

Purpose-driven growth



T. V. Narendran
Chief Executive Officer & Managing Director



Tata Steel has a proud legacy of pioneering positive change within the communities where it operates and its commitment towards this endeavour remains steadfast

Dear Stakeholders

I am pleased to bring to you our inaugural Business Responsibility and Sustainability Report (BRSR). At Tata Steel, we have long recognised the Environment, Social and Governance (ESG) stewardship as a core to our purpose. We have a proud legacy of pioneering positive change, not just within the industry but in the communities where we operate as well, and our commitment remains steadfast.

As the shift to a low-carbon economy is likely to unfold faster, the implications on steel, a hard-to-abate sector shall be profound. We take cognisance of the urgency of the decarbonisation journey to meet the evolving stakeholder expectations. Our Net Zero target is in line with the Tata Group's target and is the most ambitious net zero target adopted by any major steel company globally.

We continue to seek innovative ways for this transition, through continuous experimentation, and investments in research, technological innovations, and partnerships. Adoption of Direct Reduced Iron (DRI) using green hydrogen, injection of hydrogen in blast furnaces, carbon capture & utilisation technologies and use of alternate low-carbon fuels, such as biomass, are key areas in this approach. While the company explores sustainable alternatives to traditional steel production methods, it is concurrently investing in new and alternate materials,

We have established clear and measurable objectives for our DE&I journey and have charted out holistic plans for broadening the number of lives positively impacted through CSR initiatives,

as part of its efforts to offer more sustainable alternatives to steel. Within the realm of biodiversity conservation, we have implemented initiatives aimed at revitalising and safeguarding the flora and fauna and restoring the natural habitats.

We aspire to be a global benchmark for corporate citizenship. Our efforts are aligned to this vision as we endeavour to improve workforce Diversity, Equity and Inclusion (DE&I), health and safety, and community well-being. We have established clear and measurable objectives for our DE&I journey and have charted out holistic plans for broadening the number of lives positively impacted through CSR initiatives, developing a responsible supply chain through ethical sourcing and ensuring the code of conduct compliance.

Tata Steel consciously embeds the highest standards of governance in its operations. We recognise the criticality of governance challenges relating to business ethics, ever-

evolving compliance landscape, and the imperative of improved disclosures. To effectively mitigate these challenges, we have in place a comprehensive Code of Ethics, a holistic compliance framework and an integrated governance structure that carries a strong commitment to global ESG disclosure standards for promoting transparency and accountability.

Our efforts towards ESG initiatives during the past year are detailed in the later pages and I encourage you to read our Integrated Report and BRSR to gain a comprehensive understanding of the progress we have made. Our commitment to ESG not only aligns to the global expectations but also serves as a catalyst for our long-term success and resilience in the face of evolving market dynamics.

Warm Regards,
T. V. Narendran
Chief Executive Officer &
Managing Director

BUSINESS RESPONSIBILITY AND SUSTAINABILITY REPORT

Financial Year 2022-23

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SECTION A: GENERAL DISCLOSURES

I. Details of the listed entity

Sl. No.	Particular	Company Details
1	Corporate Identity Number (CIN)	L27100MH1907PLC000260
2	Name	Tata Steel Limited
3	Year of incorporation	1907
4	Registered office address	Bombay House, 24, Homi Mody Street, Fort, Mumbai – 400 001
5	Corporate address	Bombay House, 24, Homi Mody Street, Fort, Mumbai – 400 001
6	E-mail	cosec@tatasteel.com
7	Telephone	+91 22 6665 8282
8	Website	www.tatasteel.com
9	Financial year for which reporting is being done	April 1, 2022 – March 31, 2023
10	Name of the Stock Exchange(s) where shares are listed	a) BSE Limited b) National Stock Exchange of India Limited
11	Paid-up Capital	₹1,222.40 Crore
12	Name and contact details of the person who may be contacted in case of any queries on the BRSR report	Mr. Parvatheesam Kanchinadham Company Secretary & Chief Legal Officer (Corporate & Compliance) Bombay House, 24, Homi Mody Street, Fort, Mumbai – 400 001 Tel.: +91 22 6665 7330 E-mail: cosec@tatasteel.com

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)

The financial, environmental, social and governance disclosures made in this report are on a consolidated basis for Tata Steel Limited and its 13 key subsidiary companies. These companies have been identified based on their materiality and contribute over 98% of Tata Steel’s consolidated revenues, nearly 95% of Tata Steel’s Consolidated employee base and over 99% of Tata Steel’s Consolidated emission footprint.

Region	Entity
India	<ol style="list-style-type: none"> Tata Steel Limited (TSL) Tata Steel Long Products Limited (TSLP) Tata Metaliks Ltd. (TML) The Tinplate Company of India Ltd. (TCIL) Tata Steel Mining Limited (TSML) Tata Steel Downstream Products Limited (TSDPL) Tata Steel Utilities and Infrastructure Services Limited (TSUISL) The Indian Steel & Wire Products Limited (ISWP) Angul Energy Limited (AEL) Bhubaneswar Power Private Limited (BPPL)
Outside India	<ol style="list-style-type: none"> Tata Steel Nederland BV (TSN) Tata Steel UK Limited (TSUK) Tata Steel (Thailand) PCL (TSTH) Tata Steel Minerals Canada Ltd. (TSMC)

Throughout this report, the phrase 'Tata Steel' or 'the Company' refers to the consolidated group of 14 entities listed above, unless mentioned otherwise. Additionally, and in specific cases, the following boundary has also been used in the report:

- a) Tata Steel Limited or Tata Steel Standalone: The boundary is only the standalone entity 'Tata Steel Limited'.
- b) Tata Steel Consolidated: The boundary matches all entities (subsidiaries, joint ventures and associates) consolidated for financial results of Tata Steel Limited.

Basis for reporting:

1. Consolidation of all indicators have been undertaken without adjusting for minority shareholder in the relevant group entity, where applicable.
2. The Greenhouse Gas (GHG) Emission has been reported using the Greenhouse Gas protocol standard and the equity methodology for consolidation.
3. Where applicable inter-company elimination has been undertaken (Revenue, GHG emission and energy consumption).
4. The reported Revenue, Total Capex and R&D Expenditure are on a consolidated basis (unless mentioned otherwise), aligned with the Consolidated Financial Statements of Tata Steel Limited.
5. Energy consumption has been reported on the basis of Primary Energy Consumption, including feedstocks.
6. Reporting Period for various indicators range from 1 - 3 years, aligned with the prescribed SEBI format.

It should be noted that in the case of certain reported indicators, previous year(s) and current year values are not comparable on account of year on year change in the production, size and complexity of the Company. In FY2022-23, Tata Steel was also a more complex organisation compared to the previous year due to the acquisition and ramp up of Neelachal Ispat Nigam Limited and increased activity undertaken for the ongoing 5MnTPA expansion at Kalinganagar. The actual production was also different year on year, which has a direct impact on production driven indicators.

Statement of Assurance

The indicators/information reported in the BRSR below have not been externally assured. However, select indicators in the Company's Integrated report for FY2022-23 have been externally assured by Price Waterhouse & Co Chartered Accountants LLP and the respective Reasonable Assurance and Limited Assurance Reports are annexed to Tata Steel's Integrated Report for FY2022-23 and are accessible on the below link: (<https://www.tatasteel.com/investors/integrated-reportannual-report/integrated-report-annual-accounts-2022-23-116th-year-and-related-documents/>)

II. Products/Services

14. Details of business activities

Sl. No.	Main Activity group code	Description of Main Activity group	Business Activity Code	Description of Business Activity	% of turnover of the Company
1.	C	Manufacturing	C7	Metal & Metal products	96.96

Note: The details of business activities as given in MGT- 7 for Tata Steel Limited.

15. Products/Services sold by the entity:

Tata Steel Consolidated				
Sl. No.	Name of Product/Service	NIC	Turnover (₹ crore)	Turnover (%)
1.	Sale of Products	2410	2,39,343.16	98
2.	Sale of power and water	3510, 3600	1,924.04	1
3.	Income from services	-	369.05	0
4.	Others	-	1,716.44	1
Total		-	2,43,352.69	100

Notes: i. The above split is based on Tata Steel consolidated turnover as reported in the Company's Integrated Report for FY2022-23.

ii. Others include income from export and other incentive schemes.

III. Operations

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

Location	Number of plants	Number of offices	Total
India	64	139	203
Outside India	40	28	68

Tata Steel is one of the world's most geographically diversified steel producer with a steelmaking capacity of 35 million tonnes per annum, and amongst a few global steel companies which have a fully integrated supply chain – from mining to manufacturing and marketing of finished products. A summary of Tata Steel's geographical footprint is provided in its Integrated Report for FY2022-23.

17. Markets served by the entity:

a) Number of locations

Locations	Number
National (No. of States)	28 States and 8 Union Territories
International (No. of Countries)	79 Countries

Tata Steel caters to its diverse customer base either directly or through a single or a double tier distribution system. Large customers belonging to Business to Government and select Business to Business market segments, with high volume uptake, are served directly by the Company. Sale to Micro, Small & Medium Enterprise segment is made through a single tier distribution system with an exhaustive team of channel partners and the Business to Consumer segment, covering retail consumers, is made through a two-tier distribution system, with an extensive group of distributors and dealers.

Tata Steel has also developed Aashiyana, which is an e-commerce platform used to reach out to and make direct sales to end consumers (individual home builders), in India.

b) What is the contribution of exports as a percentage of the total turnover of the entity?

Whilst Tata Steel has significant exports to rest of the world from India, Tata Steel also serves its international customers directly through its subsidiary companies situated in the relevant geographies. Accordingly, Tata Steel is reporting the split of its sales between India and outside India, which appropriately reflects its international sales. In addition, Tata Steel is also disclosing exports made directly by Tata Steel Limited from India to rest of the world.

Tata Steel Consolidated Revenue	Amt in ₹ Cr	
	FY2022-23	FY2021-22
Particulars		
India	1,29,385.23	1,19,729.67
Outside India	1,12,251.02	1,22,597.20
Total	2,41,636.25	2,42,326.87

Note: Sales Outside India includes export revenue from India. The above split is based on Tata Steel Consolidated turnover as reported in the Company's Integrated Report for FY2022-23 and excludes other operating revenue.

Tata Steel Limited (Standalone)	Amt in ₹ Cr	
	FY2022-23	FY2021-22
Particulars		
Exports Revenue	9,052.22	17,488.02
Total Revenue	1,29,006.62	1,29,021.35
% of exports in total revenue	7%	14%

c) A brief on types of customers

Tata Steel's market segments have been identified and prioritised based on the broad consuming segments and is in line with the long-term strategic objectives of the Company. Key market segments of Tata Steel include, but are not limited to, Construction, Automotive, General Engineering, Industrial and Consumer durable sectors. Given that majority of sales from Tata Steel's Indian operations are made within India and sales from its European operations are made in the European Union, the United Kingdom and the United States of America, Tata Steel's product segmentation and sub-segmentation is customised for Indian and European operations, to best serve the needs of the customers in each geography.

Tata Steel has also defined customer groups based on the route to the market, as below:

- 1. Business to Business (B2B)** – Large Original Equipment Manufacturers (OEMs), including automotive and construction OEMs and project customers.
- 2. Business to Emerging Corporate Accounts (B2ECA)** - Emerging corporate accounts or Micro, Small and Medium Enterprises.
- 3. Business to Consumers (B2C)** – Retail consumers.
- 4. Business to Government (B2G)** – Government organisations and Public Sector Undertakings.

In the endeavour to improve customer insights, further micro-segmentation has been done based on the end use, application, buying behaviour and geography. A summary of Tata Steel's products and brands is provided in the Company's Integrated Report for FY2022-23.

IV. Employees

18. Details as at the end of Financial Year

a) Employees and workers (including differently abled):

Sl. No.	Particulars	Total (A)	Male		Female		Others	
			No. (B)	% (B/A)	No. (C)	% (C/A)	No. (D)	% (D/A)
Employees								
1	Permanent (E)	66,186	60,598	91.6	5,512	8.3	76	0.1
2	Other than Permanent (F)	1,598	1,398	87.5	200	12.5	-	0.0
3	Total Employees (E+ F)	67,784	61,996	91.5	5,712	8.4	76	0.1
Workers								
4	Permanent (G)	50,514	46,549	92.2	3,889	7.7	76	0.2
5	Other than Permanent (H)	1,15,810	1,07,883	93.2	6,266	5.4	1,661	1.4
6	Total workers (G + H)	1,66,324	1,54,432	92.9	10,155	6.1	1,737	1.0

Note 1: Other than Permanent Workers, majorly include workforce hired through third party job contracts. A sizable number is engaged to carryout expansion projects. The organization is focused on skilling and automation to further optimize manpower and improve productivity.

Note 2: Employees includes Workers. Permanent employees includes all personnel on rolls of the Company excluding those on fixed term contract, who are covered under Other than Permanent Employee. Permanent workers are on rolls of the Company but do not perform managerial or administrative role. 'Other than permanent workers' are third party contractor.

Note 3: 'Others' includes 76 transgender personnel in case of Permanent workers, also included in Permanent employees. Other than Permanent workers include 15 transgender workers in India as well as 1,646 workers overseas, where gender bifurcation is not available.

Tata Steel understands that historically certain sections of the society have had lower participation in the workforce and faced exclusion and discrimination in employment across the world. This is felt even more acutely in the mining and manufacturing sector, which has traditionally been perceived as less attractive for women, compared to the service sector. As a result, the participation rate of females in the steel industry globally has been lower than average. Furthermore, Tata Steel operates in some of the remotest parts of India, wherein historically there were limited opportunities available to women, marginalised communities and other minority groups, including the LGBTQIA+ community (Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual, and more), Persons with Disabilities and Tribal Communities, to pursue education and gain the requisite work experience.

Tata Steel believes it is imperative for companies to strive to better represent the larger society and create opportunities for all sections of the society in order to be successful. We also believe it is our responsibility to not only to employ from all segments of the society, but also to empower them to learn and grow equitably, to launch enabling policies and benefits that are critical for their psychological safety, and to ensure sustenance of such endeavours. Tata Steel has tremendous organisational focus on the potential of Diversity & Inclusion and its philosophy is to be a truly world class organisation that respects uniqueness of individuals, which will eventually create a diverse and inclusive atmosphere to be competitive in business by having access to a larger talent pool.

Accordingly, Tata Steel has set up its Diversity & Inclusion wing, MOSAIC in 2015 — a platform where different pioneering initiatives, diversity targets and employee friendly policies are conceptualised and executed. Just like the artform mosaic, Tata Steel is conceptualised as an amalgamation of its diverse people, from diverse backgrounds, coming together to make a unified whole. Our initiatives aim to alleviate the barriers to employment for all sections of the society through inclusive recruitment, enabling policies, upskilling and sponsorship initiatives.

Tata Steel has identified four focus areas for intervention: Women, the LGBTQIA+ community, Persons with Disabilities and the Affirmative Action Community (Tribal Communities). Tata Steel has also formulated 5 pillars for its Diversity & Inclusion philosophy: Recruitment, Sensitisation, Development, Infrastructure and Celebration.

Tata Steel has emerged as an industry benchmark for Diversity & Inclusion initiatives in India. We have formed a central Diversity & Inclusion team which ideates, curates, and implements policies to make the workplace truly diverse and inclusive. The central team works alongside the divisional Diversity & Inclusion leaders to drive initiatives across the organisation. Tata Steel is also looking to collaborate with other organisations within and outside the Tata Group to generate momentum in this journey, and thereby bring social change.

A summary of some of our Diversity & Inclusion interventions in our chosen segments is provided below:

1. As an equal opportunity employer, Tata Steel strives to break gender stereotype and provide opportunities to all workgroups to be an integral part of the workforce. Tata Steel is focussed on getting more women with STEM (Science, Technology, Engineering and Mathematics) background in manufacturing and mining units. Through its “Women@ Mines” initiative (all shift operation in mines), Tata Steel became the first Company in India to deploy women in all shifts in mines. Tata Steel has onboarded 73 women as heavy earth moving machinery operators – a major step in breaking mental barriers and increasing women participation in the workforce. Tata Steel’s ‘Tejaswini 2.0’ programme has been set up to upskill women for such roles.
2. Initiatives such as Women of Mettle, a unique scholarship programme wherein women engineering students are provided with scholarships and internship opportunities with the Company to create a talent pipeline of young female officers for the organisation.
3. At its mining and manufacturing locations where 3 shift working of women is permitted, necessary infrastructure enablement has been done to create a safe and inclusive workplace (e.g. transport between the plant and their home). Tata Steel has also started deploying females in A & B shift operation at its Jamshedpur plant and is planning for 3 shift staffing of operations by women.
4. Various leadership development programmes have been curated for development of women leaders with focus on upskilling, sponsorship, and career progression support. Tata Steel is focussed on ensuring leadership developmental interventions for 100% women in leadership roles.
5. Many policies have been put in place to foster a culture of inclusion within Tata Steel such as Agile Working Models with ‘absolute work from home’ opportunities and other flexible work models, introduction of Raahat (menstrual leave for its female employees), Take Two Policy (a recruitment programme to encourage female professionals on a career break or otherwise to restart their career with Tata Steel), gender-neutral adoption assistance policy and a policy enabling women to return to the workforce after any period of leave.

6. Tata Steel is also one of the first companies in India to roll out a special recruitment drive for hiring transgender talent and recruited over 100 members from Transgender community at its various locations for different job roles (including trainees). Going forward, the Company plans to hire more talent from this community, based on the role requirement.
7. An Employee Resource Group – WINGS – for the LGBTQIA+ colleagues and the allies help provide psychological safety and a platform for learning & sharing knowledge with each other. 'WINGS' aims to support Tata Steel's LGBTQIA+ diversity and inclusion strategy, institutionalise LGBTQIA+ friendly policies within the organisation, foster a climate of awareness & sensitisation, increase engagement, and provide a comfortable work environment. Tata Steel's policies are gender neutral and equal benefits are provided to LGBTQIA+ colleagues.
8. An innovative recruitment model “**Queerious**” was launched in FY2022-23 to attract talent from premium institutes. Through this approach, queer talent in the country were given an opportunity to participate in industry focus challenges leading to scholarships, internship opportunity with Tata Steel and placement offers. Going forward, this model of hiring LGBTQIA+ talent will be further scaled up.

As an organisation, we are also focused on the Affirmative Action community, with a special focus on the tribal communities, with a three-pronged approach of Employment, Employability and Entrepreneurship. We actively engage with people from the community and focus on skilling of the youth, development of Affirmative Action vendors and various other Corporate Social Responsibility activities. Through its not-for-profit institution, J N Tata Vocational Training Institute, more than 4,500 youth from communities around the select operations of the Company have been skilled with employment opportunities. Tata Steel's community connect programmes, through initiatives like Samvaad – a platform for exchanging ideas and thoughts, help promote the tribal culture in India.

At present c.12% of our workforce comes from the Affirmative Action groups. In FY2022-23, a full batch of 167 meritorious tribal youth were selected for a Trade Apprentice programme. Tata Steel also has Affirmative Action vendors operating in the Tata Steel ecosystem, with special focus on encouraging entrepreneurship and strengthening the financial condition of the Affirmative Action community.

In addition to the Diversity & Inclusion programmes for its Indian operations, which focuses on key societal issues in India, Tata Steel has also launched a new Diversity & Inclusion programme for its Dutch operations, covering the following four key societal issues in Europe:

1. **Inclusivity:** Tata Steel is looking to provide a more inclusive workplace at its European sites and is initiating interventions, such as the Confidential Advisers platform and training courses for managers and teams, to discourage undesirable behaviour in the form of discrimination, harassment, aggression and/or bullying.
2. **Ethnic and cultural diversity:** Tata Steel strives for more ethnic and cultural diversity in its workforce. In IJmuiden, which is the Company's largest operations in Europe, Tata Steel is looking to increase the ethnic and cultural diversity by increasing the number of employees with non-western background from 7% (in 2021) to 14% by 2027.
3. **More female engineers and managers:** We also aim to increase the number of women in technical and decision-making positions in the organisation as below:
 - a) In terms of technical positions, Tata Steel aims to employ 5% of women by 2027 at its IJmuiden site, an increase of 3 percentage points.
 - b) In terms of decision-making positions, Tata Steel is targeting to increase the participation of women to at least 30% by 2027, compared to c.20% in FY2022-23.
4. **Science, Technology, Engineering and Mathematics (STEM):** In line with Tata Steel's initiatives in India, Tata Steel in the Netherlands is also working towards gender balance and encourage the participation of more women into the industry by building awareness of STEM choices and opportunities available in schools and during higher education. Every year, Tata Steel holds a well-known Girl's Day in IJmuiden, Netherlands. It is an initiative to introduce girls to technology at a young age, and at the end of March 2023, 300 girls and a good number of boys were introduced to Engineering at our IJmuiden plant.

To realise the goals of its Diversity & Inclusion Policy, Tata Steel Nederland has launched an extensive programme of activities, including communication campaigns, inspiration sessions about diversity & inclusion, training on avoiding unconscious bias, coaching, facilitating buddies for young female managers and meetings under the motto of Future Female Leadership.

b) Differently abled Employees and workers:

Sl. No.	Particulars	Total (A)	Male		Female	
			No. (B)	% (B/A)	No. (C)	% (C/A)
Employees						
1	Permanent (D)	144	139	96.5	5	3.5
2	Other than Permanent (E)	0	0	0	0	0
3	Total Employees (D+ E)	144	139	96.5	5	3.5
Workers						
4	Permanent (F)	124	122	98.4	2	1.6
5	Other than Permanent (G)	We do not report differently abled workers who are not on the rolls of Tata Steel.				
6	Total workers (F + G)	124	122	98.4	2	1.6

Note: The data excludes number of differently abled employees for Tata Steel's European subsidiaries, which currently do not capture this data, in line with local practice (due to data privacy regulations).

Tata Steel is an equal opportunity employer and has taken several initiatives to have a more inclusive work environment for differently abled employees. To create an inclusive workplace for employees with disability (focused on 4 disabilities: Upper Limb, Lower Limb, Visual Disablement and Hearing Impairment), several accessibility related policy interventions have been put in place, such as Company provided travel arrangement (to and from office), specialised laptops to address the nature of disability and various relevant physical infrastructure (ramps, washrooms, etc). Tata Steel has also revamped its website to comply with the Web Content Accessibility Guidelines (WCAG) 2.0, to make its website more accessible for differently abled employees. Work is in progress to get all internal digital platforms revamped and achieve compliance with WCAG 2.0 guidelines.

To increase the talent footprint of differently abled employees, Tata Steel is working with an external partner to carry out evaluation of available vacancies that may be suitable for deployment of differently abled persons. This may also help open other areas of disability, such as neurodiversity and autism, for consideration in Tata Steel's workforce planning.

Tata Steel has also organised communication and awareness sessions to increase the awareness of different types of disabilities and inclusion initiatives, to ensure that all employees understand the importance of a diverse and inclusive workplace. This includes virtual sessions on different accessibility features and shortcuts on commonly used IT platforms and sensitisation sessions to create accessible contents.

