other person or organization. This document represents Intertek's independent and balanced opinion on the content and accuracy of the information and data held within the Report.

### Assurance Scope

The assurance has been provided for selected sustainability performance disclosures as per BRSR core disclosures with reference to SEBI's "BRSR Core - Framework for assurance and ESG disclosures for value chain" vide circular no. SEBI/HO/CFD/CFD-SEC-2/P/CIR/2023/122 dated July 12, 2023, presented in the Report. The assurance boundary included data and information of various business units i.e. Refineries, LPG, Retail, Pipeline, Aviation, Lubricants and Corporate office in Mumbai. Our scope of assurance included verification of internal control systems, data and information on core disclosures reported as summarized in the table below:

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Bharat Petroleum Corporation Limited | BRSR FY2023-24 | Reasonable Assurance
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Page 1 of 3



Total Quality. Assured.

### **BRSR-Core Disclosures**

- Total scope 1 and scope 2 emissions.
- GHG emissions intensity (scope 1 and 2).
- Water consumption, water consumption Intensity and water discharge by destination and levels of treatment.
- Total energy consumed, percentage of energy consumed from renewable sources and energy intensity.
- Waste Generation (category wise), Disposal, Recovered, Re-used and Intensity.
- Cost incurred on well-being measures of employees and workers as a percentage of total revenue of the company.
- Safety related incidents for employees and workers (LTIFR + Fatality + Permanent Disabilities) including contractual workforce.
- Gross wages paid to females as percentage of total wages paid.
- Complaints on POSH
- Input material sourced (from MSMEs/ small producers and from within India)
- Enabling inclusive development (Job creation in smaller towns and wages paid)
- Instances involving loss / breach of data of customers and Number of days of accounts payable.
- Concentration of purchases & sales done with trading houses, dealers and related parties. Also, loans and advances & investments with related parties.

### Assurance Criteria

Intertek conducted the assurance work in accordance with requirements of 'Reasonable Assurance' procedures as per the following standard:

- International Standard on Assurance Engagements (ISAE) 3000 (revised) for 'Assurance Engagements other than Audits or Reviews of Historical Financial Information'.
- International Standard on Assurance Engagements (ISAE) 3410 for 'Assurance Engagements on Greenhouse Gas Statement

A reasonable assurance engagement involved assessing the risks of material misstatement of the BRSR core indicators/parameters whether due to fraud or error, responding to the assessed risks as necesary in the circumtances along with a materiality threshold level of 5% was applied. Assessment of compliance and materiality was undertaken against the stated calculation methodology and criteria.

### Limitations

We have relied on the information, documents, records, data, and explanations provided to us by BPCL for the purpose of our review.

The assurance scope excludes:

- Any disclosures beyond those specified in the Scope section above.
- Data and information falling outside the defined reporting period and boundary.
- Data pertaining to the Company's financial performance, strategy, and associated linkages articulated in the Report if any.
- Assertions made by the Company encompassing expressions of opinion, belief, aspiration, expectation, forward-looking statements, and claims related to Intellectual Property Rights and other competitive issues.

While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls.

The procedures did not include testing controls or performing procedures related to checking of aggregation or calculation of data within software/IT systems.

### Methodology

Intertek performed assurance work using risk-based approach to obtain the information, explanations and evidence that was considered necessary to provide a reasonable level of assurance. The assurance was conducted by desk reviews and visit to Refineries and marketing-operating locations on sample basis (which contributes more than 90% of data) i.e. Mumbai Refinery, Kochi Refinery, Bina Refinery, Jobner Retail, Irugur Retail, Manmad Retail,

Bharat Petroleum Corporation Limited | BRSR FY2023-24 | Reasonable Assurance



Rajkot LPG, Loni LPG, Bina - Kanpur Pipeline, Budge Budge Lubricants, Chandigarh Aviation, Mumbai corporate office along with stakeholder interviews with regards to the reporting and supporting records for the fiscal year 2023-24. Our assurance task was planned and carried out during the month of June to July 2024. The assessment included the following:

- Review of the Report that was prepared in accordance with the SEBI's BRSR guidelines.
- Review of processes and systems used to gather and consolidate data.
- Examined and reviewed documents, data and other information made available by BPCL digitally or at a selected operational site.
- Conducted physical interviews with key personnel responsible for data management at selected locations.
- Assessment of appropriateness of various assumptions, estimations and thresholds used by BPCL for data analysis.
- Review of BRSR core disclosures for the duration from April 1, 2023, to March 31, 2024.
- Appropriate documentary evidence was obtained to support our conclusions on the information and data reviewed.

### Conclusions

Intertek reviewed BRSR core disclosures provided by BPCL in its consolidated Business Responsibility and Sustainability Report (BRSR). Based on the procedures performed as above, evidence obtained, and the information and explanations given to us along with the representation provided by the management and subject to inherent limitations outlined above in this report. In our opinion, BPCL's data and information on BRSR core disclosures for the period of April 1, 2023, to March 31, 2024, included in the Report, is, in all material respects, in accordance with the SEBI's BRSR core disclosures on reasonable assurance basis.

### Intertek's Competence and Independence

Intertek is a global provider of assurance services with a presence in more than 100 countries employing approximately 43,500 people. The Intertek assurance team included competent sustainability assurance professionals, who were not involved in the collection and collation of any data except for this assurance opinion. Intertek maintains complete impartiality towards any people interviewed.

### For Intertek India Pvt. Ltd.

Poorgan Sh

Poonam Sinha

Intertek-Verifier

10<sup>th</sup> Jul 2024

Shilpa Naryal

Head of Sustainability Intertek South Asia & MENAP 12<sup>th</sup> Jul 2024 SANDEEP S VIG 1 Sandeep Vig

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Director-Business Assurance Intertek India & MENAP 12<sup>th</sup> Jul 2024

No member of the verification team (stated above) has a business relationship with Bharat Petroleum Corporation Limited stakeholders beyond that is required of this assignment. No form of bribe has been accepted before, throughout and after performing the verification. The verification team has not been intimidated to agree to do this work, change and/or alter the results of the verification. The verification team has not participated in any form of nepotism, self-dealing and/or tampering. If any concerns or conflicts were identified, appropriate mitigation measures were put in place, documented and presented with the final report. The process followed during the verification is based on the principles of impartiality, evidence, fair presentation and documentation. The documentation received and reviewed supports the conclusion reached and stated in this opinion.

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