19. Participation/ Inclusion/ Representation of women

	Total (A)	No. and percentage of Females	
		No. (B)	% (B / A)
Board of Directors	10	2	20
Key Management Personnel ¹	3	0	0
Senior Leadership Team ²	17	2	12

¹Chief Executive Officer & Managing Director, Executive Director & Chief Financial Officer and Company Secretary & Chief Legal Officer (Corporate & Compliance).

²Vice-presidents, excluding Key Management Personnel.

Note 1: The data provided in the above table pertains to Tata Steel Limited only.

Note 2: The data is as on March 31, 2023

20. Turnover rate for permanent employees and workers:

	FY2022-23			FY2021-22			FY2020-21		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Permanent Employees & Permanent Workers (%)	7.3	9.4	7.4	6.3	8.4	6.5	5.0	6.7	5.1

Note: Turnover rate includes Resignations (attrition) + Separation due to Retirement

The corresponding data for separation by resignations is provided below:

	FY2022-23	FY2021-22	FY2020-21
Tata Steel Limited (Standalone) Permanent Employees and Permanent Workers (%)	2.7	2.0	1.2
Tata Steel Group (Consolidated) Permanent Employees and Permanent Workers (%)	3.8	3.0	1.8

V. Holding, Subsidiary and Associate Companies (including Joint Ventures)

21. Names of holding/ subsidiary/ associate companies/ joint ventures

- Tata Steel Limited does not have any holding Company. The details of Promoter and Promoter Group of Tata Steel Limited as on March 31, 2023 is provided in the shareholding pattern available on our website at - <https://www.tatasteel.com/investors/stock-exchange-compliances/shareholding-pattern/>
- The list of subsidiary companies of Tata Steel Limited is provided in Part A of Annexure 5 of the Board's Report forming part of Tata Steel's Integrated Report for FY2022-23.
- The list of Joint Ventures & Associate companies of Tata Steel Limited is provided in Part B of Annexure 5 of the Board's Report forming part of Tata Steel's Integrated Report for FY2022-23.

All subsidiaries, associates and joint venture companies of Tata Steel Limited that have business operations participate in the Business Responsibility initiatives of Tata Steel Limited.

VI. Corporate Social Responsibility Details

Section	Details	Company Particulars
22. (i)	Whether Corporate Social Responsibility is applicable as per Section 135 of Companies Act, 2013?	Yes
22. (ii)	Turnover (in ₹ Cr.) for Tata Steel Limited	1,29,006.62
22. (iii)	Net worth (in ₹ Cr.) for Tata Steel Limited	1,34,797.51

VII. Transparency and Disclosures Compliances

23. Complaints/Grievances on any of the principles (Principles 1 to 9) under the National Guidelines on Responsible Business Conduct:

Stakeholder Group	Grievance Redressal Mechanism in Place
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Communities Yes, Tata Steel has grievance redressal mechanisms in place to address grievances of all key stakeholder groups across all geographies, including communities. The grievance mechanisms are designed based on specific requirements of each of the locations, so as to be most effective.

For its Indian operations, Tata Steel Foundation (TSF), a wholly owned subsidiary of Tata Steel Limited, which acts as the fulcrum of Tata Steel's Corporate Social Responsibility activities in India and also leads Tata Steel's engagement with the local communities in the areas where Tata Steel operates within India. TSF team members regularly interact with the community members and speak with individuals and groups within the communities, as well as with various stakeholders, to ensure that the grievances are resolved.

Further, in India, Tata Steel has also set up several forums involving communities and their representatives, with significant participation from citizens. These forums are designed with a participatory approach in mind, rather than a formal grievance redressal system, and thereby not only ensure a free flow of input but also enable understanding of different perspectives & concerns, thus establishing a deep two-way relationship between the Company and the communities. Some of the key forums are:

1. Scheduled Tribe stakeholders' council
2. Scheduled Caste stakeholders' council
3. Citizens' forum of Jamshedpur

Tata Steel is also looking to leverage technology to enable grievance redressal for the community, where necessary. In the Netherlands, Tata Steel has created an online link accessible to the community members to raise environment related grievance. For all other geographies where Tata Steel operates, there are means and measures to take feedback from all categories of stakeholders, including those on relatively smaller sites, where the management teams directly interact with the local communities.

FY2022-23		FY2021-22	
Number of complaints filed during the year*	Number of complaints pending resolution at close of the year	Number of complaints filed during the year*	Number of complaints pending resolution at close of the year
4,866	NIL	2,724	NIL

* Complaints from the communities are recorded for our overseas subsidiaries in the UK and Netherlands. Tata Steel in the Netherlands has multiple engagement mechanism to communicate with and redress the grievances raised by the communities. Further details are provided under Principle 8 Essential indicator 3.

Investors & Shareholders

Yes, Tata Steel has comprehensive grievance redressal mechanisms in place to address grievances of investors and shareholders. The Company has a Board-level Stakeholders' Relationship Committee to oversee functioning of mechanisms for redressal of investor grievances.

Tata Steel has appointed TSR Consultants Private Limited (TSR) as the Registrar and Transfer agents of the Company. TSR acts as the single point of contact for all investor related complaints of the Company. TSR works closely with the Company Secretary of Tata Steel to actively address and resolve all investor and shareholder grievances. The Investor Presentations, Quarterly Financial Reports, Annual Integrated Report etc. are also shared through the website: www.tatasteel.com

In addition, Tata Steel has a dedicated investors relation team to address queries from equity and debt investors. The investor relations team also communicates key Tata Steel strategic initiatives/ plans through structured meets and reports to the investors & analysts. Key investor events organised by Tata Steel includes Analyst Meets, Investor Day Meets, One-to-One meetings, Earnings and other update calls, in addition to the Company's Annual General Meeting.

Tata Steel has also developed deep relationships with key banking and non-banking investors at the senior most level and has regular meetings with the lenders. We also provide them with the requested information and address queries, as necessary.

FY2022-23		FY2021-22	
Number of complaints filed during the year *	Number of complaints pending resolution at close of the year*	Number of complaints filed during the year*	Number of complaints pending resolution at close of the year*
355	4	405	1

* The numbers pertain to Tata Steel Limited

Stakeholder Group	Grievance Redressal Mechanism in Place
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Employees and Workers

Yes, Tata Steel has several grievance redressal mechanisms for addressing complaints and grievances of employees and workers, as below:

1. Tata Steel has a dedicated one-stop solution for all employee issues across all geographies. The largest such platform, rolled out for Tata Steel and its key subsidiaries in India, is called the 'Speak Up' platform. Similar solutions exist at all locations with different names. Under the 'Speak Up' umbrella, Tata Steel also provides an independent and confidential third-party reporting helpline (<https://www.tatasteel.com/corporate/our-organisation/ethics/>), with similar helplines available for overseas locations of the Company.
2. Tata Steel also has a Whistle-Blower Policy and associated mechanisms to redress grievances of all stakeholders, including employees. The link to the Policy is available on Tata Steel's website and accessible to everybody at <https://www.tatasteel.com/corporate/our-organisation/policies/>
3. Tata Steel has a Joint Consultation System between the union and the management across key geographies, which has representation from both the management and the union. This is a 3-tier mechanism where issues ranging from policy decision to the concerns faced by shop floor employees are discussed and resolved in a proactive manner.
4. A bespoke helpdesk service, called People Care, has been set up for addressing employee queries. Employees can raise any query/ issue related to Human Resource processes on the People Care helpline, which resolves these issues in a targeted timeline. People Care is accessible through both email and telephone.
5. As part of its consultative approach of working with Unions, Tata Steel has also set up various Zonal & Central Works Committees (in India) and Regional and Central Works Council (in Europe), as applicable, which take up the employee grievances.
6. Where required, Liaison Officers & Complaint Officers have been nominated by Tata Steel, who help in providing requisite support to realise the goals of an inclusive and discrimination free, LGBTQIA+ friendly, accessible workplace.
7. Tata Steel Limited, which has a large contract workforce, has created a bespoke Reach Out programme for the contract workforce to create awareness on worker rights. There is also a Digital Contract Labour Management platform for improved contract workforce experience.

FY2022-23		FY2021-22	
Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Number of complaints filed during the year	Number of complaints pending resolution at close of the year
880	184	596	115

Note: Includes behavioral complaints, Human Resource related complaints, complains related to safety and improper use of company facilities and whistle blower complaints.

Customers

Yes, Tata Steel has a well-defined Customer Complaint Management System, based on the 8D (Eight Disciplines of Problem Solving) Complaint Management Process, in which a team-oriented approach is used to solve critical problems. The objective of this method is to find the root cause of a complaint, develop containment actions and take corrective actions to prevent similar occurrences in the future. Tata Steel endeavours that all complaints are resolved promptly, and that Corrective and Preventive Actions are communicated to the customer.

Tata Steel has also introduced TSLCARES App for direct logging of complaints by customers, who could take action on App for speedy resolution of complaints.

FY2022-23		FY2021-22	
Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Number of complaints filed during the year	Number of complaints pending resolution at close of the year
5,596	223	5,515	159

Note: The complaints cover the various categories such as those related to, payments, order entry and fulfillment, product quality, logistics etc.

Stakeholder Group	Grievance Redressal Mechanism in Place
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Value Chain Partners

Yes, Tata Steel has several vendor grievance redressal mechanisms in place across all its locations. Some key vendor grievance redressal mechanisms for Tata Steel Limited are listed below and similar mechanisms are also in place for other geographies of the Company:

1. Ethics related grievances are addressed through a dedicated platform called 'Speak Up', operated by 3rd party vendors (<http://www.in.kpmg.com/ethicshelpline/tslindia>). The process provides for a time bound resolution by a properly constituted committee.
2. Any grievance related to business transactions are handled through the Vendor Feedback & Dialogue Mechanism, which involves a dedicated Vendor Grievance Redressal Committee chaired by a Vice president of the Company. The committee reviews any representations received from vendors to ensure that their grievances are addressed and resolved effectively.
3. A bespoke helpdesk service called ProCare has been set up for addressing vendor and customer grievances (related to their day-to-day operations) through timely resolution. ProCare extends its services to 100% of the supplier base of Tata Steel Limited, ensuring timely resolutions for all. Around 27,000 vendor queries were resolved in FY2022-23 related to day-to-day issues.

In addition to the above, we have several listening posts for our supplier partners to address their concerns, capture their suggestions, and address key issues. On occasions such as Ethics Month, World Environment Day, National Safety Day etc., we organise interactive sessions with our vendor partners. Periodic communication is also undertaken with our suppliers through the e-Proc platform.

We have also conducted sessions on Anti-Bribery and Anti-Corruption (ABAC) and Anti-Money Laundering (AML) policies with all our suppliers in FY2022-23.

	FY2022-23		FY2021-22	
	Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Number of complaints filed during the year	Number of complaints pending resolution at close of the year
Speak Up	103	20	174	21
Vendor Grievance Redressal Committee	15	0	12	0
Others	58	22	53	16
Anonymous	471	136	297	95

24. 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.

Tata Steel has a structured Materiality Assessment process to identify business conduct and sustainability issues pertaining to environmental and social matters that present a risk or an opportunity for the Company. The assessments are conducted by independent external advisors, in line with global standards, on a periodic basis. The most recent materiality assessment has been conducted in FY2022-23, for Tata Steel as a whole.

Based on the outcome of this materiality assessment, the following material issues pertaining to environmental and social matters have been identified by Tata Steel, covering both risks and opportunities.

Material issues identified

Environment

A1. Greenhouse Gas Emissions & Climate Change Management

	Rationale for identifying the risk/opportunity	Approach to adapt or mitigate
Risk & Opportunity	A significant part of Tata Steel’s production is through the blast furnace route, which is an emission intensive process and contributes towards global warming. Tata Steel has committed to a target of Net Zero by 2045 and transition to low carbon steelmaking is critical for the long-term success of the Company.	Tata Steel has set an ambitious target to be Net Zero emissions by 2045. In its pursuit of decarbonisation, Tata Steel has adopted a two-pronged approach of Carbon Direct Avoidance (e.g., use of hydrogen or steelmaking using the electric arc furnace route) and Carbon Capture & Usage. Tata Steel’s decarbonisation roadmap includes Green Hydrogen – Direct Reduced Iron based steelmaking, use of cleaner fuel (e.g., hydrogen & coal-bed methane) in blast furnaces, carbon capture & usage, increased scrap usage in existing operations and scrap-based steelmaking. Tata Steel has published its strategy to mitigate Climate Change related risks in its Climate Change Report. Tata Steel’s FY2022-23 Climate Change Report is a part of Tata Steel’s Integrated Report for FY2022-23.
Financial implications	Details of financial impact on the Company is provided in the Climate Change report, included in the Integrated Report for FY2022-23.	

A2. Circular Economy

	Rationale for identifying the risk/ opportunity	Tata Steel's Initiatives
Opportunity	<p>Steel as a material lends itself handsomely to circularity and is recyclable as ferrous scrap to produce new steel. Steel produced through recycling has a significantly lower carbon footprint, as opposed to producing primary steel by reducing iron ore. Tata Steel has adopted a target to be Net Zero emissions by 2045 and increased usage of scrap in its steelmaking process is one of its strategies to become a green steel producer.</p> <p>Tata Steel also produces a large quantity of waste, which can either be reused into its own process (and reduce operating costs) or be sold to external parties (e.g. sale of slag to the cement industry), creating additional revenue for the Company.</p>	<p>Tata Steel is looking at two approaches for value creation from circularity:</p> <p>(a) Tata Steel aims to maximise the amount of scrap charged into its existing blast furnace based steelmaking operations and is setting up new electric arc furnace-based steelmaking operations across multiple locations in North, West and South India, to make steel, using steel scrap. The Company has also set up Steel Recycling Business to supply existing and new scrap requirement.</p> <p>(b) Tata Steel has set up its Industrial By-Products Management Division as a profit centre, which operates on the 3R principle - Recover, Re-use and Re-cycle, and generates revenue from sale of By-Products which are not useful for Tata Steel but can act as a raw material for other industries. The By-Products include sale of Aluminium and Copper, Coal tar and Coal washery products, various types of Scrap, Granulated and Ground granulated blast furnace slag, Iron oxide, lazy goods & miscellaneous items, Pooled iron, Sulphur and Zinc By-Products. India's first branded construction products created from steelmaking slag – Tata Aggreto & Tata Nirman – have been launched by Tata Steel.</p>
Financial implications	Positive	

A3. Water Consumption and Effluent Discharge

	Rationale for identifying the risk/ opportunity	Approach to adapt or mitigate
Risk	<p>Tata Steel utilises a large quantity of water in its processes and draws this water from multiple sources. Tata Steel's water consumption is regulated under all geographies and non-compliance to regulatory requirements with respect to effluent discharge & higher water usage may lead to environmental compensation by regulatory authorities, financial loss due to stoppage of operation and withdrawal of license to operate.</p> <p>Additionally, as a result of climate change, access to fresh water is expected to reduce in certain geographies, making water a scarce resource. Tata Steel will need to minimise water requirement and maximise water recycling to be cost efficient.</p>	<ol style="list-style-type: none"> 1. Addressing water scarcity through 4R framework of Reduce, Reuse, Recycle and Recover and using best available technologies. 2. Minimising withdrawal of fresh water from rivers by maximising the recycling of treated waste effluents within the plant by setting up effluent treatment plants. 3. Tata Steel is also reusing treated municipal wastewater and has water harvesting infrastructure across multiple locations. 4. Tata Steel's aim is to achieve Zero Effluent discharge from Works premises and ensure completion of Zero Effluent Discharge projects under progress (for its Indian operations). 5. Ensuring health and connectivity of the installed online continuous effluent analysers. 6. New plants are designed to be water efficient.
Financial implications	Negative	

A4. Energy Efficiency/Energy Management

	Rationale for identifying the risk/opportunity	Tata Steel's Initiatives
Opportunity	<p>Production of steel is a highly energy intensive process and Tata Steel consumes a large quantity of energy across multiple sources: coal, natural gas, electricity and other fossil fuel. Energy efficiency and management initiatives helps Tata Steel to manage and optimise energy consumption across its operations, resulting in lower operational costs (through lower consumption of energy), greater resilience in the event of energy disruptions, and greater ability to respond to regulatory obligations.</p> <p>Energy efficiency and adoption of renewable energy is also a key lever for Tata Steel to lower its Scope 2 greenhouse emissions.</p>	<p>Tata Steel has several initiatives to improve energy efficiency of the Company across all geographies, and already recovers a large part of its process gases to produce power and for heating purposes at all its geographies. Tata Steel is also working with the Bureau of Energy Efficiency in India to identify and implement energy efficiency projects across various sites in India. Similar energy efficiency initiatives are also being undertaken in Europe.</p> <p>Simultaneously, to reduce its dependence on fossil fuel, Tata Steel is entering into an agreement with Tata Power Renewable Energy Limited to set up c.950 MW of solar & wind hybrid renewable power capacity under captive arrangement. This will cater to c.379 MW of the Company's power requirement in India and enable reduction of over 2 million tonnes of CO₂ per annum. Additional details are included later in this report.</p>
Financial implications	Positive	

OPERATIONS

B1. Occupational Health and Safety

	Rationale for identifying the risk/opportunity	Approach to adapt or mitigate
Risk	<p>Tata Steel has a large number of employees and contract workers working across all sites. In addition, many of the Company's steel plants are situated in close proximity of the wider community (e.g., Jamshedpur, Ijmuiden and Port Talbot). Therefore, ensuring the safety of its employees, contract workers and communities is critical for continued regulatory and social licence to operate, especially considering process related hazard in steelwork. In case safety related processes or performance of the Company is deemed inadequate, or in case of a significant safety incident, prohibition order from the government may also lead to partial closure of the plant.</p> <p>Each safety incident also has a negative impact on the health, well-being and morale of employees along with a negative reputational impact on the Company. They may also result in operational and financial loss to the Company, including potential partial closure of the plant.</p>	<p>Tata Steel's safety and health responsibilities are driven by our commitment to zero harm to the people we work with, and the community at large. We endeavour to achieve this objective through a robust safety management system framework and a sound safety governance structure. Details on Tata Steel's approach on mitigating safety risk is provided later in this report.</p>
Financial implications	Negative	

B2. Air Pollution/Air Quality Management

	Rationale for identifying the risk/ opportunity	Approach to adapt or mitigate
Risk	Non-compliance related to regulatory requirements with respect to air pollution at any of the Tata Steel sites may lead to adverse impact on the health and safety of employees / workers / community, environmental compensation by regulatory authorities, financial loss due to stoppage of operation, withdrawal of license to operate and can lead to loss of reputation.	Tata Steel's Mitigation Strategies include the following: <ol style="list-style-type: none"> 1. We are investing in various environment improvement projects such as upgradation of pollution control equipment, installation of 'De-NOx' facilities (including the upcoming 'De-NOx' facility at IJmuiden), installation of new dust extraction and dust suppression systems to reduce stack dust and fugitive dust emissions. 2. Tata Steel is also ensuring the health and connectivity of the installed online continuous Stack Emission and Ambient Air quality analysers. 3. Tata Steel also closely monitors the Ambient Air quality.
Financial implications	Negative	

B3. Biodiversity

	Rationale for identifying the risk/ opportunity	Approach to adapt or mitigate
Risk	Regulatory risks and increased spend due to requirements of forest diversion and other compliances and restoration of biodiversity loss.	Tata Steel has a Biodiversity Policy in place and is deploying Biodiversity Management Plans across various sites, designed on the foundation of mitigation hierarchy (avoid, minimise, restore & offset) tool after a baseline assessment. Tata Steel has a target to cover 100% sites under Biodiversity Management Plans by 2025.
Financial implications	Negative	

B4. Research and Development/Technology, Product and Process Innovation

	Rationale for identifying the risk/ opportunity	Tata Steel's Initiative
Opportunity	<p>Tata Steel is focused on production of high value-added or differentiated steel, which enables us to achieve higher margin for our products. Our continuous focus on Research & Development, new technologies and innovation in products and processes is critical for the Company to better serve and retain customers, retain leadership in differentiated products and access new markets.</p> <p>Research & Development and Innovation are also critical for Tata Steel to retain cost competitiveness by continuous improvement in process efficiency and resource utilisation.</p> <p>The importance of Research & Development has increased even more for the Company as we focus on increasing the technological maturity of low carbon steelmaking to achieve our Net Zero emissions objective and remain a sustainable partner for all our stakeholders.</p>	<p>Tata Steel aspires to be among the top 5 global technology leaders in the steel industry and has consistently used technology and innovation to build a rich portfolio of future ready high value-added products. We continuously focus our research efforts to retain our leadership position in attractive segments like automotive steel and packaging steel.</p> <p>We also collaborate with the academia and others to identify the best ideas and technologies, wherever they may be.</p> <p>Tata Steel is actively engaged in development and piloting of various low carbon steelmaking technologies, including HIsarna and the use of hydrogen in steelmaking, either through the Direct Reduced Iron route (in Netherlands) or through injection of hydrogen in the blast furnace (in India).</p>
Financial implications	Positive	

SOCIAL

C1. Supply chain sustainability

	Rationale for identifying the risk/opportunity	Tata Steel's Initiatives
Risk	<p>Tata Steel has a long-integrated value chain that extends from mining to finished steel products, with an interconnected network of suppliers, mines, ports, manufacturing locations, stockyards, warehouses, processing facilities, channel partners and customers, handling over 100 million tonnes of material in a year. The production, transportation, storage and handling of materials like iron ore, coal, limestone, refractory, aluminium, zinc, ferro alloys etc. have a negative impact on the environment, including greenhouse gas and other emissions. These materials also have adverse impact on the environment during their use in iron and steelmaking.</p> <p>By implementing environmentally and socially responsible supply chain practices, companies can protect the long-term viability of their business and secure a social licence to operate. Better scope 3 performance will also have a positive reputational impact and help achieve the Net Zero target of the Company.</p>	<ol style="list-style-type: none"> 1. Tata Steel is one of the few companies to measure end to end Scope 3 emissions for all modes of transportation, giving it an equal focus as Scope 1 & 2 emissions. The Company has also taken several initiatives to reduce Scope 3 emission by using cleaner fuel or alternate fuel. Additional details on these initiatives have been provided later in this report. 2. Tata Steel has launched the Zero Carbon Logistics programme in Europe which aims to reduce our CO₂ footprint caused by the transport of our product to the customer by 30% by 2030. 3. Tata Steel has also launched Responsible Supply Chain Policy, which covers issues related to ethics, human rights, health & safety, and environmental sustainability. These policies are incorporated in the vendor qualification process and all vendors are made aware of and are required to adhere to these policies. Implementation of Responsible Supply Chain Policy will also help in de-risking the Company's supply chain.
Financial implications	Positive	

C2. Employee Well-being and Development

	Rationale for identifying the risk/opportunity	Approach to adapt or mitigate and Tata steel's Initiatives
Risk and Opportunity	<p>Risk: Tata Steel's plant and mining locations are in some of the remotest parts of India and a majority of its future expansion in India are also coming up at the same sites. These locations have a relatively lesser availability of urban infrastructure compared to large cities, making access to skilled manpower a risk for both the expansion phase and the operations phase at these sites.</p> <p>Opportunity: Tata Steel believes that Employee Well-being and Development creates a healthy company culture, better employee satisfaction and higher employee engagement and therefore, helps attract and retain talent. The Company's ability to attract and retain talent provides the Company with a competent and experienced workforce and reduces recruitment costs for the Company. A high quality and motivated workforce is critical for Tata Steel to achieve its vision of being the global steel industry benchmark for Value Creation and Corporate Citizenship.</p>	<p>Tata Steel believes that people are our greatest asset, and we adopt best practices to ensure healthy employee relations, employee growth and development as well as work satisfaction. Our agile working model has further strengthened the trust and outcome-based working culture while offering the remote working flexibility to employees. We also provide industry leading social security benefits to employees and their families. Since its inception, Tata Steel has introduced several path-breaking policies and practices for employee welfare and well-being and we continue to invest in our people, processes and supporting ecosystem. Tata Steel has central recognition framework through which we appreciate our people for their extraordinary efforts and our recognition mechanism include experiential rewards and provide a unified experience across our employee segments. Additional details of Tata Steel's employee well-being initiatives are provided later in this report.</p> <p>We have strived to build caring and collaborative relationships based on trust and mutual respect, paving the way for a 'Respectful workplace' for all. We provide a range of opportunities for employees to upgrade their skills and almost the entire employee base is impacted through one or more learning interventions every year.</p>
Financial implications	Positive	

C3. Community Support and Corporate Social Responsibility/Building thriving Communities

	Rationale for identifying the risk/ opportunity	Approach to adapt or mitigate or Tata Steel's Initiatives
Risk and Opportunity	<p>Many key sites of Tata Steel are located in close proximity to the wider community. A mutually beneficial, two-way relationship with the community, anchored by transparency and trust, is critical for Tata Steel to continue to retain its social license to operate.</p> <p>A deep engagement with the community fosters goodwill amongst them for Tata Steel and helps maintain the public consent to operate. It also brings in a number of long-term benefits in terms of community support, loyalty, source of future employees and capital and the fostering of goodwill, which in turn helps raise awareness of the Company's products and/or services.</p>	<p>Tata Steel firmly believe the health and welfare of our people, the community and society are intrinsic to our approach to business. Tata Steel's Corporate Social Responsibility initiatives focus on four thrust areas – Education, Health, Livelihoods and Rural & Urban Infrastructure, aimed at improving the communities' quality of life. Our Corporate Social Responsibility approach revolves around six guiding principles – Impact, Partnerships, Affirmative Action, Volunteerism, Communication and Innovation.</p> <p>Whilst we ensure that all communities benefit from our Corporate Social Responsibility activities, we focus on those groups that are socially and economically marginalised, such as women, girl child and scheduled castes and tribes.</p> <p>Tata Steel also engages in open and transparent dialogue with members of the community to understand their concerns and tries to address them through various initiatives.</p> <p>Further details of Tata Steel's Corporate Social Responsibility activities and community engagement is provided later in this report.</p>
Financial implications	Positive	

SECTION B: MANAGEMENT AND PROCESS DISCLOSURES

a) This section is aimed at helping businesses demonstrate the structures, policies and processes put in place towards adopting the National Guidelines for Responsible Business Conduct (NGRBC) Principles and Core Elements.

Tata Steel Policies	NGRBC Principle								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Affirmative Action Policy	✓		✓	✓	✓			✓	
Alcohol and Drugs Policy			✓						
Anti-Bribery and Anti-Corruption Policy	✓						✓		
Anti-Money Laundering Policy	✓								
Biodiversity Policy		✓				✓			
Climate Change Policy for Tata Companies		✓				✓			
Code of Corporate Disclosure Policy	✓			✓			✓		
Corporate Social Responsibility Policy				✓				✓	
Data Privacy Policy									✓
Dividend Distribution Policy				✓					
Document Retention and Archival Policy	✓								
Energy Policy		✓				✓			
Environmental Policy		✓				✓			
Equal Opportunity and Anti-Discrimination Policy			✓		✓				
HIV / AIDS Policy			✓						
Human Resource Policy			✓						

Tata Steel Policies	NGRBC Principle								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Information Security Asset Classification Policy									✓
Information Security Organisation Policy									✓
Information Security Policy									✓
Information Security Risk Management Policy									✓
Information Security Sustenance Policy									✓
Prevention of Sexual Harassment (POSH) at Workplace			✓		✓				
Policy for determining 'Material' subsidiaries	✓			✓					
Policy on dealing with Related Party Transactions	✓								
Policy on determination of Materiality for Disclosures	✓			✓					
Quality Policy		✓							✓
Remuneration Policy of Directors, Key Management Personnel and other Employees	✓								
Research Policy		✓				✓			
Responsible Supply Chain Policy and Guidelines		✓	✓	✓	✓	✓			✓
Risk Management Policy*		✓							
Safety Principles & Occupational Health Policy		✓	✓						
Social Accountability Policy			✓	✓	✓				
Sustainability Policy	✓	✓		✓	✓	✓			✓
Tata Code of Conduct	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tata Steel Business and Human Rights Policy			✓	✓	✓				
Whistle-Blower Policy for Business Associates	✓		✓	✓			✓		✓
Whistle-Blower Policy for Directors & Employees	✓		✓	✓			✓		✓

*Not published on Company's website

P1: Businesses should conduct and govern themselves with integrity and in a manner that is ethical, transparent, and accountable

P2: Businesses should provide goods and service 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 to all its stakeholders

P5: Businesses should respect and promote human rights

P6: Businesses should respect and make efforts to protect and 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



Disclosure Questions	Principles								
	P 1	P2	P3	P4	P5	P6	P7	P8	P9
Policy and management processes									
b) Has the policy been approved by the Board? (Yes/No)	<p>Yes, Tata Steel's Governance provides for approval of key policies by the Board or the Chief Executive Officer & Managing Director of the Company, based on the nature of the Policy and the associated regulatory requirements (if any). Accordingly, all policies of Tata Steel are approved by one of the two above-mentioned authorities. Key policies approved by Board are listed below:</p> <ol style="list-style-type: none"> 1. Anti-Bribery and Anti-Corruption Policy 2. Anti-Money Laundering Policy 3. Prevention of Sexual Harassment at Workplace Policy 4. Corporate Social Responsibility Policy 5. Policy on determination of Materiality for Disclosures 6. Policy on Related Party Transactions 7. Policy on Appointment and Remuneration of Directors and KMPs 8. Tata Code of Conduct 9. Policy on determination of material subsidiaries <p>The remaining policies of Tata Steel are approved by the Chief Executive Officer & Managing Director of the Company.</p>								
c) Web Link of the Policies, if available	<p>The Policies covering these principles are available on the Company's website under 'Our Policies' section. Link- https://www.tatasteel.com/corporate/our-organisation/ethics/</p>								
2. Whether the entity has translated the policy into procedures. (Yes/No)	<p>Yes, all the policies of the entity have been translated into procedures, which are in various stages of implementation. Various executive committees designated with specific responsibilities have also been constituted for operationalising these policies, called Apex Committees and Sub-committees. These are chaired by the senior leadership of Tata Steel.</p>								
3. Do the enlisted policies extend to your value chain partner? (Yes/No)	<p>Yes, Tata Steel's Code of Conduct and Responsible Supply Chain Policy and Guidelines cover key aspects of Tata Steel's policies related to its value chain partners. These policies are a stage-gate for registration of all vendors for Tata Steel. In case any vendor either does not accept Tata Steel's Code of Conduct or is in its breach, the relationship is terminated following due process.</p>								
4. Name of the national and international codes/ certifications/ labels/ standards (e.g. Forest Stewardship Council, Fairtrade, Rainforest Alliance, Trustea) standards (e.g. SA 8000, OHSAS, ISO, BIS) adopted by your entity and mapped to each principle.	<p>Tata Steel supports, adopts and complies with multiple domestic and international standards, as relevant. Some key certifications are listed below:</p> <ol style="list-style-type: none"> 1. Key sites of Tata Steel are certified under ISO 14001 (compliance to environmental management system). Further details are available in the ESG Factsheet section of Tata Steel's Integrated Report for FY2022-23. 2. Key sites of Tata Steel are certified under ISO 45001/OHSAS 18001 (Occupational Health & Safety Management Systems). Further details are available in the ESG Factsheet section of Tata Steel's Integrated Report for FY2022-23. 3. Key sites of Tata Steel are in compliance with the requirements of SA8000. 4. All manufacturing departments supplying to automotive companies in India are certified to IATF16949-2016. 5. Tata Steel Limited's R&D laboratory is approved by Department of Scientific and Industrial Research and is ISO 9001:2015 certified. Key laboratories in India are ISO/ IEC 17025:2017 certified. 6. Key sites of Tata Steel in India have ISO 9001 (Quality Management System) certification. 7. Tata Steel has adopted ISO 27001 and ISO 9001 for IT systems. 8. Tata Steel has adopted the <IR> framework of the IFRS Foundation and its annual Integrated Report is aligned with the <IR> framework. 9. Tata Steel has adopted the recommendations of the Taskforce on Climate Related Financial Disclosures (TCFD) and published a Climate Change Report aligned with the recommendations of TCFD, as part of Tata Steel's Integrated Report for FY2022-23. 10. Tata Steel has received ResponsibleSteel™ Certification for three facilities in Jamshedpur (Steel Works, Tubes Division and Cold Rolling Mill (Bara)). ResponsibleSteel™ is the steel industry's first global multi-stakeholder standard and certification initiative that works with steel producers, consumers, and intermediaries towards building a sustainable steel industry by addressing pressing challenges, including climate change, diversity, human rights and more. 11. Tata Steel's Enterprise Risk Management process is based on international standards like Committee of Sponsoring Organisation of the Treadway Commission ('COSO') and ISO 31000. 12. Tata Steel has a basket of Bureau of Indian Standards approved products. 								

<p>5. Specific commitments, goals and targets set by the entity with defined timelines, if any.</p>	<p>In line with our vision of being the steel industry benchmark in Corporate Citizenship, Tata Steel has adopted Environmental, Social & Governance goals for the organisation, which drive our initiatives across the Company, as below:</p> <p>Environmental Goals:</p> <ol style="list-style-type: none"> 1. Climate Change <ol style="list-style-type: none"> a) 2045: Net Zero emissions for the Tata Steel Group. 2. Dust Emission <ol style="list-style-type: none"> a) 2025: Achieve specific dust emission intensity of 0.43kg per tonne of crude steel in India b) 2030: Achieve benchmark status specific dust emission intensity in India 3. Product Sustainability <ol style="list-style-type: none"> a) 2025: Cover 100% of steelmaking and downstream sites under Life Cycle Assessment in India b) 2030: Disclose environment performance of 100% of products in India 4. Water <ol style="list-style-type: none"> a) 2025: Achieve specific freshwater consumption of 2.0 m³ per tonne of crude steel across all steelmaking sites in India b) 2030: Achieve specific freshwater consumption of <1.5 m³ per tonne of crude steel across all sites in India 5. Biodiversity <ol style="list-style-type: none"> a) 2025: Cover 100% sites under Biodiversity Management Plans across India, UK and the Netherlands. b) 2030: Strive for no Net Loss of biodiversity in designated areas of influence in India 6. Circular Economy <ol style="list-style-type: none"> a) 2025: Achieve material efficiency of 99% at all Indian steelmaking sites b) 2030: Sustain material efficiency at 100% at all Indian steelmaking sites c) 2030: Increase Tata Steel's Industrial By-product Management Division's EBITDA by 2.4 times over FY2019-20 d) 2030: Build a 5 MnTPA recycling business in steel and other business in India <p>Social Goals:</p> <ol style="list-style-type: none"> 7. Safety <ol style="list-style-type: none"> a) 2030: Achieve zero harm for Tata Steel Limited 8. Diversity: <ol style="list-style-type: none"> a) 2025: Achieve 25% diversity in workforce for Tata Steel Limited b) 2027: Increase diversity in job with persons from non-western background to 14% for Tata Steel Nederland c) 2027: Women in vocational technical positions to grow to 5% for Tata Steel Nederland d) 2027: Women in decision-making positions to increase to at least 30% for Tata Steel Nederland e) Tata Steel UK to aim to have 25% women employed across the business 9. Local community development: <ol style="list-style-type: none"> a) 2030: Reach >10 million lives per annum through Corporate Social Responsibility initiatives <p>Governance Goals:</p> <ol style="list-style-type: none"> 10. ResponsibleSteel™ Certification <ol style="list-style-type: none"> a) 2025: Achieve 'Certified Site' certification for all existing steelmaking sites in India b) 2030: Achieve 'Certified Steel' certification for all sites in India 11. Supply Chain <ol style="list-style-type: none"> a) 2027: Coverage of 100% critical supply chain partners for Environment, Social and Governance risk assessment for Tata Steel Limited. b) 2030: Integrate Environment, Social and Governance performance of critical supply chain partners in procurement decision-making for Tata Steel Limited (Assessment & coverage in line with ResponsibleSteel™ guidance) 12. R&D and Technology <ol style="list-style-type: none"> a) 2030: Be amongst top 5 in technology in steel industry globally
<p>6. Performance of the entity against the specific commitments, goals and targets along with reasons in case the same are not met.</p>	<p>Please refer to the ESG Factsheet published by Tata Steel Limited in its Integrated Report for FY2022-23.</p>

Governance, Leadership and Oversight

7. Statement by director responsible for the business responsibility report, highlighting ESG related challenges, targets and achievements Please refer CEO&MD's statement

8. Details of the highest authority responsible for implementation of the Business Responsibility policy (ies). The Board of Tata Steel Limited is the highest authority responsible for the oversight of the implementation of Business Responsibility policies.

The Chief Executive Officer & Managing Director of the Company is the highest authority responsible for implementation of all policies in Tata Steel.

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, the Board of Tata Steel has constituted various Board committees, which are responsible for and have a remit over key sustainability related policies of Tata Steel, as below:

1. The Corporate Social Responsibility and Sustainability (CSR&S) Committee: The CSR&S committee of the Board governs and reviews the Corporate Social Responsibility and Sustainability activities of the Company. The CSR&S Committee recommends the annual business plan for Tata Steel's Corporate Social Responsibility and Sustainability initiatives to the Board for its approval. The plan includes resource requirements and allocation across interventions and locations. The CSR&S Committee also receives regular update on the performance of the Company against such Annual Business Plan.

2. The Risk Management Committee: The Board has constituted the Risk Management Committee to assist the Board in fulfilling its oversight responsibilities regarding management of element wise key risks, including strategic, financial, operational, sectoral, sustainability (Environment, Social and Governance) related risks, information & cyber security and compliance risks. The Committee ensures that appropriate methodology, processes, and systems are in place to monitor and evaluate risks associated with the business of the Company and reviews the adequacy of the risk management practices and actions deployed by the management in respect of identification, impact assessment, monitoring, mitigation and reporting of key risks to the achievement of business objectives.

3. The Stakeholder Relationship Committee: This Committee considers and resolves the grievances of the shareholders, debenture holders and other security holders of the Company, including complaints relating to non-receipt of Annual Report, transfer and transmission of securities, non-receipt of dividends/interests and such other grievances.

4. The Safety, Health and Environment Committee : This Committee of the Board oversees the policies relating to Safety, Health and Environment related performance and initiatives of the Company and their implementation across the Tata Steel Group.

Additional information on the Board of Directors of Tata Steel and Committee members of all the Board committees of Tata Steel are provided on Tata Steel's website: <https://www.tatasteel.com/corporate/our-organisation/leadership/>

10. Details of Review of NGRBCs by the Company:

Subject for Review	Indicate whether review was undertaken by Director/ Committee of the Board/ Any other Committee									Frequency (Annually/ Half yearly/ Quarterly/ Any other – please specify)								
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P1	P2	P3	P4	P5	P6	P7	P8	P9
Performance against above policies and follow up action	The Senior Management of the Company regularly reviews the performance of the Company against various policies. Key aspects of such reviews are also updated to the Board and various Board Committees by the Management from time to time.									On a continuous basis								
Compliance with statutory requirements of relevance to the principles, and rectification of any non-compliances	The Company is in compliance with the existing regulations as applicable and a Statutory Compliance Certificate on applicable laws is provided by the Chief Executive Officer & Managing Director/ Chief Financial Officer / Company Secretary and Chief Legal Officer (Corporate & Compliance) to the Board of Directors.																	

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

Yes. Tata Steel undergoes assessment under the Business Excellence Assessments conducted as part of the Tata Business Excellence Model (TBEM) framework, which is based on the Malcolm Baldrige National Quality Award Model of USA. As part of the assessment, all key policies and their working are evaluated by a group of trained external assessors, which is translated into a score. Based on the assessment conducted in 2022, for the year 2021, Tata Steel has received the coveted JRDQV award and was recognised as the 'Benchmark Leader' under the TBEM Assessment for the Assessment Year 2021.

The ResponsibleSteel™ standard is the first international standard for responsible processing and production of steel. Tata Steel is a founding member of ResponsibleSteel™ and is undergoing assessment under the ResponsibleSteel™ framework for its various sites. The ResponsibleSteel™ certification process involves detailed review of key policies and their working for the site by independent external assessor. Tata Steel's Jamshedpur site has already been certified by ResponsibleSteel™.

Tata Steel also undertakes periodic external assessment of its Risk Maturity, with such assessment being conducted by independent third-party assessors. Tata Steel has been consistently obtaining high scores in such assessments.

Tata Steel also underwent the Data and Analytics Target Operating Model ('DATOM') assessment during 2022, wherein its data and analytics maturity was assessed by external assessors in terms of how the Company's data is governed, managed, and used for generating insights. DATOM assessment also assessed the relevant policies and procedures of the Company. The Company got a score of 3.8/5, which placed Tata Steel in the "Synergised" band and as a Tata Group benchmark on Data Maturity.

Tata Steel also obtained certification under various national and international standards, including ISO 14001, ISO 45001 / OHSAS 18001, etc. These certifications also include assessment of the policies of the Company by independent external assessor. A summary of certifications received by Tata Steel is included in Section B of this report.

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

Not Applicable

SECTION C: PRINCIPLE-WISE PERFORMANCE DISCLOSURES

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 categorised 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 programmes on any of the Principles during the financial year:

Segment	Total number of training and awareness programmes held	Topic/principles covered under the training and its impact	% of persons in respective category covered by awareness programme
Board of Directors	On going- Multiple trainings throughout the year	<p>Orientation and awareness sessions for the Directors of the Company are regularly organised, covering issues related to Safety, Health and Environment, Strategy/Industry Trends, Ethics & Governance and Legal & Regulatory matters. These matters are also regularly discussed and deliberated upon in Board meetings, Board’s Audit Committee meetings, and other Governance committees.</p> <p>Details of orientation given to the new and existing Independent Directors are available at https://www.tatasteel.com/media/12333/familiarization-programme-for-independent-directors-for-website.pdf</p>	100
Key Managerial Personnel (KMPs)	On going- Multiple trainings throughout the year	<p>Regular awareness programmes are held for KMPs of Tata Steel covering areas of ethics, governance, code of conduct and policy making. Tata Steel’s KMPs and senior leadership teams are also on key national and international forums, where they engage with their global counterparts and provide thought leadership in multiple areas.</p>	100
Employees and Workers	On going- Multiple trainings throughout the year	<p>Tata Steel conducted multiple remote and classroom sessions throughout the year on key topics such as Safety, the Tata Code of Conduct, Anti-Bribery and Anti-Corruption Policies, Conflict of Interest, Prevention of Sexual Harassment policies, etc., for employees and workers across management and non-managerial levels. These training sessions are mandatory for all employees.</p> <p>In addition, employees and workers are provided need-based training as per their job requirement, covering aspects including Safety, Agile Way of Working, Cyber-security, Quality Management, Data Analytics and Sustainability, etc. Tata Steel is also focussed on skill upgradation training and uses an online portal to assign individual e-learning modules regularly to employees for facilitating skill upgradation. The approach is to provide a range of technical and managerial courses with a strong focus on capability development in all functional areas across the levels.</p> <p>There is also a dedicated leadership development team which organises signature leadership programmes for senior management covering topics such as Sustainability, Product Innovation, Culture, Human behaviour, Strategy and Organisation development.</p>	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 Requirements) Regulations, 2015 and as disclosed on the entity’s website:

Monetary	NGRBC Principle	Regulatory/ enforcement agencies/ judicial institutions	Amount (in ₹)	Brief of Case	Has an appeal been preferred?
Penalty/Fine					
Settlement	Nil	Nil	0	Nil	Not Applicable
Compounding Fee					
Non-Monetary					
Imprisonment	Nil	Nil	Nil		Not Applicable
Punishment					

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

Case Details	Name of the regulatory/enforcement agencies/judicial institutions
Not Applicable	Not Applicable

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, Tata Steel has an Anti-Bribery and Anti-Corruption (ABAC) Policy and all Tata Steel companies have adopted the ABAC Policy. In some cases, depending upon local laws and regulations, Tata Steel’s overseas subsidiaries may modify the ABAC Policy to align with local requirements.

The purpose of the ABAC Policy is to ensure all Tata Steel Group Companies, in any part of the world, conduct their operations and business activities in consonance with applicable laws and with the highest ethical standards and ensure the prevention and detection of fraud, bribery and corruption. Tata Steel’s ABAC Policy is applicable to all individuals working at all levels and grades, including Directors, Senior Executives, Senior Managers, Officers, Employees, Consultants, Contractors, Trainees, Interns, Seconded Staff, Casual Workers & Agency Staff, Agents, Business Partners, Service Providers, Professional Associates, and other relevant persons, third parties or companies associated with Tata Steel, including those acting on behalf of Tata Steel.

The Company also communicates, creates awareness, and disseminates the ABAC Policy to all its employees, vendors and supply chain partners through e-modules. Furthermore, Tata Steel, from time to time, designates an employee of sufficient seniority, competence, and independence as the Compliance Officer/Chief Ethics Counsellor to ensure compliance with the provisions of this ABAC Policy.

The weblink of the Policy is as follows: https://www.tatasteel.com/media/11802/1-abac-policy_final.pdf

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

	FY2022-23	FY2021-22
Directors	0	0
KMPs	0	0
Employees	0	0
Workers	0	0

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

	FY2022-23		FY2021-22	
	Number	Remarks	Number	Remarks
Number of complaints received in relation to issues of Conflict of Interest of the Directors	0	Nil	0	Nil
Number of complaints received in relation to issues of Conflict of Interest of the KMPs	0	Nil	0	Nil

7. **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.

Leadership Indicators

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

Tata Steel takes several initiatives to create awareness amongst its value chain partner on key issues related to the 9 Principles of the National Guidelines for Responsible Business Conduct. Most of the awareness programmes conducted for value chain partners can be broadly classified into three segments i.e. Safety, Ethics and Business Responsibility:

- Safety:** Tata Steel's goal is to achieve 'Zero Harm' and to become an industry leader in Safety & Health performance. It has enunciated safety policies that provide clear direction, created a sound safety governance structure, established robust management & reporting systems, training and communication mechanisms, along with well-defined performance measures and indicators to track its Safety & Health performance. These measures extend to not just employees and workers, but to all value chain partners who enter our sites. All individuals, including contract employees working with vendor partners, need to undergo compulsory safety training in order to enter Tata Steel's plants, with such training covering same areas as the training received by the employees of the Company. This ensures shared understanding of safety risks and principles between all personnel present on the site.
- Ethics:** Tata Steel's vendor partners frequently undergo awareness sessions on Anti-bribery and Anti-corruption Policy of the Company, the Tata Code of Conduct and on the Prevention of Sexual Harassment Policy. Key topics which get covered under these awareness sessions include governance, ethics, health and safety, labour practices and human rights.
- Supply Chain Responsibility:** Tata Steel has launched its Responsible Supply Chain Policy Programme across multiple geographies. The programme cover issues related to ethical behaviour, human rights, health & safety, and environmental sustainability, amongst others. These policies are incorporated in the vendor qualification process for the applicable entities and all vendors are made aware of and are required to adhere to the principles of these policies. For all key entities of the Tata Steel Group, 100% of suppliers are made aware of Tata Steel's Responsible Supply Chain Policy.

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, Tata Steel has a Code of Conduct for all members of Tata Steel's Board, which requires all Directors of the Company to always act in the interest of the Company and ensure that any other business or personal association which they may have

does not involve any conflict of interest with the operations of the Company. In case of any actual or potential conflicts of interest, the concerned Director is required to immediately report such conflicts and seek approvals as required by the applicable law and under Company’s policies.

The Company receives an annual declaration from its Board of Directors and all employees confirming adherence to the Code of Conduct, which includes the provisions on dealing with conflict of interest.

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:

	FY2022-23	FY2021-22	Details of improvements in environmental and social impacts
R&D^{1,2}	100% (₹ 859 crore)	100% (₹ 783 crore)	The cost includes overall expenditure including the expenditure made on environmental and sustainable related projects like low-carbon transition, reducing dependence on freshwater consumption, maximising value from waste, energy efficiency, establishing circular economy and developing techno-economic solutions to use low grade raw materials.
Capex²	23%	15%	Includes investments in CO ₂ and other air emission (SO _x , NO _x and dust) reduction, water conservation and effluent treatment, solid waste utilisation, improvement of safety and employee welfare initiatives.

1. 100% of Tata Steel’s R&D spend are aligned with one or more of the 9 Principles of the National Guideline for Responsible Business Conduct

2. Total R&D expenditure and total capital expenditure based on Tata Steel’s consolidated financials as reported in the Company’s Integrated Report for FY2022-23.

Tata Steel is an innovation driven Company and the Research & Development (R&D) initiatives of Tata Steel combines top class innovation with cutting edge technology to deliver solutions in a constantly changing world. Tata Steel also works very closely with its customers to ensure they get all the support they need to enable them to design new products and applications.

Tata Steel has a strong R&D team across India, UK and Netherlands, with a strength of over 600 personnel. The Company’s key R&D centres are located both within our sites and in select academic institutes and are listed below:

1. The R&D centre in Jamshedpur (India) focuses on process and product research, with emphasis on the specific needs of Tata Steel’s Indian operations.
2. The Innovation Centre based out of IJmuiden (Netherlands) focuses on process and product and applications research for the automotive and packaging sectors for our European business.
3. Tata Steel Technology Centre, Swansea University and Tata Steel Technology Centre, Warwick University work to innovate, develop and support implementation of advanced metallurgical solutions for our chosen markets and providing process research and support to ironmaking, steelmaking and casting, whilst taking a leading role in decarbonisation of UK’s steelmaking processes.
4. The Centre for Innovation in Mobility at the Indian Institute of Technology, Madras focuses on developing application technologies for current and future mobility industries such as Automotive, Railways and Hyperloop.
5. The Centre for Innovation in Mining and Mineral Beneficiation at the Indian Institute of Technology (Indian School of Mines), Dhanbad will develop technological solutions in natural and urban mining and beneficiation for value from low grade and difficult ores, with a focus on circularity and resource efficiency.
6. The Tata Steel Advanced Materials Research Centre, in partnership with Indian Institute of Technology, Madras and the Centre for Nano and Soft Matter Sciences, Bangalore works closely with the academia, other research centres and early incubated start-ups to identify early-stage ideas and nurture those to develop breakthrough technologies/products with potential commercialisation by ‘Technology Entrepreneurship’.

Over the years, Tata Steel has generated significant intellectual capital in form of R&D capabilities and spends.

Tata Steel has also set up a New Materials Business in 2018 to explore opportunities other than steel, covering three verticals – Composites, Graphene & Advanced Ceramics (in Medical Materials). Additional details on the New Materials Business of Tata Steel is provided in the Intellectual Capital section of Tata Steel's Integrated Report for FY2022-23.

The Company has also adopted several digital initiatives and technologies across the value chain, that help in achieving higher levels of sustainability and safety. Technology has been a key enabler in this journey, and the Company has leveraged digital tools and technologies in areas such as energy management, supply chain management, environment management, safety management, and customer engagement, amongst others. The Company has also adopted digital technologies to improve the health and safety of its employees and has implemented several digital initiatives to enhance the well-being of its workforce. In the process, Tata Steel has built strong in-house capabilities in Artificial Intelligence and Machine Learning, leveraging mathematical modelling for driving Yield, Energy, Throughput, and Quality & Productivity gains across the value chain. Some of the key digital initiatives and technologies adopted by the Company towards achieving sustainability and safety are Digital solutions for energy management, Digital supply chain management, Far-site Remote Operation centres and physically delinking workplace & work. Additional details have been provided through the rest of this report on the aforementioned initiatives.

Tata Steel has achieved the Fourth Industrial Revolution (4IR) Global Lighthouse recognition from the World Economic Forum for 3 different steel manufacturing sites – Kalinganagar and Jamshedpur in India and IJmuiden in the Netherlands. Global Lighthouse recognitions are awarded to manufacturing sites which are beacons in the world for achieving efficiency and driving value through digital transformation. Over 75% of the entire steel production of Tata Steel is produced in Global Lighthouse sites, one of the highest in the world.

In yet another pioneering step, Tata Steel has also become one of the first and few enterprises globally to have access to OpenAI technologies (e.g. ChatGPT) in a private & secure environment and have since deployed the technology at enterprise scale with numerous experiments ongoing for future use case derivation.

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

Yes. Tata Steel has a dedicated Responsible Supply Chain Policy for its key operations, which are applicable to all supply chain partners including its upstream vendor partners ("suppliers"). The Policy aims to encourage suppliers to share Tata Steel's commitment on embedding sustainable business practices. The Responsible Supply Chain Policy focusses on the following four principles on Environmental, Social, and Governance parameters:

1. **Health and safety:** Tata Steel expects its suppliers to adopt management practices in respect of health and safety which provide a high safeguard for their workers.
2. **Fair business practices:** The Tata Code of Conduct outlines the ethical standards and fair business practices by which Tata Steel conducts its business and the Company expects its suppliers to adopt similar principles.
3. **Environmental protection:** Tata Steel expects suppliers to maintain effective policies, processes, and procedures to manage their environmental impact.
4. **Human rights:** Tata Steel expects suppliers to develop and implement policies and procedures to promote and protect human rights in their business and to encourage their step-down suppliers to do likewise.

As a requirement of our Responsible Supply Chain Policy, all our suppliers acknowledge the Supplier Code of Conduct. We assess our key suppliers at least once in a year on our Responsible Supply Chain Policy principles and update our risk registers for key input materials, such as iron ore and coal. Our assessment includes questionnaire on the suppliers' Environmental, Social and Governance practices, including evidence of environmental stewardship, such as CO₂ reduction initiatives.

The outcome of the Responsible Supply Chain Policy assessment guides us onto the next steps – identifying the gaps/opportunities for improvement and taking collaborative projects with the Supply Chain partners to bridge the gaps. The overall governance, oversight and review of the Responsible Supply Chain programme is carried out at the Apex Councils, led by the senior leadership team.

Tata Steel has also initiated independent third-party assessment of its critical supply chain partners on the four principles of Responsible Supply Chain Policy. The critical suppliers have been identified based on factors like spend value, criticality to business, and actual/potential Environment, Social & Governance risks in partner operations.

Tata Steel expects its suppliers to abide by its ethical, social, safety, and security standards for transparent, hassle free and long-term business relationships. During their onboarding, all suppliers sign declarations to comply with the Tata Code of Conduct and Social Accountability Standard (SA8000) on areas such as child labour, forced or compulsory labour, health & safety, money laundering, bribery, gifts & hospitality and human rights, et al. They also commit to having systems for monitoring and analysis and for taking corrective actions. Moreover, only suppliers conforming to Tata Steel's internal standard on safety are permitted to undertake activities on our sites.

Tata Steel's European operations have also embraced the six-step approach of the Organisation for Economic Co-operation and Development's (OECD) due diligence guidance for Responsible Business Conduct, to drive supply chain transparency, adherence to laws & regulations, minimum standards and continuous improvements. The OECD guidelines ensure that Tata Steel procures its goods and services responsibly, whilst aligning to the core Tata Steel values and Code of Conduct. To that end, Tata Steel in Europe has enhanced its onboarding process and system to identify and evaluate any associated risks.

As members of ResponsibleSteel™, Tata Steel also promotes and recognises other relevant programmes, such as the Responsible Minerals Initiative, amongst its suppliers. Since 2019, Tata Steel Nederland has also been a member of the Metal Covenant, an initiative of the Social and Economic Council, where the government, unions, non-governmental organisations and companies collaborate on the implementation of the OECD guidelines and work on improving conditions in the Metals value chain.

Tata Steel has also implemented several digital solutions to improve the efficiency and sustainability of its operations and supply chain. Automation and Analytic & Insight teams of the Company collaborates with Plant Operations and Supply chain teams to streamline efficiency in processes, reduce the carbon footprint and limit supply chain emissions. The Data Analytic Models and Digital Twin in Plant operations enable improved efficiency, ensure equipment reliability, enhance product quality and minimise waste.

b) If yes, what percentage of inputs were sourced sustainably?

It is mandatory for all suppliers of Tata Steel to declare their commitments to Tata Steel's sustainability expectations during registration. 100% of Tata Steel's inputs in India are sourced through suppliers who commit to our guiding principles by providing declarations during the registration phase. In UK, 94% of our suppliers have committed to our Responsible Supply Chain Policy and in Netherlands, 88% of our input is sourced through suppliers who commit to our guiding principles, or equivalent.

3. 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:

Steel has a very long useful life (typically 25 – 30 years) due to its durability, before it needs to be scrapped and recycled. Steel is ideally suited to circular economy: it is durable and flexible with a long lifespan, provides many opportunities for its reuse and product life extension, is easily recovered after scrapping due to its magnetic properties and is easily recycled, with high yield, to produce new steel using well proven low carbon technology. As per the World Steel Association, Steel is the most recycled material in the world, with around 680 Mt recycled in 2021. End of life steel, or scrap steel, is not considered a waste product by the steel industry. It is instead considered an input for steelmaking by remelting and is a globally traded commodity.

Tata Steel is committed to circularity and looks to maximise the use of steel scrap in its operations. Accordingly, Tata Steel reuses scrap generated during the production process as well as procures external scrap. A brief summary of scrap recycled in FY2022-23 by Tata Steel is provided below:

Entity	Internal scrap recycled (kt)	External scrap recycled (kt)
Tata Steel Limited	865	673
Tata Steel Nederland BV	458	624
Tata Steel UK Limited	366	106
Tata Steel (Thailand) Public Company Limited	48	1,208
Tata Steel Long Products Limited	39	0

Tata Steel also has systems in place to recycle plastic waste (including packaging), e-waste, and hazardous waste in a safe manner. For the disposal of such waste, the Company contracts with authorised recyclers and files returns with the appropriate statutory bodies. Tata Steel has optimised its processes to the point where over 98% of the waste produced across all geographies is either recycled and reused in its own operations or sold as co-products to other industries, with the largest customer being the cement industry. Cement industry uses steel slag as a replacement for clinker, decreasing the emission intensity of cement production. Tata Steel also aspires to have 100% solid waste utilisation.

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 Extended Producer Responsibility (EPR) plan submitted to Pollution Control Boards? If not, provide steps taken to address the same:

As per Plastic Waste Management Rules, 2016 and its Amendments, Tata Steel comes under the obligations of Extended Producer Responsibility (EPR) for Plastic waste Management. We have applied for EPR Registration of Tata Steel Limited with the Central Pollution Control Board.

Tata Steel's UK subsidiary has a formal legal Extended Producer Responsibility obligation under the Producer Responsibility Obligations Regulations in the United Kingdom with respect of its packaging grades of steel. This accounts for c.12% of Tata Steel UK's turnover. The regulations stipulate minimum end of life recycling rates to be achieved through direct action and activities in its value chain. Tata Steel is in compliance with the regulation.

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:

Life cycle assessment (LCA) is a powerful tool for identifying opportunities to reduce the environmental impact of a product – whether that is a building, a vehicle, a piece of machinery or packaging – throughout its life cycle. Tata Steel conducts LCA for many of its products and taking a supply chain perspective allows Tata Steel to demonstrate that improvements in material utilisation and right-first-time manufacturing can reduce emissions during the production phase.

A summary of key products for which Tata Steel conducts LCA, across various geographies, is provided below:

Entity	NIC Code	Name of product/ service	Turnover (₹ Cr)	% of total turnover (of the respective entity)	Boundary for which the life cycle perspective / assessment was conducted	Whether conducted by independent external agency	Results communicated in public domain
Tata Steel Limited	24105	Hot Rolled & Cold Rolled Steel	1,29,006	55%	Cradle to Gate with options	No	Yes (Partially) https://environdec.com/library/epd6474
	24109	Galvanized, Rebar Steel & Pravesh Doors		19%	Cradle to Gate with options	No	Yes (Partially) https://environdec.com/library/epd6474
	24311	Steel Structural hollow section		2%	Cradle to Gate with options	No	Yes https://www.environdec.com/library/epd5020
	24105	Tata Pipes		1%	Cradle to Gate with options	No	No
Tata Steel UK Limited	24105	Hot Rolled Dry & Cold Rolled	31,873	29%	Cradle to Gate	No	Available upon request
	24109	Metallic Coated & Building Products		20%	Cradle to Gate	No	
	24106	Tube		14%	Cradle to Gate	No	Yes ¹
	24109	Organic Coated		15%	Cradle to Gate	No	Yes ¹
	24105	Hot Rolled Pickled		5%	Cradle to Gate	Verified by third party as per EN 15804 or ISO 14040 / 44.	Available upon request
Tata Steel Nederland BV	24105	Hot & Direct Rolled Steel Coil, Pickled Hot & Direct Rolled Steel Coil & Cold Rolled and annealed Steel Coil	62,686	30%	Cradle to Gate	No	No
	24109	Galvanised Steel Coils		25%	Cradle to Gate	No	No
	24106	Steel Tube		4%	EN15804 modules A, C & D – Cradle to gate, end of life and recycling	No	Yes ¹
	24109	Organic Coated Steel & Steel building products: cladding & decking		16%	EN15804 modules A, C & D – Cradle to gate, end of life and recycling	No	Yes ¹
Tata Steel Long Products Limited	24105, 24108, 24102, 24109	Crude Steel, Hot metal, Wire rod, Bloom, Pellet, DRI, Sinter, Coke	7,464	100%	Cradle to Gate	No	No
Tata Metaliks Limited	24101	Pig Iron	3,260	42%	Cradle to Gate	Yes	No
	24311	Ductile Iron Pipe		58%	Cradle to Ground (Installation)	Yes	No

¹ <https://www.tatasteeleurope.com/construction/download-centre/environmental-product-declarations>

² These are intermediary products for which LCA has been conducted but are not directly sold to customers.

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:

There are no significant social or environmental concerns and/or risks arising from disposal of our products/services, as identified in the Life Cycle Perspective/Assessments (LCA). However, production of steel is an energy intensive process with large emission footprint. These anthropogenic CO₂ emissions have been identified as key source for global warming.

Tata Steel feels a strong sense of responsibility, therefore, to reduce its own emissions in FY2022-23, Tata Steel adopted a target to be Net Zero across the entire Tata Steel Group by 2045. Tata Steel has also published a Climate Change Report aligned with the recommendations of the Taskforce on Climate Related Financial Disclosures, with detailed disclosures on its Climate Action Strategy, Governance, Risk Management and Metrics and Targets for the Tata Steel Group. The Climate Change Report is part of Tata Steel's Integrated Report for FY2022-23.

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):

Indicate input material	Recycled or re-used input material to total material	
	FY2022-23	FY2021-22
Process solid waste like slag, scrap etc.	10%	10%

Note: Includes waste generated from process and reutilised in the process and excludes waste/by-product sold to third parties.

4. Of the products and packaging reclaimed at end of life of products, amount (in metric tonnes) reused, recycled, and safely disposed - plastic, e-waste, hazardous, others:

In metric tonnes	FY2022-23			FY2021-22		
	Reused	Recycled	Safely disposed	Reused	Recycled	Safely disposed
Plastics (incl. packaging)	NA			NA		
E-waste	NA			NA		
Hazardous waste	NA			NA		
Other waste	NA			NA		

The Company does not have any specific product to reclaim at the end of life, However, at the project and operation sites, there are systems in place to recycle, reuse and dispose in line with regulatory requirement for the above waste being generated during course of construction and operation.

5. Reclaimed products and their packaging materials (as 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
Steel Scrap	Tata Steel is a producer of steel, and steel scrap is not considered waste but is used as input for further steelmaking and is a globally traded commodity. Accordingly, this question is not applicable to Tata Steel's product. Similarly, use of packaging in the sale of steel is insignificant. For details related to scrap, please refer Principle 2, Essential Indicators 3 of this Report.

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

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

Category	% of employees covered by										
	Total (A)	Health Insurance incl. company owned hospital ^{1,3}		Accident Insurance		Maternity benefits		Paternity Benefits		Day Care Facilities ²	
		Number (B)	(B/A) %	Number (C)	(C/A) %	Number (D)	(D/A) %	Number (E)	(E/A) %	Number (F)	(F/A) %
Permanent Employees											
Male	60,598	60,598	100	60,598	100	Not Applicable		57,857	95	54,549	90
Female	5,512	5,512	100	5,512	100	5,512	100	Not Applicable		5,300	96
Others ⁴	76	76	100	76	100	Benefits available as applicable					
Total	66,186	66,186	100	66,186	100	100% of all maternity cases		57,857	95	59,849	90
Other Than Permanent Employees											
Male	1,398	1,398	100	1,398	100	Not Applicable		1,217	87	1,208	86
Female	200	200	100	200	100	200	100	Not Applicable		183	92
Total⁴	1,598	1,598	100	1,598	100	100% of all maternity cases		1,217	87	1,391	87

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

Category	% of workers covered by										
	Total (A)	Health Insurance inc. company owned hospital ^{1,3}		Accident insurance incl social security schemes & Suraksha scheme		Maternity benefits		Paternity Benefits		Day Care Facilities ²	
		Number (B)	(B/A) %	Number (C)	(C/A) %	Number (D)	(D/A) %	Number (E)	(E/A) %	Number (F)	(F/A) %
Permanent Workers											
Male	46,549	46,549	100	46,549	100	Not Applicable		43,165	93	36,108	78
Female	3,889	3,889	100	3,889	100	3,889	100	Not Applicable		3,033	78
Others	76	76	100	76	100	Benefits available as applicable					
Total	50,514	50,514	100	50,514	100	100% of all maternity cases		43,165	93	39,141	78
Other Than Permanent Workers											
Male	1,07,883	1,07,883	100	1,07,883	100	Not Applicable		Not tracked		80,771	75
Female	6,266	6,266	100	6,266	100	6,266	100			4,111	66
Others	1,661	1,661	100	1,661	100	Benefits available as applicable				Benefits available as applicable	
Total	1,15,810	1,15,810	100	1,15,810	100	100% of all maternity cases				84,882	73

All contract employees in India are covered under Employees' State Insurance Corporation benefits and in case of any eventuality or death, under the Tata Steel Suraksha Scheme (which provides financial aid to the family).

¹Tata Steel employees at Jamshedpur and mining locations in India are covered under the Company's medical hospital for free medical treatment for self and dependents.

² For Tata Steel's European subsidiaries, day care facilities are typically provided by the national governments or part of the national school system. Employers are not directly involved, but 100% employees have access to such benefits.

³For Tata Steel's European subsidiaries, Health Insurance and / or medical benefits are either provided by the government (e.g., the National Health Services in UK) or are compulsory. Accordingly, all employees are considered to be covered. Under Thailand labour law, health insurance, accident insurance, maternity benefits, paternity benefits and day care facilities are covered under social security schemes for other than permanent workers.

⁴Others includes transgender personnel in case of permanent employees and workers. Other than permanent workers include transgender workers as well as overseas personnel where gender bifurcation is not available.

Tata Steel endeavours to go beyond regulatory requirements and market practices to provide benefits for employee well-being across all sections of workforce. Tata Steel introduced a Family Protection Scheme to support family of employees who passed away due to COVID 19 pandemic. Tata Steel has also initiated menstrual leave for all its women employees in India.

Similarly, Tata Steel has tied up with an external agency to provide counselling services to employees and their families for their mental well-being. A major section of our employees in India are eligible for periodic executive health check-up programme and remaining employees would be brought under the plan in the coming two financial years.

2. Details of retirement benefits, for Current Financial Year and Previous Financial Year:

All Tata Steel entities across all geographies provide retirement benefits to all its employees, aligned with regulatory requirements and market practices in the respective geography. Key retirement benefits provided by Tata Steel are:

Benefits	Applicability (Country)	FY2022-23			FY2021-22		
		No. of employees covered as a % of total employees in the relevant geographies	No. of workers covered as a % of total workers in the relevant geographies	Deducted & deposited with the authority or exempted fund	No. of employees covered as a % of total employees in the relevant geographies	No. of workers covered as a % of total workers in the relevant geographies	Deducted & deposited with the authority or exempted fund
Employee Provident Fund Benefits	India	100%	100%	Yes	100%	100%	Yes
Gratuity Benefits	India	100%	100%	Yes	100%	100%	Yes
Employees' State Insurance Benefits	India	Covered as per rules	Covered as per rules	NA	Covered as per rules	Covered as per rules	NA
Post Retiral Medical Benefits (Select Tata Steel entities)	India	100% (Hospitals or Mediclaim Schemes)	100% Permanent Workers (Hospitals or Mediclaim Schemes)	NA	100% (Hospitals or Mediclaim Schemes)	100% Permanent Workers (Hospitals or Mediclaim Schemes)	NA
Stichting Pensioenfonds Hoogovens	The Netherlands	100%	100% Permanent Workers	NA	100%	100% Permanent Workers	NA
Tata Steel UK defined contribution scheme	United Kingdom	100%	100% Permanent Workers	NA	100%	100% Permanent Workers	NA

Benefits	Applicability (Country)	FY2022-23			FY2021-22		
		No. of employees covered as a % of total employees in the relevant geographies	No. of workers covered as a % of total workers in the relevant geographies	Deducted & deposited with the authority or exempted fund	No. of employees covered as a % of total employees in the relevant geographies	No. of workers covered as a % of total workers in the relevant geographies	Deducted & deposited with the authority or exempted fund
Thailand Provident Fund	Thailand	100%	100% Permanent Workers	NA	100%	100% Permanent Workers	NA
Thailand Severance Pay	Thailand	100%	100% Permanent Workers	NA	100%	100% Permanent Workers	NA
Others	India	a) National Pension Scheme is offered to officers b) Earned Leaves encashed at retirement		Under Employee Pension Scheme	a) National Pension Scheme is offered to Officers b) Earned Leaves encashed at retirement		Under Employee Pension Scheme

Tata Steel also offers other voluntary and optional schemes, like the Tata Steel Superannuation Fund and the TISCO Employee Pension Scheme, which can be opted for by permanent employees and permanent workers of Tata Steel in India. To the extent employees decide not to participate in such schemes, they receive a cash payment of such amounts.

All employees, as applicable, in India are also allowed to retain Company provided accommodation, if applicable, upto 1 year post separation, depending on the type of separation. This may be further extended on a case-by-case basis.

Tata Steel in Nederland has the 'Wenckebach Fund', a social fund that provides assistance to former employees in connection with costs incurred as a result of serious illnesses or accidents (and circumstances resulting therefrom) and other special situations where help is needed.

A brief description of all the schemes is provided below:

1. **Employee Provident Fund:** Defined contribution scheme with a lumpsum payment at superannuation, applicable to companies in India.
2. **Gratuity:** Defined benefit scheme with a lumpsum payment at superannuation, applicable to companies in India
3. **Stichting Pensioenfonds Hoogovens:** Defined contribution pension fund, open to all employees of Tata Steel's subsidiary Companies in Netherlands.
4. **Tata Steel UK defined contribution scheme:** Defined contribution pension fund, open to employees of Tata Steel's subsidiary company in UK.
5. **Thailand Provident Fund:** Defined contribution scheme with a lumpsum payment at superannuation, applicable to companies in Thailand.
6. **Thailand Severance Pay:** Defined benefit scheme with a lumpsum payment at superannuation, applicable to companies in Thailand.

7. **Employees' State Insurance Benefits:** The Employees' State Insurance Act is a social security legislation that provides for medical care and cash benefit in the contingencies of sickness, maternity, disablement and death due to employment injury to workers in India.
 8. **TISCO Employee Pension Scheme:** Defined contribution pension scheme for permanent workers of Tata Steel.
 9. **Superannuation Fund:** Defined contribution pension scheme for permanent employees (other than permanent workers) of Tata Steel in India.
 10. **National Pension Scheme:** Defined contribution retirement savings scheme applicable to companies in India. The scheme is voluntary in nature.
 11. **Employee Pension Scheme:** Saving scheme that assures a pension to employees after retirement, wherein a part of the employer's contribution to the Employee Provident Fund is made towards the Employee Pension Scheme (in India).
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.

Tata Steel has taken steps to comply with the Rights of Persons with Disability Act, 2016 (RPwD Act) across its sites and locations of Tata Steel (in India) and has put in accessibility measures in compliance and alignment to the accessibility mandate of the RPwD Act. Some key actions taken by Tata Steel are listed below:

1. As required under the RPwD Act 2016, all new building structures are in compliance with the accessibility requirement. Tata Steel has also modified workstations and washrooms for existing infrastructure in accordance with the regulations.
 2. Tata Steel also provides specialised laptops as per the type of disability (Upper Limb, Lower Limb, Visual Disablement and Hearing Impairment) to its differently abled employees. Necessary Speech to Text, Text to Speech and Screen reading software and hardware aid are provided to persons with disabilities to facilitate the use of computers and IT systems. Our workplace productivity software also comes with accessibility features.
 3. All new differently abled employees are initially provided with company accommodation at the time of onboarding. As most of Tata Steel's company accommodations are in the close vicinity of its offices, the commute for differently abled employees becomes easier.
 4. All new differently abled employees are assigned buddy in their initial phase to help and support them with the onboarding processes, relocation, and infrastructural familiarity.
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, Tata Steel has an Equal Opportunity Policy for Persons with Disabilities. In addition, the Tata Code of Conduct incorporates key equal opportunity principles. Tata Steel's Equal Opportunity Policy is in accordance with the provisions of The Rights of Persons with Disabilities Act, 2016.

Tata Steel recognises the value of diverse workforce. It is committed to providing equal opportunities in employment and creating an inclusive workplace and work culture in which all employees are treated with respect & dignity. It strives to ensure that the Company's workforce is representative of all sections of the society and proactively works towards ensuring fair representation of differently abled within its workforce. Tata Steel is committed to eliminating all forms of unlawful discrimination, bullying and harassment of people with disabilities.

Tata Steel encourages candidates with different abilities to apply for identified suitable positions and its decisions on employment, career progression, training or any other benefits are solely based on merit. Tata Steel’s policies have been framed to include the following:

1. The manner of selection of persons with disabilities for various posts, post-recruitment and pre-promotion training, preference in transfer and posting, special leave, preference in allotment of residential accommodation if any, and other facilities.
2. Facilities and amenities to be provided to the Persons with Disabilities, to enable them to effectively discharge their duties.
3. List of posts identified suitable for persons with disabilities in the establishment.
4. Provisions for assistive devices, barrier-free accessibility and other provisions.
5. Appointment of liaison officer to look after the recruitment of Persons with Disabilities and provisions of facilities and amenities for such employees.

Tata Steel’s Equal Opportunity Anti-discrimination Policy is available at:
<https://www.tatasteel.com/corporate/our-organisation/policies/>

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

Gender	Permanent Employees		Permanent Workers	
	Return to work rate	Retention rate	Return to work rate	Retention rate
Male	100%	95%	100%	93%
Female	98%	94%	98%	90%
Total	99%	94%	99%	92%

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

	Yes/No (If yes then give details of mechanism)
Permanent Workers	
Other than permanent workers	
Permanent Employees	Yes. Further details are provided below.
Other than permanent employees	

1. Yes, Tata Steel has a three-stage Grievance Redressal mechanism for employees with an appropriate forum for each stage. There is also a dedicated grievance redressal procedure which includes subjects such as discharge / dismissal, misconducts, fines etc.

2. In the first stage the employee may raise their grievance at the Shift-in-charge / Foreman level. If the employee is not satisfied with the answer at that level, he / she may raise it to the second level of the Head of the Department. If the employee is still not satisfied, they may raise the grievance to the third level of Zonal Works Committees. If still unresolved, grievances can also be raised to the Central Works Committee or the Special Central Works Committee.
3. There are several other forums available to the workers to report their concerns like various Joint Consultative bodies, Departmental Chief – Union Representative meetings and /or individual case meetings.
4. There are also anonymous modes (e.g., the SpeakUp platform for the Indian operations) available for any worker to report any kind of concern. Independent third-party mechanisms are also in place for workers to raise any concerns and grievances.
5. Tata Steel also has Reach-Out Programs for addressing grievances of contract workers.
6. Tata Steel's annual Performance Appraisal Process also provides for a formal review mechanism for the employees, in case they are dissatisfied with the rating.
7. All employees of Tata Steel Limited also get an opportunity to raise their concerns directly with the CEO&MD of the Company on the first working day of every month via the CEO&MD Online Forum, where the CEO&MD of the Company interacts with the whole organisation.

7. Membership of employees and worker in association(s) or Unions recognised by the listed entity:

Tata Steel entities in India	FY2022-23			FY2021-22		
	Total Employees / Workers in respective category (A)	No. of Employees / Workers in respective category who are part of association or union (B)	% (B/A)	Total Employees / Workers in respective category (C)	No. of Employees / Workers in respective category who are part of association or union (D)	% (D/C)
Total Permanent Employees	44,914	27,562	61	44,377	24,511	55
Male	41,708	25,802	62	41,538	23,167	56
Female	3,130	1,684	54	2,838	1,344	47
Others ¹	76	76	100	1	0	0
Total Permanent Workers	30,486	27,637	91	29,811	24,506	82
Male	28,606	25,858	90	28,238	23,142	82
Female	1,804	1,703	94	1,573	1,364	87
Others ¹	76	76	100	-	-	-

¹ Others include transgender personnel

Tata Steel entities (India + Overseas)	FY2022-23			FY2021-22		
	Total Employees / Workers in respective category (A)	No. of Employees / Workers in respective category who are part of association or union (B)	% (B/A)	Total Employees / Workers in respective category (C)	No. of Employees / Workers in respective category who are part of association or union (D)	% (D/C)
Total Permanent Employees	66,186	36,387	55	65,087	33,455	51
Total Permanent Workers	50,514	36,462	72	49,400	33,450	68

Note: It is not mandatory for employees in some of our European subsidiaries to inform the Company regarding their union affiliation. Data captured includes only those employees who pay their union dues via the Company, but does not include employees (if any) who may be making direct payment to the union

A large proportion of Tata Steel's workforce is part of Union which promotes a healthy work environment. In FY2022-23, Tata Steel Kalinganagar workers have also been included in the Union culture. In steel industry unionisation is concentrated in the workers category as managerial employees are not unionised. The proportion of unionised staff as a proportion of total permanent employee is 61% and as a proportion of total permanent workers is 91% for Tata Steel and its Indian subsidiaries.

8. Details of training given to employees and workers:

Category	FY2022-23			FY2021-22		
	Total Number	On health and safety measures (%)	On skill upgradation (%)	Total Number	On health and safety measures (%)	On skill upgradation (%)
Permanent Employees						
Male	60,598	100	100	59,966	100	100
Female	5,512	100	100	5,120	100	100
Others ¹	76	100	100	1	100	100
Total	66,186	100	100	65,087	100	100
Permanent Workers						
Male	46,549	100	100	45,797	100	100
Female	3,889	100	100	3,603	100	100
Others ¹	76	100	100			
Total	50,514	100	100	49,400	100	100

¹ Others include transgender personnel

Tata Steel places great importance on continual development of human resources at all levels and takes responsibility for the professional development and career growth of all its employees. Future skills & competencies aligned with the long-term strategies of the organisation are given equal focus, along with the skills/competencies required at the present time. Key focus areas of the organisation’s training interventions are:

1. Core foundational knowledge including Safety, Business Ethics, Tata Values, Total Quality Management, and Customer Centricity.
2. Functional/technical skills
3. Business & Leadership skills
4. Transformational skills like Digital technology, Sustainability and Agility.

Considering the varying needs of different sets of workforces, a multi-dimensional approach has been taken which is manifested through various frameworks & processes deployed in Tata Steel’s training & development ecosystem. Some key processes for different categories of workforce are listed below:

1. **New Recruits:** Cadre based programmes with duration ranging from 3 months to 2 years.
2. **Permanent employees (excluding Permanent Workers):** 70:20:10 model activated through vehicles like - Functional Competency Framework, Project/Role Marketplace (StepUP) & Schools of Excellence and Company-initiated & Self-initiated programmes through renowned institutes.
3. **Permanent Workers:** Enterprise Capability Building System, Business Key Performance Indicator linked training programmes – E4 Training model-based Programmes and Request Based Programmes.
4. **Contract Workers:** Training & assessment followed by certifications through structured programmes encompassing critical inputs on Safety and Functional skills and Reskilling opportunities through multi-skilling programmes

Tata Steel has also invested in e-learning modules that supplement the instructor led training programmes. In order to capitalise on the technology advancement in the space of augmented reality and virtual reality, Tata Steel is building training modules that use such technologies to deliver enhanced experience, together with gamification for accelerated and measurable learning outcomes. Tata Steel has also linked movement in positions and job codes to training which are mandatory for the new role whenever a new employee or worker transitions to a new role.

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

Category	FY2022-23			FY2021-22		
	Total (A)	No. (B)	% (B/A)	Total (C)	No. (D)	% (D/C)
Permanent Employees						
Male	60,598	60,598	100	59,966	59,966	100
Female	5,512	5,512	100	5,120	5,120	100
Others ¹	76	76	100	1	1	100
Total	66,186	66,186	100	65,087	65,087	100
Permanent Workers						
Male	46,549	46,548	100	45,797	45,797	100
Female	3,889	3,889	100	3,603	3,603	100
Others ¹	76	76	100			
Total	50,514	50,514	100	49,400	49,400	100

¹Others include transgender personnel

Career progression and career development policies are in place for all permanent employees and workers at all locations. Specifically for workers, different policies are in place for various Tata Steel Group entities based on local market practices. Performance and career development reviews are undertaken to review the skill level of each worker and is essential in their career progression and development. Such reviews are at an individual level at some locations and team-based performance review mechanisms are in place at other locations (e.g. Incentive Bonus scheme, Team Performance Reward, Iron Ore Sufficiency Reward, Coal Production Enhancement Reward, etc). The annual bonus scheme for Permanent Workers is also based on the performance parameters of Productivity, Profitability and Safety.

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, the coverage of such system?

Yes, Tata Steel has implemented an occupational health and safety management system. The system is based on the ISO 45001 and is designed to ensure that the Company meets its legal obligations and provides a safe and healthy working environment for its employees.

b) What are the processes used to identify work-related hazards and assess risks on a routine and non-routine basis by the entity?

Tata Steel places the highest emphasis on Health & Safety and has implemented various measures to ensure that Safety is a priority in all its operations. The Company has introduced a Recalibrated Risk Matrix to improve its hazard identification and risk assessment process and has implemented an Environment, Health, and Safety (EHS) risk management framework to assess risks associated with all activities. The framework also captures the top organisational risks related to EHS, and outlines strategies to address them.

Tata Steel's commitment to safety is demonstrated through its continuous efforts to enhance its safety culture and reduce risks through strategic interventions. The Company employs several proactive safety tools to ensure a safe working environment for its employees. These tools include:

1. Safety Visits, which involve regular inspections of the workplace to identify potential hazards and unsafe practices by senior executives of the Company.
2. Elimination of Commonly Accepted Unsafe Practices, which targets practices that are commonly accepted but pose a risk to employees' safety.

3. The Fatality Risk Control Programme is another tool used by Tata Steel to identify potential risks that may result in fatal accidents and take measures to eliminate them.
4. Job Cycle Checks are employed, which involves reviewing each stage of a job to identify potential hazards and take corrective measures.

To enable the smooth functioning of these safety tools, Tata Steel has deployed bespoke IT systems that support these processes. Tata Steel's 'Connected Workforce' platform uses a plant wide heat map that assigns a colour code to micro zones inside the works. By using electronic work permit data, training data, skill data etc., coupled with near-real time image analytics, the system delivers a continuous risk assessment of person, place, process, and asset.

As part of our business responsibility of ensuring a safe work environment, and to improve safety and health at workplace, Far-site Remote Operation centres (iROC) has been established for Agglomerates (8 iSPOC for Sinter Plant and Pellet Plant Operations) and Raw Materials (14 iRMSC for Remote Supervision of 5 Raw Material locations) operations, in order to reduce the physical human footprint at the hazardous shop floor location and provide ergonomic and comfortable environment to employees compared to near location control rooms. This has an added benefit of reducing the carbon footprint of operators having to travel to remote plant and raw material locations, hence making them more sustainable. Tata Steel is looking to further capitalise advances in 5G technology, reducing latency, quantum computing and greater integration between different types of data (video, voice, process etc) to leverage its digital capabilities for improving workplace safety.

c) Whether you have processes for workers to report the work related hazards and to remove themselves from such risks:

Yes, all employees can report incidents and near-misses through a bespoke IT platform to enable prompt reporting, investigation and learning. Tata Steel follows a reporting and investigation process to identify the root cause of any incidents and to implement corrective and preventive measures to prevent recurrence of similar incidents. The reporting and investigation process is aligned with the incident investigation procedures outlined in the Tata Steel Incident Management System.

Tata Steel also has a Safety Helpline (known by different names in different geographies, it is called "SpeakUp" in India), where employees can raise their safety concerns anonymously. The India helpline operates in five languages and is managed by a third-party service provider. The raised concerns are addressed promptly by the relevant departments and a feedback mechanism is in place to ensure that the employees are informed of the outcome of the raised concerns.

In addition to these reporting mechanisms, Tata Steel also conducts regular safety audits, safety assessments and safety walk-downs to identify and address any safety risks in the workplace. These audits and assessments are performed by internal safety auditors and external safety experts, and the findings are used to improve the safety management system.

Digital solutions such as 'Connected Workforce, facilitate real time tracking of unauthorised access to hazardous locations and generate alerts based on violations. Deployment of access control system, Predictive Equipment Health Index, 'Safety Wearables', et al, reiterate our commitment towards a future ready culture. The 'Connected Workforce' platform leverages a plant wide heat map that assigns a colour code to micro zones inside the works. It uses electronic work permit data, training data, skill data etc., coupled with near-real time image analytics, to deliver a continuous risk assessment of person, place, process, and asset.

d) Do the employees/worker of the entity have access to non-occupational medical and healthcare services? (Yes/No)

Yes, Tata Steel prioritises the health and well-being of its employees and workers. The Company provides access to non-occupational medical and healthcare services, such as hospitals, dispensaries, and health insurance, at their respective locations. Moreover, employees have access to national health services provided by national governments at overseas locations.

In addition to these services, Tata Steel offers its employees various in-house health and wellness programmes, counselling services, and health clinics to promote overall physical and mental well-being. The Company also organises regular health and wellness activities, including health fairs, wellness workshops, and health camps, to encourage employees to adopt healthy habits and lifestyles.

Tata Steel's comprehensive approach to employee health and well-being underscores its commitment to creating a safe and healthy workplace environment.

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

Safety Incident/Number	Category*	FY2022-23	FY2021-22
Lost Time Injury Frequency Rate (LTIFR) (per one million-person hours worked)	Employees	0.87	0.92
	Workers	0.45	0.55
Total recordable work-related injuries	Employees	390	380
	Workers	643	597
No. of fatalities	Employees	1	0
	Workers	6	6
High consequence work-related injury or ill-health (excluding fatalities)	Employees	10	1
	Workers	9	6

*Employees include all personnel on rolls of the Company. Workers include third party contractors. This definition is applicable to this table only.

12. Describe the measures taken by the entity to ensure a safe and healthy work place:

The Safety, Health and Environment Committee of the Board has an oversight on health and safety initiatives and the responsibility of the initiatives is on CEO&MD. Tata Steel's goal is to achieve 'Zero Harm' and to become an industry leader in Safety & Health. It has enunciated safety policies that provide clear direction, created a sound safety governance structure, established robust management & reporting systems and training and communication mechanisms, along with well-defined performance measures and indicators, to track its Safety & Health performance.

Tata Steel's value-based system drives its safety culture, with risk-based thinking being reinforced in recent years at all locations. The Company's integrated value chain, from mining to iron & steelmaking and finally to the delivery of products to customers, as well as large project requirements for growth and expansion, demand constant oversight on Safety & Health to achieve its goal.

Tata Steel is focused towards making safety a way of life, be it by the deployment of process safety Centre of Excellence framework or developing capabilities through state of art 'Safety Leadership Development Centre' or ensuring business continuity during emergency situations through the 'Tactical Centre'. Digital solutions, such as 'Connected People', which enables real time tracking of unauthorised worker across hazardous location and generates alerts based on violation, Access Control System, Predicting Equipment Health Index, 'Safety Wearables', etc., reiterate our commitment towards a future ready safety culture.

Tata Steel also recognises the importance of behavioural safety, especially in the operation of heavy vehicles, mobile equipment and moving machinery. We strive to address these by promoting a risk-based thinking culture, leveraging digital technologies and pursuing strategic interventions like simplification of safety standards, development of E-learning modules, safety aligned reward & recognition policy and, intelligent video analytics to improve road safety, Personal Protective Equipment violation detection, person entering in prohibited zone, equipment visualisation with respect to energy source isolation, Standard Operating Procedure compliance, and violation detection during energy isolation.

Tata Steel has also launched the Felt Leadership Program 2.0, reiterating its commitment towards Safety Excellence.

Safety & Health of the workforce is fundamental to the creation of sustained business value at Tata Steel and trust in it as a preferred employer. Far site Remote Operation centres have been setup to reduce footprint at hazardous shop floor location and provided an ergonomic comfortable environment compared to near location control rooms to improve safety and health. The Company is committed to providing a safe & healthy environment to the workforce and addressing impacts by investing in achieving its safety vision of 'Zero Harm' by 2030. Six long-term safety & health strategies, driven through the Agile Way of Working, serve as a key driver in accelerating the creation of business and social value through improved Safety & Health, as below:

1. Build (Safety) leadership capability at all levels

- a) Implementation of past fatal and red risk recommendations across the organisation.
- b) Influence behaviour through deployment of Reward & Recognition as well as consequence management system.
- c) Leveraging deployment of digital interventions for risk reduction across all locations of Tata Steel.

2. Improve competency and capability for hazard identification & risk management

- a) Safety training through Safety Leadership Development Centre in India and Tata Steel's Safety Centre in IJmuiden
- b) Dissemination of safety standard-based e-learning modules to all workforces.
- c) 5S & Visual Workplace Management assessment and subsequent risk mitigation.

3. Ensure contractor safety risk management

- a) Periodic assessment of High-risk job vendors on star rating assessment criteria.
- b) Upgrading skills of contract workmen and development of model Contactor Safety Management workplaces across locations including at Steel Processing Centres and Business partners.
- c) The fifty most important subcontractors of Tata Steel IJmuiden have united under the IJmond Safety Platform (called VeiligheidsPlatform IJmond or VPIJ), a platform by and for the contractors to inform each other about safety initiatives, lessons learned from accidents, etc.

4. Eliminate safety incidents on road & rail

- a) Deployment of technological interventions like Anti-tilt switches, Driver Fatigue Monitoring System, Dala Raised Interlock System etc., across all locations.
- b) Planned improvements in road infrastructure at steelmaking sites along with behavioural safety training programmes for heavy vehicle operators.
- c) Tata Steel's European operations also place great emphasis on safer logistics within their operations management, transport and storage and have also developed additional, company-wide safety standards for the lashing and storage of steel products.
- d) Applying video analytics based close circuit television surveillance for proactive identification and mitigation of potential risks.

5. Achieve excellence in process safety management

- a) Leveraging digital technology to induce timely maintenance of Process Safety Critical Equipment, leading to reductions in failure of critical equipment.
- b) A 'Tactical Centre', tasked with business continuity management during emergencies has been developed.
- c) Process safety school of excellence, a 3-Tier capability development (Learner, Practitioner, Expert) system has been developed to enhance process safety competency of employees.
- d) Tata Steel in IJmuiden has its own fire brigade, consisting of six teams of employee volunteers, with at least seven persons available 24/7 ensuring the safety of employees and neighbours.
- e) Extensive inventory, analysis and associated control measures undertaken, which includes, amongst other things, regular review and updating of the risks of fires, explosions and released gases and liquids, at IJmuiden.

6. Establish industrial hygiene competency & improve occupational health

- a) Physical & Mental Well-being digital programme across locations to reduce and control lifestyle diseases and reduce ergonomic risk factors via assessments and control measures.
- b) Industrial Hygiene assessment & Implementation of control measures through Wellness at Workplace

The Company has prioritised digitalisation to ensure employee safety through data-driven decision-making. Tata Steel has implemented a 'Connected Workforce system' for real-time tracking and access control of employees and contract workers to enhance safety and productivity. The platform leverages multiple technologies and systems to pre-empt unsafe incidents, while enabling policy interventions and ensuring safety & security of its employees and assets. The platform proved pivotal in ensuring business continuity and workforce safety during the COVID-19 pandemic. Entire covid response was digitally enabled and a safety app with multiple tracks was developed with agility over the connected workforce platform, which allowed Tata Steel to operate without any disruptions.

13. Number of Complaints on the following made by employees and workers:

	FY2022-23		FY2021-22	
	Filed during the year	Pending resolution at the end of year	Filed during the year	Pending resolution at the end of year
Working Conditions	230	9	202	12
Health & Safety	230	5	323	8

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% (Assessment on ISO 45001)
Working Conditions	100% (IS 14489)

Note: Assessment by the senior management team

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:

All safety incidents and near-misses are investigated, and risk mitigation is done through the incident classification, reporting & investigation safety standard. This is supported by the safety IT system, and the Environment, Health and Safety recalibrated risk assessment system. All Opportunities for Improvement identified during internal and external assessments are captured and addressed through the IT system.

Corrective actions and its horizontal deployment are a continuous process in Tata Steel, where all safety incidents are recorded, investigated and corrective actions communicated and implemented across the organisation. Some key actions taken over the recent past are:

1. Restricting two-wheeler entry into the steel plants.
2. Implementing segregated timing for movement of two-wheelers and heavy vehicles.
3. Development of transport parks at strategic locations.
4. Horizontal deployment of past fatal accident recommendations.
5. Proactive replacement of equipment based on incidents at other parts of the Tata Steel Group.
6. Radio Frequency Identification based access control to restrict unauthorised entry at crane walkways and other hazardous zones.

7. Introduction of safety interlock systems in tipper operations
8. Formation of new Apex 'Digital & Technology' Safety Sub-Committee to formulate a holistic approach towards adoption of digital and technology to enable Tata Steel's safety excellence journey to achieve the overall objective of 'Zero Harm'.

Leadership Indicators

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

- A. Employees – Yes
- B. Workers – Yes

In case of a death or a permanent/temporary disablement of any employee or permanent worker, various Company social security schemes are in place to ensure the continuity of the same standard of living of the employee and family. Tata Steel has schemes like Family Support Scheme (applicable in case of death due to accident at workplace), Family Benefit Scheme (applicable in case of death due to any other reason than accident at workplace or due to accident while going or coming to duty), Employee Family Benefit Scheme (applicable in death while in service), Medical Separation Scheme, TISCO Employee Family Benefit Scheme and TISCO Officers Family Benefit Scheme, in India, which allow the employees or their family to draw monthly pension or employment (in select schemes) along with the lumpsum retivals and other benefits.

Tata Steel also introduced a Family Protection Scheme to support families of employees who passed away due to COVID-19 pandemic.

For the non-permanent workers in India, Tata Steel has a Suraksha Scheme, which provides financial stability to the worker's family in case of death or permanent disablement of the worker due to accident while at workplace.

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

The contract between Tata Steel and its suppliers incorporates statutory provisions including payment and deduction of statutory dues such as Goods and Services Tax. The suppliers are responsible for adherence to various statutes required for their operations, whilst Tata Steel is responsible as a principal employer.

Tata Steel has a well-established procedure to ensure compliance of all statutory provisions of suppliers who operate in our premises, including ensuring payments and wellbeing of suppliers' workers. Tata Steel's Contractor Cell drives compliance of payment of statutory dues of the suppliers' workers in our premises. The suppliers are mandated to pay all statutory dues to their employees (such as Provident Fund, Employee State Insurance etc.) within the stipulated time and such payments are verified by the members of the Contractor Cell. Non-compliance attracts actions required under law and penalties as per Tata Steel's own policies.

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:

The Suraksha Scheme is a pioneering initiative of Tata Steel to protect families of contract workmen through assured compensation in the event of a fatality. This scheme was developed to support the contract labourer/ his/ her family in case of a serious accident resulting in permanent loss of earning capacity of 50% or more/or in case of death arising out of an accident in Company's work premises. It covers the contractor and contractor worker and includes all establishments and manufacturing units of the Company within India over which the Company has direct control, including the stockyards and railway sidings.

	Total No. of affected employees/ workers		No. of employees/workers that are rehabilitated and placed in suitable employment or whose family members have been placed in suitable employment	
	FY2022-23	FY2021-22	FY2022-23	FY2021-22
Employees	11	1	2	0
Workers	15	12	4	7

Note: Numbers for cases of support for Employee fatality/or high consequence injury.

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

No. Tata Steel does not provide any transitional assistance programme.

5. Details on assessment of value chain partners:

All value chain partners are assessed periodically on their health & safety practices and working conditions. Adhering to the requirement of SA8000 / OHSAS 18001 / ISO 45001 / IS 14489 certifications is encouraged through implementation of internal standards and third-party assessments.

Furthermore, under the Responsible Supply Chain Policy, all key Tata Steel Group entities have developed a detailed process to evaluate adverse impacts on labour force, human rights, environment and business environment where Tata Steel suspect high-priority risks. Within Tata Steel's regular vendor qualification process, the Company asks all high risk/high spend suppliers for 3rd party certificates on health & safety and working conditions. High-risk suppliers also receive safety audits.

Tata Steel believes that performance evaluation of suppliers helps to ensure that the suppliers have the potential in performing and running the business on the same basis as Tata Steel. If the Suppliers do not perform as per the required standard, they may be temporarily suspended or withdrawn from the companies' vendor list. Tata Steel also works with suppliers to ensure they understand our requirements and to enhance suppliers' capabilities by providing training, advice and supports.

A summary of value chain partners assessed by key Tata Steel entities is provided below:

	% of value chain partners (by value of business done with such partners) that were assessed		
	Tata Steel Limited	Tata Steel Nederland BV	Tata Steel UK Limited
Health & Safety practices	78	67	100
Working Conditions	78	Not Monitored	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:

Over the years, Tata Steel has taken several actions to address significant risks/concerns arising from assessments of health and safety practices and working conditions of value chain partners. Tata Steel collaborates with suppliers to improve their sustainability performance by sharing opportunities for improvements, especially with those who have been identified as 'Basic' and 'Improving' under the Responsible Supply Chain Policy assessment. This includes defining follow-up actions, which get tracked. As an example, following an enhanced due diligence visit to one of Tata Steel's South African raw material suppliers (for our Dutch operations) and their supplying mines in August 2022, Tata Steel has agreed actions with the supplier and are tracking them.

Tata Steel also takes actions within our control to increase the capabilities of our value chain partners. Some key actions taken are listed below:

1. Tata Steel has established a **Safety Leadership Development Centre (SLDC)** at Jamshedpur. It is a state-of-the-art facility dedicated to providing comprehensive safety training to all individuals entering the workplace and utilises cutting-edge training props and techniques to ensure an engaging and effective learning experience. In FY2022-23,

Tata Steel trained over 40,000 contract workforce on various safety standards at the SLDC, Jamshedpur. This significant investment in safety training underscores Tata Steel's commitment to creating a safe and healthy working environment for all employees and contractors. Similar facilities are also being established at our Kalinganagar and Meramandali sites.

2. Tata Steel has also recently established a state-of-the-art Practical Safety Training Centre to enhance its workforce's risk perception regarding various critical hazards in the workplace. The centre provides hands-on training on various modules, including Working at Height, Material Handling, Gas Safety, Confined Space, Heavy Vehicle Simulators, First Aid & Cardiopulmonary Resuscitation (CPR), and Virtual Reality for moving machinery. By incorporating the latest technology and equipment, Tata Steel aims to ensure engaging and effective training experience that is relevant to the employees' safety needs.
3. Awarding high risk job to only those vendor partners who score 3-star or above ratings in a comprehensive safety due diligence process known as Contractor Safety Management Standard or its equivalent across group companies. High risk work includes working at height, hot work, confined space entry, electrical work, transportation etc.
4. Incorporating safety & health requirements in the Request for Quotation documents and ensuring that those requirements are the condition of the contract. The safety & health requirements are formalised during the pre-bid meetings.
5. Creating a safety recognition or positive discrimination framework among high performing vendors on safety performance (4-star and 5-star)
 - a) Rewards through provision of special privileges during contract award decisions.
 - b) Recognition by Senior Leadership Team and provisions of better growth opportunities.
6. Implementation of Contractor Safety Management Standard at the Meramandali site, after its acquisition by Tata Steel. The journey started with training and handholding of different stakeholders and making them aware of the Six Steps Contractor Safety Management process and continued with full-fledged implementation of star rating assessment system for all High risk job vendors.
7. Through its flagship Vendor Capability Advancement Programme, Tata Steel is working with the low safety score vendors to improve their safety performance through handholding and training.
8. Safety Excellence Reward and Recognition framework was initially introduced for management employees of Tata Steel in India, to promote a positive safety culture and reward individuals and departments with exceptional safety performance. This framework has now been extended to all employees, including contract employees and vendor partners of Tata Steel.
9. The '**Ghar-Se-Ghar-Tak programme**' is designed to sensitise the message of nurturing a risk averse culture and improve risk perception not only at the workplace, but also within the homes of contractor employees. This initiative involves families of the contract employees and aims to promote the message of choosing safety over risks at workplace as well as at home. Tata Steel has conducted more than 200 Ghar-Se-Ghar-Tak sessions in FY2022-23.
10. Based on past trends on safety related incidents associated with vehicle movement, Tata Steel has developed a "Transport Park" at its Cold Rolling Mill at Bara (in Jamshedpur) and at Meramandali. Tata Steel has also undertaken the renovation of its existing Transport Park at Kalinganagar and developed Model Heavy Vehicles Parking areas at all its mining locations in India.
11. Extensive use of Video Analytics for Safety Monitoring in terms of Personal Protective Equipment compliance and Restricted Area Access Violations and Advanced Artificial Intelligence models have been deployed for close monitoring of various manufacturing processes to detect conditions which could violate safe operating conditions
12. Tata Steel's European Operations has a supply chain improvement request system to capture improvement opportunities with suppliers regarding Safety, Health, Environment, Delivery and Quality. The same system allows the issuing of positive commendations to suppliers who demonstrates going over and beyond the initial requirements.

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:

Tata Steel has a structured Materiality Assessment process to identify key stakeholder groups and take their input in identifying material issues for Tata Steel. The assessment is conducted by an independent 3rd party and takes into consideration various standards, including the following, in identifying key stakeholder groups:

1. Global Reporting Initiative
2. Sustainability Accounting Standards Board (Coal, Metals & Mining, and Iron Steel Producers)
3. EU Sustainability Reporting
4. MSCI Index (Morgan Stanley Capital International)
5. International Labour Organisation Framework
6. UN Guiding Principles on Business & Human Rights
7. Peer company reports
8. Tata Steel's past Materiality Assessment Report.

As part of the Materiality Assessment, Tata Steel also uses the AA1000 Stakeholder Engagement Standard to provide guidance on identifying and engagement with stakeholders.

Based on the guidance provided by standards, input from the Company and their independent judgement, the independent party identifies the key stakeholder list for Tata Steel.

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

Sl. No.	Stakeholder Group	Whether identified as Vulnerable & Marginalised Group	Channels of communication	Frequency	Purpose and scope of engagement including key topics and concerns raised during such engagement
1	Investors	No	Earnings calls	Quarterly	<ol style="list-style-type: none"> 1. Transparent and effective communication of business performance 2. Addressing investor queries and concerns 3. Sound corporate governance mechanisms 4. Providing insights into the Company's corporate strategy and business environment
			Structured investor and analysts meet	Annual	
			One-to-one meetings (upon request)	As and when required	
			General Meetings	Annual /as and when convened	

Sl. No.	Stakeholder Group	Whether identified as Vulnerable & Marginalised Group	Channels of communication	Frequency	Purpose and scope of engagement including key topics and concerns raised during such engagement
2	Community Representatives	Yes	<ol style="list-style-type: none"> 1. Public hearings 2. Scheduled Caste stakeholder council meetings 3. Scheduled Tribe stakeholder council meetings 4. Jamshedpur citizens forum 5. Meetings with community leaders 6. Rural Satisfaction Survey 7. Village Coordinator meetings 8. Informal interactions with members of the Tata Steel Foundation 	Public hearings as per regulatory requirement, other community meetings as required	<ol style="list-style-type: none"> 1. Community development programmes based on local communities' needs 2. Strengthening of livelihood opportunities 3. Improvement of social infrastructure for hygienic and healthy living environment 4. Understanding and addressing concerns of the community on environment and social issues. 5. Dignity of life through economic and social empowerment
3	Suppliers	Yes. Tata Steel recognises Affirmative Action Suppliers as vulnerable & marginalised	<ol style="list-style-type: none"> 1. Supplier Value Management in India and Supplier Relationship & Contract Management process in Europe 2. Responsible supply chain assessments 3. Vendor satisfaction surveys 4. Trainings, and support programmes such as 'Sathis' 5. Swaagat programme for new vendors 6. Vendor Capability Advancement Programme 7. Annual vendor meets 8. Analysis of total cost of ownership (TCO) and value in use (VIU) 9. Monthly meeting with contractors 	As per team plan/ weekly/ monthly/ quarterly/ annual	<ol style="list-style-type: none"> 1. Knowledge and infrastructure support 2. Efficient and sustainable use of natural resources, including greenhouse gas reduction and sustainable waste management 3. Regular communication and updates on business plans 4. Inclusion of local medium and small-scale enterprises in vendor base 5. Competency development of local vendors 6. Routine ordering and payment related matters 7. Assessment of sustainability risks, and building resilience against such risks

Sl. No.	Stakeholder Group	Whether identified as Vulnerable & Marginalised Group	Channels of communication	Frequency	Purpose and scope of engagement including key topics and concerns raised during such engagement
4	Customers	No	<ol style="list-style-type: none"> Dedicated Customer Service Teams Value analysis and value engineering and Vehicle Teardown & Benchmarking Early vendor involvement and Retail value management Customer meet (Parivaar meet) and other conferences, (Euroblech, Blechexpo and Metpack) conclaves, and zonal meets Ecafez & ECAféz Qualithon Relationship building with celebrations Customer Engagement & Satisfaction surveys Webinars Senior Management visits/ Virtual meets / Tata Steel Europe Customer Events and Steel Courses 	Need based/ As per team plan/ Annual/ Bi-annual	<ol style="list-style-type: none"> Product/ service quality and safety Adequate information on products Timely delivery of product/ service Maintenance of privacy/ confidentiality Knowledge and infrastructure support
5	Regulatory Authorities	No	<ol style="list-style-type: none"> Ongoing meetings and dialogues Participation in formal and informal consultation processes 	On a regular basis	<ol style="list-style-type: none"> Regulatory compliance Sound corporate governance mechanisms Tax revenues Transparency in disclosures
6	Industry Bodies, Associations & International standard setting organisations	No	<ol style="list-style-type: none"> Leadership of, and participation in national and international trade organisations, including memberships of various committees and forums (both steel industry and industry agnostic). Leadership in development of national and international standards relevant to Tata Steel 	On a regular basis	<ol style="list-style-type: none"> Regulatory compliance Transparency in disclosures Responsible Corporate Citizenship
7	Media and Industry Bodies	No	<ol style="list-style-type: none"> Press conferences Media meets Conclaves Multiple Forums and Summits One-to-one interaction with senior management 	Monthly/ Quarterly/ Annual/ As per plan	<ol style="list-style-type: none"> Transparent and accurate disclosure to stakeholders Awareness on Tata Steel's Businesses, Brands & Sustainability initiatives Enhancing Corporate Reputation

Sl. No.	Stakeholder Group	Whether identified as Vulnerable & Marginalised Group	Channels of communication	Frequency	Purpose and scope of engagement including key topics and concerns raised during such engagement
8	Employees and workers	Yes. Tata Steel recognises Employees and Workers from the LGBTQIA+ community, Persons with Disability and the Affirmative Action Community (Tribal Communities) as vulnerable & marginalised	<ol style="list-style-type: none"> 1. Joint Consultative Council of Management 2. Joint Works Council 3. Joint Departmental Council 4. Annual working together meets 5. Joint Amenities committee 6. Monthly MD-Online forum 7. Performance reviews 8. Employee Engagement Surveys 9. Managing Director Connect 10. Senior leadership communication meetings, etc. 	As per team plan/ weekly/ monthly/ quarterly/ annual	<ol style="list-style-type: none"> 1. Caring and empowering work environment 2. Personal development and growth 3. Health and safety 4. Grievance resolution 5. Competitive compensation

Leadership Indicators

1. 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:

Tata Steel has delegated the consultation between the stakeholders and the Board on economic, environmental, and social topics to the Chief Executive Officer and the Managing Director (CEO&MD) of the Company. The CEO&MD and the senior leadership team of Tata Steel and its subsidiary companies regularly update the Board and various Board Committees on relevant issues. These updates are provided during the Board meetings and separate meetings for various Board Committees.

Tata Steel has put in place various processes which ensure feedback from key stakeholders are received by the management and presented to the Board and Board committees in their meetings. Some examples of forums to receive feedback from various stakeholder groups are listed below:

A. Stakeholder: Employees

1. The **Joint Consultative mechanism** is in place in Tata Steel with representations from the Unions and the Management based on the principle of Working Together. This is a three-tier joint consultation machinery in Tata Steel consisting of Joint consultative council of management, the Joint Works Council and the Joint Departmental Council. All the three bodies form the working together architecture of Tata Steel and represent the joint working culture of the organisation. The main objective of these forums are as follows:

- a) To promote improved performance for the general benefit of the enterprise, the employees and the country.
- b) To give employees a better understanding of their role and importance in the working of the industry.
- c) To satisfy the employees’ urge for self-expression.

Regular meetings of these joint bodies are organised to facilitate discussions, recommendations, quicker decision-making and joint action planning to drive improvements in the areas of health & safety, amenities, cost, quality, production, community development, employees training & development and diversity & inclusion.

Additionally, Tata Steel organises an annual event on Working Together, with representatives from the management and unions of various plants of Tata Steel and other Tata Steel Group companies in India. Some of the recent topics discussed in the event are related to ESG, Diversity & Inclusion, Climate Change, Air Quality, Water Stewardship. Valuable inputs/feedbacks from the seminar are collated from all the participants, which are further incorporated into formulation of policies related to that topic.

2. Tata Steel also has a similarly robust employee consultation process in Europe. In the Netherlands, works councils (a total of 6) have a role in the consultations within their own work unit. They delegate members to the Central Works Council, which represents the employees at Tata Steel Nederland level and participate in consultations with the Tata Steel management.

Consultation mechanisms between employees and the management are in place for all our other locations of Tata Steel, in line with local regulations and best practices.

B. Stakeholder: Community

1. Tata Steel also engages deeply with the community on social and environmental topics via the Tata Steel Foundation (TSF). Some key examples of the comprehensive engagement that TSF has with the community are listed below:
 - a) Daily engagement of communities and stakeholders by the TSF team results in a better understanding of the issues they face currently as well as how their problems have changed and evolved over time. This allows for societal development initiatives to be re-aligned as per relevance.
 - b) Tata Steel frequently faces public hearings where community members express their concerns. It is another opportunity to understand community concerns and ensure that the development initiatives undertaken are aligned.
 - c) TSF regularly interacts with experts of national and global repute with vast experience in the community development space who can provide an unbiased outside-in perspective on the communities we serve, the socio-economic milieu including stakeholder interests as well as the development initiatives being engaged in with communities.

C. Stakeholder: Customers, Suppliers and Channel Partners

1. Tata Steel organises annual “Parivaar Meets” of various business units of Tata Steel, wherein the Channel Partners of the Company interact with the CEO&MD as well as the Senior Leadership team of the Company. Parivaar Meets provide an opportunity where future plans are discussed jointly with the Channel Partners. Additionally, Building Bonds is an engagement platform for Tata Steel team and channel partner customers to understand their emerging needs and their future aspirations.
2. Tata Steel also organised annual supplier meets wherein key suppliers interact with the Tata Steel Senior Leadership Team. Tata Steel also works with select strategic suppliers, who have a global reach, to bring in ideas on joint collaboration projects and strategic partnerships for value discovery and creation in line with the long-term strategic objectives of the Company.
3. Monthly business planning meetings capturing details of the market, industry trends, projected performance and likely impact of any foreseeable change are conducted at apex level. In addition, customer feedback is captured annually, and the action taken across product, delivery, commercials, relationship, new product development, technical support, etc. is shared with CEO&MD.

D. Investors, Lenders and Shareholders

The Tata Steel Investor Relations team forms the bridge between the senior leadership of the Company and the investor and lender communities. The CEO&MD and ED&CFO of the Company also hold regular interactions with the investor and lender communities, including earnings calls, analyst meets and over one-to-one meetings.

Tata Steel has also appointed TSR Consultants Private Limited (TSR) as the Registrar and Transfer agents of the Company. TSR acts as the single point of contact for all shareholder related feedback of the Company and works with the Secretarial team of the Company to address all investor's queries.

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 policies and activities of the entity:

Yes. Tata Steel relies on the outcome of the stakeholder's consultation, including those identified during the Materiality Exercise, to identify its key policies and activities on environmental and social topics. Following on from the Materiality Exercise, for all the identified areas, Tata Steel has identified and adopted ambitious targets. Based on the inputs received from stakeholders, one of the strategic objectives identified by Tata Steel is 'Industry Leadership in Sustainability'. Tata Steel has also put in initiatives to achieve these targets, which have been articulated in various sections of the current Business Responsibility and Sustainability Report.

Tata Steel follows an integrated approach of balancing stakeholder requirements while formulating Long-Term Plans/ Annual Business Plan, which helps to mitigate adverse impacts and community risks that may arise from our operations. Accordingly, the sustainability issues identified during the Materiality Assessment (please refer to Section A, Question 24) are embedded in Tata Steel's strategic planning process and their impact are mitigated through focused action plans and resource allocation, including capital expenditure, revenue expenditure, technology adoption, manpower planning etc.

A robust top-down governance structure at Board & Corporate level ensures periodic oversight of material issues and related action plan. The governance mechanism at the Board level (Corporate Social Responsibility & Sustainability Committee, Safety, Health & Environment Committee, Risk Management Committee and Audit Committee) and CEO & MD's level (Apex Environment, Apex Safety), TIMC (Technology & Innovation Management Committee), Group Risk Review Committee enables periodic review of the performance against action plan and provides directions based on external landscape evolution and organisational objectives.

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

The Corporate Social Responsibility & Sustainability Committee (CSR&S) of the Board has an oversight on CSR initiatives. At Tata Steel, steelmaking and mining operations are in the states of Jharkhand and Odisha, both of which have a large indigenous population, and accordingly the community amongst which we operate can be considered to be vulnerable/marginalised stakeholder group.

The value proposition of Tata Steel's engagement with the community is to enable lasting betterment in the well-being of communities in the operating region through regional development models prioritising the excluded and those proximate to business operations. Additionally, Tata Steel is also looking at addressing core development gaps at a national scale through replicable models of development. Some actions taken by the Company to address their concerns are:

1. Ensuring safety in operating sites so that health & safety of communities is not compromised.
2. Sustaining community outreach activities in areas where we operate.
3. Actively supporting communities through initiatives encompassing public health, household nutrition, access to and conservation of water, household sanitation, holistic education, stable livelihoods, nurturing sporting talent, enabling a life of dignity for persons with disabilities, creating necessary public infrastructure and amenities, enabling grassroots leadership.

Further details on Tata Steel's engagement with communities is provided in Social & Relationship Capital section of Tata Steel's Integrated Report for FY2022-23 and later in this report.

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:

All our employees and workers are provided training on the Tata Code of Conduct, which cover key human rights issues, and the Prevention on Sexual Harassment trainings, from time to time. Tata Steel is rolling out a bespoke Human Rights training programme for all employees in FY2023-24.

Category	FY2022-23			FY2021-22		
	Total (A)	No. of employees/ workers covered (B)	% (B/A)	Total (A)	No. of employees/ workers covered (B)	% (B/A)
Permanent Employees	66,186	66,186	100	65,087	65,087	100
Permanent Workers	50,514	50,514	100	49,400	49,400	100

Note: The trainings are extended to the Contract Workers as well.

2. Details of minimum wages paid to employees and workers, in the following format:

100% of employees and workers of Tata Steel are paid more than or equal to the minimum wage, as applicable in their respective jurisdiction.

Category	FY2022-23			FY2021-22		
	Total (A)	Equal to or more than Minimum Wage		Total (A)	Equal to or more than Minimum Wage	
		No. (B)	% (B / A)		No. (B)	% (B / A)
Employees						
Permanent						
Male	60,598	60,598	100	59,966	59,966	100
Female	5,512	5,512	100	5,120	5,120	100
Others ¹	76	76	100	1	1	100
Other than Permanent						
Male	1,398	1,398	100	1,243	1,243	100
Female	200	200	100	119	119	100
Workers						
Permanent						
Male	46,549	46,549	100	45,797	45,797	100
Female	3,889	3,889	100	3,603	3,603	100
Others ¹	76	76	100			
Other than Permanent						
Male	1,07,883	1,07,883	100	1,00,917	1,00,917	100
Female	6,266	6,266	100	6,262	6,262	100
Others ²	1,661	1,661	100	1,646	1,646	100

¹ Others include transgender personnel

² Others include transgender workers and overseas personnel where gender bifurcation is not available.

3. Details of remuneration/ salary/ wages, in the following format:

Company	Per annum Figs in.	Category	Male		Female	
			Number	Median remuneration	Number	Median remuneration
Tata Steel Limited	₹	Board of Directors (BoD) ⁽¹⁾	9	1,55,05,000	3	1,26,40,000
	₹	Key Managerial Personnel ⁽²⁾	3	14,21,17,785	0	-
Tata Steel	₹	Employees & Permanent Workers (other than BoD and KMP listed above) ⁽³⁾	59,074	25,66,079	5,255	29,80,695

Note
1. Remuneration of Board of Directors

SN	Board of Directors (Male)	Amount (in ₹)
1	Mr. N. Chandrasekaran	3,60,000
2	Mr. Saurabh Agrawal	6,80,000
3	Mr. David W. Crane*	52,40,000
4	Mr. V. K. Sharma	1,24,50,000
5	Mr. Noel Naval Tata	1,54,00,000
6	Mr. Deepak Kapoor	1,56,10,000
7	Mr. O. P. Bhatt	2,48,00,000
8	Mr. Koushik Chatterjee	14,21,17,785
9	Mr. T. V. Narendran	18,66,50,782

SN	Board of Directors (Female)	Amount (in ₹)
1	Ms. Mallika Srinivasan**	40,80,000
2	Ms. Bharti Gupta Ramola***	52,80,000
3	Ms. Farida Khambata	1,26,40,000

* Mr. David W. Crane stepped down as an Independent Director and Member of the Board effective September 5, 2022.

** Ms. Mallika Srinivasan completed her second term as an Independent Director of the Board and ceased as an Independent Director and Member of the Board effective May 20, 2022.

*** Ms. Bharti Gupta Ramola was appointed as an Independent Director of the Company for a term of 5 (Five) years commencing November 25, 2022 through November 24, 2027.

2. Remuneration of Key Managerial Personnel

SN	Name of Key Managerial Personnel (Male)	Amount (in ₹)
1	Mr. Parvatheesam Kanchinadham	3,76,05,394
2	Mr. Koushik Chatterjee	14,21,17,785
3	Mr. T. V. Narendran	18,66,50,782

3. No. on consolidated basis not adjusted for Purchasing Power Parity and may not reflect benchmark median salary in each of the respective geography

4. Do you have a focal point (Individual/ Committee) responsible for addressing human rights impacts or issues caused or contributed to by the business?

Yes. Tata Steel has formed the Apex Business & Human Rights Committee to oversee human rights commitments and act as the focal point for addressing human rights impacts or issues.

Tata Steel recognises upholding of human rights as an integral aspect of doing business and is committed to respecting and protecting the human rights of all stakeholders and remediating adverse human rights impacts resulting from or caused by its businesses. Tata Steel's Business & Human Rights policy (<https://www.tatasteel.com/media/15484/tsl-policy.pdf>) is aligned with the principles contained in the Universal Declaration of Human Rights, International Labour Organisation's Declaration on Fundamental Principles and Rights at Work and the United Nations Guiding Principles on Business and Human Rights and is consistent with the Tata Code of Conduct. This Policy applies to Tata Steel and all its subsidiaries.

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

Tata Steel believes in the conduct of the affairs of its constituents in a fair and transparent manner by adopting the highest standards of professionalism, honesty, integrity and ethical behaviour. Towards this end, the Company has adopted the Tata Code of Conduct, which lays down the principles and standards that should govern the actions of the Company and its employees. Any actual or potential violation of the Code, howsoever insignificant or perceived as such, is a matter of serious concern for the Company.

Tata Steel is committed to providing a safe and positive work environment. The Company complies with SA8000 standards and has put in place a robust corporate governance model with defined roles and responsibilities at the Board, the Management Level Committees as well as at the Employee level. The Apex Business & Human Rights Committee has been formed to oversee human rights commitments of the Company.

Tata Steel has put systems in place to encourage the reporting of concerns related to Human Rights. In addition to Tata Steel's own internal processes, employees and suppliers are encouraged to use Tata Steel's Confidential Reporting System to report any concerns. This is an independently run service which enables concerns about any aspect of Tata Steel's operations to be reported on a confidential (and/or anonymous) basis. The service, called "Speak Up", is available on Tata Steel's website and a Telephone helpline is also available (<https://www.tatasteel.com/corporate/our-organisation/ethics/>).

On receipt of any concern through email, letter, web helpline or orally, it is registered by the Ethics Department of Tata Steel. The investigation team conducts investigation by gathering, validating, analysing the data and provides their observations and recommendations.

The investigation report is further reviewed by the Chief Ethics Counsellor or other appropriate authority and the recommendations are acted upon. The documentation of the action taken is filed for records. Issues concerning the Chief Ethics Counsellor and employees at the levels of Vice presidents and above are addressed to the Chairperson of the Audit Committee of the Company and those concerning other employees is addressed to the Chief Ethics Counsellor of the Company. The Ethics Counsellor regularly provides an update to the Tata Steel Board's Audit Committee on the status of various grievance redressal mechanisms.

Tata Steel also obtains declarations from all the value chain partners regarding SA8000 and other ISO requirements. Moreover, all of Tata Steel's value chain partners have to affirm compliance with the Tata Code of Conduct.

When deemed appropriate, Tata Steel requires suppliers operating in regions recognised as having a higher risk of human rights abuse, including slavery and human trafficking, to adopt suitable and robust policies and procedures to prevent such abuses. This could include having suitable accreditation (e.g. SA8000). If no suitable accreditation exists, a supplier is required to provide evidence that their policies cover the key elements of SA8000, including there being no forced labour in their operations. Any reported concerns are investigated thoroughly and appropriate action taken following due process.

No reports were received, or investigations undertaken by procurement in respect of modern slavery or human trafficking in the supply chain during FY2022-23.

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

	FY2022-23		FY2021-22	
	Filed during the year	Pending resolution at the end of year	Filed during the year	Pending resolution at the end of year
Sexual Harassment	38	10	26	4
Discrimination at workplace	3	0	1	1
Child Labour	0	0	0	0
Forced Labour/Involuntary Labour	0	0	0	0
Wages	42	1	45	0
Other human rights related issues	Nil	Nil	Nil	Nil

Note: In addition to the above, Tata Steel also records and redresses behavior related issues.

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

Tata Steel seeks to encourage its employees, customers, suppliers, and other stakeholders to raise concerns or make disclosures when they become aware of any actual or potential violation of Tata Steel’s Code of Conduct, policies or law and accordingly has put in place mechanisms to prevent adverse consequences to the complainant, as below:

- i. As part of Whistle-blower Policy and Prevention of Sexual Harassment Policy, Tata Steel is committed to the protection of identity of the complainant and all such matters are dealt in strict confidence, with appropriate measures taken to maintain such confidentiality.
- ii. As part of its Code of Conduct, the Company does not tolerate any form of retaliation against anyone reporting legitimate concerns. Anyone involved in targeting such a person is subject to disciplinary action.
- iii. Under the Prevention of Sexual Harassment Policy, any employee may lodge a complaint of sexual harassment against any other employee to the chairperson or to any member of the relevant complaints committee. All complaints have to be sent in writing and are dealt with in strict confidence by the committee members. After having heard both the complainant and accused, the complaints committee thoroughly investigates (including meeting the complainant, enquiry into all evidence, meeting all witnesses, consultation with experts) the complaint and makes a report of its findings. This report is submitted to the relevant Management Team. The Company also ensures that any employee who is a part of the investigations is not victimised or subjected to any unfavourable treatment.
- iv. Under the Whistle-blower Policy, complete protection is given to Whistle-blowers against any unfair practice like retaliation, threat or intimidation of termination/suspension of service, disciplinary action, transfer, demotion, refusal of promotion, or the like, including any direct or indirect use of authority to obstruct the Whistle-blower’s right to continue to perform his/her duties and functions, including making further disclosures.
- v. The Company takes steps to minimise difficulties for the Whistle-blower because of making the disclosure. Thus, if the Whistle-blower is required to give evidence in criminal or disciplinary proceedings, the Company arranges for the Whistle-blower to receive advice about the procedure.
- vi. The identity of the Whistle-blower is kept confidential to the extent possible and permitted under law. All whistle-blowers are also cautioned that their identity may become known for reasons outside the control of the Chief Ethics Counsellor/Chairperson of the Audit Committee (e.g. during investigations carried out by Investigators).
- vii. While discouraging retaliation against anyone reporting legitimate concerns, Tata Steel’s Policy also provides for disciplinary action in case the complaint registered is found to be frivolous or false or made with a mischievous intention.
- viii. Regular awareness and training sessions are conducted to ensure that the employees are fully aware of various aspects of sexual harassment and of the redressal mechanism.

8. Do human rights requirements form part of your business agreements and contracts?

Yes, human rights requirements form part of our business agreements and contracts. The terms of contract or purchase order copies submitted to vendors include compliance to SA8000 requirements, and it is mandatory for all vendor partners to comply with such requirements. SA8000 Policy covers various aspects of human rights such as child labour, forced or compulsory labour, health & safety, freedom of association, non-discrimination, disciplinary practices, security practices, working hours, compensation practices, supply chain practices and management systems.

Tata Steel also follows the Tata Code of Conduct globally and expects all business associates and value chain partners to adhere to the principles of the Tata Code of Conduct. Tata Steel has specific clauses of the Tata Code of Conduct included in all its business agreements and contracts/purchase orders, including clauses on human rights.

The Tata Code of Conduct can be accessed at <https://www.tatasteel.com/corporate/our-organisation/ethics/>. The Business Associates Code of Conduct can be found on link <https://www.tatasteel.com/media/9244/business-associates-code-of-conduct.pdf>

Furthermore, Tata Steel's Responsible Supply Chain Policy encourages supply chain partners to share the same commitment and expect them to integrate the four sustainability principles of Tata Steel (Fair business practices, Health & Safety, Human Rights and Environment management) in all their business decision-making. It is also expected from them to extend them to their own supply chain. The Policy states that business partners will be assessed on the Responsible Supply Chain Policy Principles and the assessment is given due consideration during evaluation and contract approvals, both for new as well as existing partners.

9. Assessment for the year:

Human Rights issues	% of plants and offices that were assessed (by entity or statutory authorities or third parties)
Child Labour	
Forced/Involuntary Labour	
Sexual Harassment	100% of Tata Steel's plants and offices are assessed for compliance on key Human Rights issues by internal teams of the Company, as part of the regular ongoing reviews by the senior leadership team of the Company.
Discrimination at workplace	
Wages	
Others	

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

There were no significant risk or concerns identified during FY2022-23. However, being a responsible company, we ensure continuous monitoring and capability building of our value chain partners. Some key initiatives taken by Tata Steel are listed below:

1. Tata Steel is extending training and capability building to the business partners and thus is helping them achieve the required level of readiness in the areas of fair business practices, health and safety, human rights and environmental management. Tata Steel has categorised business partners into Basic, Evolving, Maturing, Leading and Established categories, and Tata Steel provides continuous support in terms of training and knowledge transfer help them to move into higher band(s).
2. Declaration of adherence to the Tata Code of Conduct from the value chain partners as part of all contracts/purchase orders. Vendor contracts are terminated in case of non-adherence to the Code of Conduct (following due process).
3. Tata Steel conducts assessment of its upstream and downstream business partners as per the Responsible Supply Chain Policy and initiates corrective actions.

Leadership Indicators

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

Some key processes that have been adopted over the last several years with an objective, amongst others, to address human rights grievances and complaints, are as below:

1. Statutory rights of Contract Employees are addressed through a grievance redressal mechanism, where contractual employees report their concerns through third party helpline.
2. Tata Steel has also set up the Contractor’s Cells at several locations, where the concerns of contract employees related to wages, Provident Fund, full & final settlement of dues etc., are duly addressed.
3. In FY2022-23, the Prevention of Sexual Harassment Policy has been modified taking into consideration the online meetings being attended from home and other places, apart from offices.
4. Training session for vendors are conducted to make the vendors aware about the statutory rights of Contract Employees and ensure they abide by the requirements.
5. Vendors are made to sign the Tata Code of Conduct as part of their initial vendor registration.
6. Tata Steel’s European operations have also embraced the six-step approach of the Organisation for Economic Co-operation and Development’s (OECD) due diligence guidance for Responsible Business Conduct, to drive supply chain transparency, adherence to laws & regulations, minimum standards and continuous improvements. The OECD guidelines ensure that Tata Steel procures its goods and services responsibly, whilst aligning to the core Tata Steel values and Code of Conduct.

2. Details of the scope and coverage of any Human rights due-diligence conducted:

Tata Steel has formed an internal committee for Human Rights due-diligence and the process is under planning. In FY2023-24, Tata Steel plans to conduct a 3rd party Human Rights due diligence of the value chain to identify vulnerable areas, potential human rights issues, and their remediation along with global benchmarking for best practices. Tata Steel has, in any case, implemented the guidelines under SA8000 at all its key location.

For the upcoming due-diligence exercise, the following 14 Human Rights issues have been identified:

1. Child labour	8. Non-harassment
2. Forced/involuntary labour	9. Right to clean air and water
3. Fair wages	10. Right to Privacy
4. Equal opportunity	11. Rights of Indigenous persons
5. Health & Safety	12. Rights of migrant Labours
6. Human Rights in value chain	13. Rights of Persons with Disabilities
7. Land rights resettlement and rehabilitation	14. Contemporary forms of slavery.

Tata Steel has also identified the following 6 rights holders:

1. Tata Steel employees	4. Consumers/customers
2. Contract workforce	5. Employees of value chain partners
3. Communities	6. Family members of Tata Steel employees

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?

Tata Steel has taken steps to ensure compliance with the Rights of Persons with Disability Act, 2016 (RPwD Act) across its sites and locations of Tata Steel (in India). Our plant and office premises are adapted for easy movement of differently abled visitors and employees and the requisite infrastructure, including ramps, elevators and disabled friendly washrooms, have been installed at the key premises of Tata Steel.

4. Details on assessment of value chain partners:

Human Rights issues	% of value chain partners (by value of business done with such partners) that were assessed
Child Labour	Tata Steel obtains declarations from all the value chain partners regarding various guidelines, like SA8000 and ISO requirements. Moreover, all our value chain partners have to affirm compliance with the Tata Code of Conduct.
Forced/Involuntary Labour	
Sexual Harassment	Under Responsible Supply Chain Policy, the due diligence of the value chain partners for four Sustainability principles of Fair Business practices, Health & Safety, Human Rights and Environment Management has been conducted. 78% of Critical suppliers, contributing to 80% - 90% of the spend were assessed under Responsible Supply Chain/ Procurement Policy in our Indian operations till FY2022-23.
Discrimination at workplace	
Wages	Details of the Responsible Supply Chain Policy - https://www.tatasteel.com/media/10931/tata-steel-responsible-supply-chain-policy_guidelines.pdf
Others	

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

Tata Steel did not identify any significant risks/concerns arising from its value chain partners. However, Tata Steel has developed monitoring mechanisms and undertaken several initiatives to build the capabilities of its value chain partners in order to minimise the risk of potential human rights issues in the value chain, as follows:

1. Tata Steel is extending training and capability building to the business partners and thus is helping them achieve the required level of readiness in the areas of Fair Business Practices, Health & Safety, Human Rights and Environmental Management. Tata Steel has categorised business partners into Basic, Evolving, Maturing, Leading and Established categories, and Tata Steel provides continuous support in terms of training and knowledge transfer help them to move into higher band(s).
2. Tata Steel obtains a declaration of adherence to the Tata Code of Conduct from its value chain partners as part of all contracts/purchase orders. Vendor contracts are terminated in case of non-adherence to the Code of Conduct (following due process).
3. Tata Steel conducts assessment of its upstream and downstream business partners as per the Responsible Supply Chain Policy and initiates corrective actions.

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

Essential Indicators

1. Details of total energy consumption (in Joule) and energy intensity, in the following format:

Parameter	Unit of measurement	FY2022-23	FY2021-22
Total electricity consumption (A)	Peta Joule	67	61
Total fuel consumption (B)	Peta Joule	762	772
Energy consumption through other sources (C)	Peta Joule	28	26
Total energy consumption (A+B+C)	Peta Joule	857	859
Energy intensity per rupee of turnover	Peta Joule per rupee of turnover	0.00035	0.00035
Energy intensity of steelmaking sites of the Company		The energy intensity per tonne of crude steel for all steelmaking entities of the Company is provided in the ESG factsheet of Tata Steel's Integrated Report for FY2022-23.	

Note: Reports are on primary energy basis and includes feedstock.

Steel is an energy intense business and Tata Steel has initiated several measures to increase the energy efficiency of its operations. Tata Steel has also set up a Benchmarking Energy Efficiency IMPACT Centre under its Shikhar25 improvement programme, which has enabled Tata Steel's Jamshedpur plant to become the Indian Benchmark on Energy Performance. Key objective of this flagship initiative is to drive energy efficiency campaign across the Company, ensuring rigor, visibility, ownership, and wider involvement on Tata Steel's employees and all stakeholders. Key Focus areas of Tata Steel's Energy Efficiency campaign in India are:

1. Increase in-house power generation by maximising utilisation of by-product gases
2. Reduction in specific water consumption
3. Waste energy/heat recovery
4. Reduction in power, gas & liquid energy consumption through process optimisation using digital twins
5. Renewable/non-conventional power generation
6. Adaptation of new and emerging technologies/best practices and digital initiatives.

Since inception in 2015, Impact Centre has helped in implementation of significant initiatives across the value chain, which has resulted in savings of more than ₹750 crore. Some key initiatives towards energy saving taken by Tata Steel in recent years are listed below:

- a) Blast furnace is a high-pressure operation, and the residual gases contain enough pressure energy to generate power. Tata Steel uses it to produce power through Top Recovery Turbines. The blast furnace residual gases also contain c.25% carbon monoxide, which is used to pre-heat stoves and hot gas generators dedicated to the Pulverised Coal Plant.
- b) The carbon content of gas cleaning plant slurry and dry dust from dust catcher is high, which is being transferred to facilitate the sinter making process, to be used as one of the raw materials for the blast furnace.
- c) Tata Steel has focused on adoption of other best available technologies for waste heat recovery, such as Coke Dry Quenching and the use of by-product gases in power generation.
- d) Energy Recovery Micro Turbines have been installed to reduce the energy loss in the pressure reducing station for the supply of process steam.
- e) Tata Steel has designed and deployed a digital system to analyse and assess the burden distribution in the blast furnace and thereby reducing the carbon rate.

- f) Design and use of new chemicals for use in the blast furnace to process inferior raw materials and the use of 3rd agglomerate in the form of extruded briquettes to increase the energy efficiency of blast furnaces (along with emission reduction).
- g) Tata Steel has also initiated the trial for record high hydrogen gas injection in one of its blast furnaces in India. This is the world's first instance where such a large quantity of hydrogen gas is being continuously injected in a blast furnace and marks an important milestone in the Company's decarbonisation journey.
- h) Installation of Variable Frequency Drives for improvement of energy efficiency in the production process for equipment with high variability.
- i) All conventional lights have been converted into LED lights as energy savings measure across plants.
- j) A comprehensive Energy Management System has been rolled out for the Jamshedpur plant by integrating all sources of energy, leading to unified energy management, performance monitoring and solution modelling for enhancement in energy efficiency.
- k) Maximising recovery of process gases from Steel Melt Shops, Blast Furnaces, and Coke Ovens to maximise in-house power generation and minimising flaring losses.
- l) A self-adaptive predictive model was designed for cooling towers to optimise the speed of running motors (for pumps and fans) and a Proof-of-Concept model has been implemented at the Wire Rod Mill at Jamshedpur. This system has potential to achieve an estimated saving of c.20% towards energy consumption.
- m) In the Netherlands, Tata Steel has institutionalised an ambitious energy-efficient programme that has been running since 1990, and Tata Steel has reduced the consumption of gas and electricity in its production processes by 30% per tonne of steel over the years. In Netherlands, under the Strategic Asset Roadmap+ programme, a new furnace in the hot strip rolling mill, which has a significantly lower energy consumption, will be installed.
- n) Tata Steel in UK commissioned a new 30MWe steam turbine in autumn 2021, which is providing an estimated 13MWe increase in the average amount of electricity generated from the site using process gases, through increased capacity and efficiency. Tata Steel is also currently commissioning an innovative system in the reheating furnaces at the Port Talbot hot rolling mill, which uses lasers to measure the efficiency of fuel combustion, with a view to substantially optimising fuel rates and therefore emissions.
- o) Tata Steel in Thailand has conducted Total Productive Maintenance project to continuously improve, develop and increase efficient energy usage and invested in high efficiency energy projects such as replacing fuel oil usage with natural gas, production process improvement both at the steel plant and the rolling mill and installing solar roof at one of its plants, with further plans to implement solar roof technology at the remaining two Plants.
- p) Tata Steel has implemented several digital solutions to improve energy efficiency and reduce the carbon footprint of its operations. These include advanced process control systems, real-time energy monitors, and energy analytics platforms that provide detailed insights into energy consumption patterns and help identify areas for improvement. Tata Steel is using data analytics to optimise its energy consumption. The Company is using data from processes, equipment and other sources to identify areas where energy consumption can be reduced and using machine learning and optimisation algorithms to optimise energy usage across its operations. This includes:
 1. Monitoring the consumption and minimising the wastage of electrical power
 2. Monitoring & optimising the consumption of fuel (solid, liquid and gaseous),
 3. Monitoring the availability and optimisation of the calorific value of the by-product gases used as fuel
 4. Monitoring the predicted demand and managing the supply of electricity to ensure uninterrupted supply with minimal wastage
 5. Monitoring of all environmental parameters is done via a single platform called Environment Canvas, which help us evaluate the effectiveness of our interventions and prompt necessary preventive/corrective actions.

2. 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:

Yes, Tata Steel has 8 sites/facilities identified as designated consumers under the Performance, Achieve and Trade Scheme of the Government of India. All the sites were able to achieve the targets set under the Performance, Achieve and Trade Scheme.

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

Parameter	Unit of Measurement	Tata Steel India and its Indian subsidiaries		TSN		TSUK		TSTH & TSMC	
		FY2022-23	FY2021-22	FY2022-23	FY2021-22	FY2022-23	FY2021-22	FY2022-23	FY2021-22
Water Withdrawal By Source									
(i) Surface water	Million Kilolitres	64	74	32	32	30	26	2	2
(ii) Groundwater	Million Kilolitres	2	2	15	12	0	0	0	0
(iii) Third party water	Million Kilolitres	18	18	0	0	1	1	0	1
(iv) Seawater / desalinated water used in process	Million Kilolitres	0	0	0	0	0	0	0	0
(v) Others	Million Kilolitres	12	0	25	26	0	0	0	0
Total volume of water withdrawal (i + ii + iii + iv + v)	Million Kilolitres	96	95	72	71	31	27	2	3
Total volume of water consumption	Million Kilolitres	96	95	72	71	31	27	2	3
Water intensity per rupee of turnover	litres per rupee of turnover	0.07	0.07	0.12	0.12	0.10	0.08	0.03	0.04
Seawater used in cooling	Million Kilolitres	-	-	157	161	14	21	0	0
Total volume of water withdrawal	Million Kilolitres	96	95	229	232	45	48	2	3
Water intensity: Total fresh water drawn per tons of crude steel production	The water intensity per tonne of crude steel for all steelmaking entities of the Company is provided in the ESG factsheet of Tata Steel's FY2022-23 Integrated Report.								

Note: Our steelmaking at Ijmuiden and Port Talbot are located near the coast. They leverage their location and use sea water for cooling purpose only and not in process (not contaminated). After a slight increase in temperature, they are pumped back into the sea.

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

Tata Steel is in the process of putting in place a system for achieving zero liquid discharge at all its locations in India. The Company's objective is to attain a state of zero effluent discharge at all its Indian steel production facilities by FY2024-25.

At all of Tata Steel's facilities, proactive measures are being implemented to mitigate the potential contamination of local water sources and to attain a goal of zero effluent discharge. In line with Tata Steel's commitment towards water risk mitigation, Tata Steel has implemented various projects under the zero effluent discharge initiative, leading to a substantial reduction in freshwater consumption (reduced by c. 60% over the past eight years) and discharge (reduced by 76% over past nine years). In addition to these internal efforts, Tata Steel has also undertaken zero liquid discharge projects in the Company's township to convert the municipal sewage into water suitable for industrial use, further enhancing its sustainability efforts.

Many of Tata Steel's downstream entities and those of subsidiaries are already 'zero' water discharge plants and 100% of their wastewater is recycled for various purposes.

5. Please provide details of air emissions (other than GHG emissions) by the entity, in the following format:

Parameter	Unit	FY2022-23	FY2021-22
Stack NOx	Kilotonnes/year	30	32
Stack SOx		51	57
Particulate matter (PM)		11	12
Persistent organic pollutants (POP)	Not material for the steel manufacturing company		
Volatile organic compounds (VOC)			
Hazardous air pollutants (HAP)			
Others – please specify			

Clean air to breathe is a basic human right, and Tata Steel is committed to maintaining the quality of air in its operating areas. Tata Steel strives to reduce the negative impact of its operations on the quality of air through maintenance and upgradation of its Air Pollution Control Equipment. Tata Steel's continuous efforts for reducing stack emission load has resulted in significant reduction in the dust emission intensity across all its operating units in India. To enable effective monitoring and proactive intervention, a live central repository of environmental parameters has been built by integration of a number of subsystems, wherein data on air, water, solid waste, noise and emissions are captured automatically or through workflows. This unified 'Environment Canvas' IT platform provides live dashboards on various indicators and enables unified reporting and digitised workflows. Performance evaluation of various units in terms of indicators like dust emission, carbon emission, water consumption, etc. is highly automated and can be viewed at the granular level.

As a responsible corporate, Tata Steel has conducted a 'Source Apportionment' study of its Jamshedpur Works and the surrounding area in a radius of 20 kilometre, to identify key sources and their contribution to the overall ambient air quality in the region. The output will be used to develop air quality management plans to improve the ambient air quality of Jamshedpur.

Tata Steel has also adopted policies intended to help it become the international benchmark in stack dust emission by 2030 and is currently developing strategies and conducting feasibility studies, as below:

1. Installation of Air Pollution Control Equipment (APCE) for benchmark performance
2. Improvement or debottlenecking of existing APCE
3. Implementation of best available technology for APCE for new facilities.

Tata Steel IJmuiden is deploying the Roadmap+ scheme to minimise the short-term impact of dust, noise, odour and NOx emission in the Netherlands. Some key initiatives taken under the Roadmap+ improvement programme are as follows:

1. A new environmental installation at the Pellet Plant, to reduce NOx emission by more than 80% from the current levels, is scheduled to be completed in 2025. Tata Steel is using a new technology that has not yet been applied on this scale elsewhere in the industry. Tata Steel is also constructing a dedusting facility at the Pellet Plant with a planned completion in 2023, which will result in reduction of emissions by 70%.

2. In April 2022, the Company commissioned several new slag pits with a mobile covering to reduce dust, which is expected to reduce dust emissions by approximately 80%. Tata Steel is also building windbreaker screen of around 18 metres height and around a kilometre length around the raw material storage facilities, thereby reducing wind speeds and the associated dust dispersal.
3. Tata Steel has also installed new soundproofing measures on trains and conveyor belts.

Tata Steel’s Thailand operations has a Fume Plant to treat high temperature and low humidity dust from the production process for filtration. The Company has also improved the roof on the Steel Plant to eliminate leakage and reduce emissions and implemented various other measures such as regular watering at material piling areas, using canvas covers and installing wind nets.

6. Provide details of greenhouse gas emissions (Scope 1 and Scope 2 emissions) & its intensity, in the following format: Boundary & Basis –

Parameter	Unit	FY2022-23	FY2021-22
Total Scope 1 emissions	Million tonnes CO ₂ equivalent	75.5	75.7
Total Scope 2 emissions		5.2	5
Total Scope 1 and Scope 2 emissions per rupee of turnover	Metric tonnes of CO ₂ equivalent/rupee turnover	0.000033	0.000033
Total Scope 1 and Scope 2 emission intensity	-	The CO ₂ intensity per tonne of crude steel for all steelmaking entities of the Company is provided in the ESG factsheet of Tata Steel’s FY2022-23 Integrated Report.	

7. **Does the entity have any project related to reducing Green House Gas emission? If Yes, then provide details:**
 Tata Steel has published a Climate Change Report aligned with the recommendations of the Taskforce on Climate Related Financial Disclosures, with detailed disclosures on Strategy, Governance, Risk Management and Metrics and Targets for the Tata Steel Group. The report also provides details of existing initiatives of the Company to reduce Green House Gas emission. The Climate Change Report is part of Tata Steel’s Integrated Report for FY2022-23.

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

Parameter	FY2022-23	FY2021-22
Total Waste generated (in metric tonnes)		
Plastic waste (A)	19,398 ¹	9,662
E-waste (B)	765	894
Bio-medical waste (C)	180	253
Construction and demolition waste (D)	1,95,903	2,45,131
Battery waste (E)	435	153
Radioactive waste (F) ²	-	0
Internal Scrap (G)	18,65,638	19,28,914
Other Hazardous waste (H)	12,00,163	11,17,077
Other Non-hazardous waste generated (I).	1,88,09,748	1,69,95,967
Total (A+B + C + D + E + F + G + H + I)	2,20,92,230	2,02,98,051
For each category of waste generated, total waste recovered through recycling, re-using or other recovery operations (in metric tonnes)		
Category of waste		
(i) Recycled	1,04,35,986	1,12,23,849
(ii) Re-used	85,34,853	69,64,834
(iii) Other recovery operations	12,27,668	17,71,308
Total	2,01,51,036	1,99,59,991
For each category of waste generated, total waste disposed by nature of disposal method (in metric tonnes)		
Category of waste		
(i) Incineration	11,682	20,852
(ii) Landfilling	78,107	48,070
(iii) Other disposal operations	1,156	2,415
Total	90,945	71,337

1. Awareness program for source segregation by its customers and increased monitoring of depot wise dry waste collection by TSUISL in the town of Jamshedpur has lead to an improvement Plastic Waste collection efficiency.

2. Tata Steel has trace amounts of radioactive active waste on account of disposal of some equipment and such disposal is undertaken as per regulations and with all due precaution.

Note: Dismantling of few Coke Ovens at our Jamshedpur operations has led to an increase in few categories of waste.

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

Tata Steel recognises the impact of greenhouse gases (GHG) on global warming and the overall contribution of the steel industry towards global GHG emission due to the use of coal in steel production. Tata Steel has therefore committed to be Net Zero emission by 2045. This strategy includes producing steel through recycling of scrap, the use of hydrogen to produce steel using the Direct Reduced Iron Route and pilots of new technologies such as the carbon capture and utilisation, the use of hydrogen in blast furnaces and the HIsarna technology. Additional details of Tata Steel's transition plans to low carbon steelmaking are provided in the Company's Climate Change Report, which is a part of Tata Steel's Integrated Report for FY2022-23.

Tata Steel also believes in the 'Zero Waste' philosophy through the use of the 3R (Reduce, Reuse & Recycle) principles of circular economy. Tata Steel has collaborated with suppliers and taken up several projects for refurbishment of equipment under use, thereby improving their life and preventing unnecessary waste. In a first-of-its-kind initiative in India, Tata Steel successfully recycled 12,000 tonnes of used refractories, contributing towards its sustainability goals. Through the refurbishment of critical imported spares in India, the Company has been able to reduce 200 metric tonnes of CO₂ equivalent in FY2022-23. Tata Steel plans to continue this effort in FY2023-24 with a target of 25% further reduction in CO₂ emissions through similar initiatives. Tata Steel also initiated trial runs with its suppliers to switch from using high speed diesel to alternate fuels, such as Liquefied Natural Gas, to decarbonise its mining operations.

In order to minimise the waste produced in the steelmaking process, Tata Steel has created a dedicated profit centre for waste management, called the Industrial By-Product Management Division (IBMD), to ensure efficient By-Product management by adopting advanced practices of steel waste processing. Ironmaking and steelmaking slags make up the maximum share of By-Products generated in the steel industry. Other By-Products include dust, sludge, mill scales and waste refractories etc. These By-Products are processed to maximise their value, so that they can be reused in multiple internal and external applications as hereunder:

1. External applications:

- a) Blast furnace slag is reused in cement manufacturing as a replacement for clinker.
- b) Coal Tar is used in Coal Tar Pitch and Carbon Black.
- c) The non-metallic component of steelmaking slag is used in civil works, road construction and in fly ash bricks.

2. Internal applications:

- a) Flue dust, lime dust, steelmaking sludge, kiln dust, mill scale and sludge, iron-bearing muck, gas cleaning plant sludge, Steel Slag fines etc. are used for sinter-making, which is an input material for the Company.
- b) Recovered metallics is reused in secondary steelmaking processes of the Company.

Tata Steel has also invested in state of art technologies for processing of By-Products to maximise the value creation. A few key facilities and initiatives are as follows:

- 1. **Increased Scrap Usage** – A major sustainability initiative of the Company is to reduce CO₂ emission intensity by maximising the scrap charge into steel melting shops and electric arc furnaces. Whilst the internal generation of scrap is maximised, Tata Steel also used over 2.6 million tonnes of purchased scrap from external systems across the Tata Steel Group, which are processed to produce steel. In continuation of this strategy, Tata Steel has entered into a long-term contract with third party vendor for setting up a new 0.5 MnTPA Steel Recycling Plant at Rohtak, Haryana in August 2021 on ‘Build, Own, Operate’ (BOO) basis. Tata Steel has also launched two new brands - Tata FerroBaled® and Tata FerroShred® for the baled & shredded ferrous scrap produced in its new facility.
- 2. **Metal Recovery & Steam Ageing Plant** – The slag generated as a by-product during steelmaking process is received by this plant, where it undergoes crushing & screening followed by magnetic separation. During the latter stage, metallic or iron content is recovered and is used as one of the raw materials in steelmaking process, thus partly saving precious natural resources. Non-metallic slag aggregates are further processed by weathering at the steam ageing facility. The weathered slag aggregates are used in civil and road construction works, while the fines are used as cement material.
- 3. **New By-product value-creation Centre** – A state-of-art facility equipped with baling machine, specialised cut-to-length line and mechanised processing line for Flat Product arisings (or extra to order steel) has been set-up to deliver customised offering to external customers. The facility also houses an Innovation Lab to develop light concrete products using in-house aggregates such as Tata Aggreto (Processed Steel Slag) & Tata Nirman. Tata Steel has developed Green Pavers and Interlocking Blocks with slag-based aggregates. Through innovative initiatives aimed at supporting the farming sector, a multi-nutrient soil enhancer Dhurvi Gold, has also been developed, which serves to provide low-cost soil conditioning solutions.
- 4. **Slag Processing & Grinding Plant** – In this plant, the slag generated during ironmaking process in Blast Furnaces (Blast Furnace slag) is divided into Air-cooled Slag and Granulated Slag. Granulated Slag is sold to the cement manufacturers whereas Air-cooled Slag is processed and utilised in road construction. With the aim of creating additional value from blast furnace slag, a new GreenPro certified product – Ground Granulated Blast Furnace Slag (GGBS) was introduced, which can be used as partial replacement of Ordinary Portland Cement (OPC) in the concrete production.

Whilst most of the process solid waste is utilised within the manufacturing process, Tata Steel also has a tie up with external organisations to dispose hazardous waste which is not processed or recycled into secure landfills.

10. 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:

Wherever required, Environment and Forest Clearances have been taken from the Government of India, and Tata Steel is in compliance with all such Environment and Forest Clearances.

Tata Steel's steelmaking site at Ijmuiden, Netherlands is situated between ecologically sensitive areas (Natura 2000 areas): On the south side (of the North Sea Canal) is the 'kennemer-land south' area, and on the north-northwest side is the 'Noordhollands Duinreservaat' area. Of the latter, about 10 hectare is owned by Tata Steel. Tata Steel has currently undertaken no activities on this area, nor does it plan to undertake any activity in future. In fact, the area is going to be managed by a third party, which also manages the rest of the North Holland dune reserves.

Tata Steel in UK also has operations close to a range of designated habitats. It is a requirement of environmental permits to assess any impacts on adjacent habitats and such assessed impacts are very small. Any protections linked to the protected habitats are incorporated into the permit and Tata Steel is in compliance with such requirements.

A list of Environment Clearances and Forest Clearances for Tata Steel in India is provided below:

Sl. No.	Locations	Type of operations	Whether the conditions of environmental approval/ clearance are being complied with.
1	Joda East	Mining	Yes
2	Katamati	Mining	Yes
3	Khondbond	Mining	Yes
4	Manmora	Mining	Yes
5	Noamundi	Mining	Yes
6	Jamadoba	Mining	Yes
7	Digwadih	Mining	Yes
8	Jharia (6&7 Pits)	Mining	Yes
9	Kalimela	Mining	Yes
10	Bhelatand Colliery and Washery	Mining and Processing	Yes
11	West Bokaro	Mining	Yes
12	Bamebari	Mining	Yes
13	Joda West	Mining	Yes
14	Tiringpahar	Mining	Yes
15	Vijaya II	Mining	Yes
16	Sukinda	Mining	Yes
17	Kamarda	Mining	Yes
18	Saruabil	Mining	Yes
19	Kalamang West	Mining	Yes
20	Ferroalloy Plant, Gopalpur	Processing	Yes
21	Prem Singhdih Sand Mining Lease (Jharia)	Mining	Yes
22	Lagla Mahal Sand Mining Lease (Jharia)	Mining	Yes
23	Mahal Saharjuri Sand Mining lease (Jharia)	Mining	Yes
24	Jamadoba Coal Washery (Jharia)	Processing	Yes

Note: Tata Steel also operates its Management Development Centre besides the Dimna Lake in Jamshedpur since 1954

11. Details of environmental impact assessments of projects undertaken by the entity based on applicable laws, in the current financial year:

Name and brief details of project	EIA Notification No.	Date	Whether conducted by independent external agency (Yes / No)	Results communicated in public domain (Yes / No)	Relevant Web link
CRC (West), Plot no. S-76, Maharashtra: Regularization of Environment clearance for existing production capacity- 300000 TPA and Proposed expansion to 1270000 TPA	2006	Terms of References granted on 27/10/21	Yes	Yes	
Wire Division, Tarapur (TWP1 & TWP2), Plot no. A6, Maharashtra- Regularization of Environment clearance for existing production facilities for Steel Wires of capacity 175000 TPA	2006	Terms of References granted on 27/10/21	Yes	Yes	
Wire Division, Tarapur (SSP & WRM), Plot no. F8, Maharashtra- Regularization of existing production facilities for Steel Wire Rods – 336000 TPA, Steel Wire & Wire Products – 66000 TPA (Total Production Capacity - 402000 TPA)	2006	Terms of References granted on 27/10/21	Yes	Yes	
Khopoli Cold Rolling Unit, Maharashtra- Regularization of Environment clearance for 0.78 MTPA	2006	Terms of References granted on 23/03/22	Yes	Yes	
Sahibabad CRM Unit, (U.P)- Regularization of existing production facilities for 0.91 MTPA Cold rolled strips & sheets (1250 MT/Day) and Galvanized plain/corrugated sheets (1250 MT/Day)	2006	Terms of References granted on 05/08/2022.	Yes	Yes	
Ludhiana EAF project	2006	Terms of References granted on 10/02/2023	Yes	Yes	
Wires Division, Pithampur, Madhya Pradesh	2006	-	Yes	Yes	
Damodarpur palkri – (EIA study conducted during March 23 - May 23)	2006	-	Yes	Yes	http://environmentclearance.nic.in/
West Bokaro Coal washery -10 MTPA – (EIA study conducted during March'22 to May'22)	2006	Ongoing	Yes	Yes	
Gandhalpadha Iron Ore mine-10 MnTPA	2006	Ongoing	Yes	Yes	
Integrated Municipal Solid Waste Management Facility at Village Begunadih, Tehsil Potka, District East Singhbhum by M/s Tata Steel Limited.	2006	Environmental Clearance granted on 13/02/2023			
Saruabil Chromite Block (ML Area: 246.858 HA) At Village: Saruabil, Kamarda & Tailangi Tehsil - Sukinda, District - Jajpur, State – Odisha for Production of 1.0 MnTPA Chromite Ore (ROM) with Maximum Excavation of 6.48 Million Cum Per Annum Through Opencast Mining Method	2006	Environmental Clearance granted on 06/06/2023	Yes	Yes	
Kamarda Chromite Block (Lease Area: 107.240 Ha) At Village: Talangi, Kamarda & Balipada Tehsil - Sukinda, District - Jajpur, State – Odisha for Production of 0.3 MnTPA Chromite Ore (ROM) with Maximum Excavation of 2.50 Million Cum Per Annum Through Opencast Mining Method	2006	Terms of References Granted 05/02/2021	Yes	Yes	
Tata Steel Long Products (Gamharia)- Environmental clearance for modernsition and expansion of facilities of existing 1.2 MnTPA integrated steel plant of TSLP limited at Adityapur Industrial Area, Gamharia, Saraikela-Kharsawan, Jharkhand	2006	Terms of References Granted 09/08/2022	Yes	Yes	

Name and brief details of project	EIA Notification No.	Date	Whether conducted by independent external agency (Yes / No)	Results communicated in public domain (Yes / No)	Relevant Web link
Installation of 0.5 MTPA combi Mill (Special Bar Quality and Wire Rod Mill) with re-heating furnace and finishing line of M/s Indian Steel & Wire Products Limited at Ward no: 19, Jamshedpur notified area committee of Jamshedpur, District: East Singhbhum, Jharkhand.	2006	Terms of References Granted 30/01/2023	Yes	Yes	
Expansion of existing Rebars & Wire Rods at Wire Rod Mill from capacity 2,67,000 TPA to 4,75,000 TPA & HC & MS GI Wires at Wire Mill from 62,050 TPA to 2,37,600 TPA and 100 TPA Graphene Powder production facility M/s Indian Steel & Wire Products Limited at Jamshedpur notified area committee of Jamshedpur, District: East Singhbhum, Jharkhand.	2006	Terms of References Granted 12/04/2023	Yes	Yes	http://environmentclearance.nic.in/
Operation of current plant of capacity 4,15,000 TPA and proposed phase-wide expansion to 10,15,000 TPA capacity of Electrolytic Tinplate and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets of M/s The Tinplate Company of India Limited at Gomuri Works, Jamshedpur, East Singhbhum, Jharkhand.	2006	Environmental Clearance granted on 30/01/2023	Yes	Yes	

12. 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 thereunder (Y/N). If not, provide details of all such non-compliances, in the following format:

Yes, the Company is compliant with the applicable environmental law/ regulations/ guidelines in India.

Leadership Indicators

1. Provide break-up of the total energy consumed (in Joule) from renewable and non-renewable sources, in the following format:

Parameter (in Peta Joules)	FY2022-23	FY2021-22
From renewable sources		
Total electricity consumption (A)	1	2
Total fuel consumption (B)	-	-
Energy consumption through other sources (C)	0	-
Total energy consumed from renewable sources (A+B+C)	1	2
From non-renewable sources		
Total electricity consumption (D)	66	60
Total fuel consumption (E)	762	771
Energy consumption through other sources (F)	28	26
Total energy consumed from non-renewable sources (D+E+F)	856	857

i. Reported electrical energy (A) is based on primary energy equivalent of net imported Electricity.

ii. For fuel (B) – coal and coke, Petro fuel, Natural Gases etc. have been considered. Reported energy includes Feedstock also.

iii. Under energy from other sources (C) – Pellet, Oxygen, Nitrogen have been considered.

In order to reduce Greenhouse Gas emissions, Tata Steel had engaged an external expert in assessing the opportunities to increase the use of renewable energy. Tata Steel is also implementing solar plants across locations and also entering into renewable power purchase agreements. Some key initiatives of Tata Steel to increase the share of renewable power are as follows:

1. To reduce its dependence on fossil fuel, Tata Steel is entering into an agreement with Tata Power Renewable Energy Limited to set up c.950 MW solar & wind hybrid renewable power capacity under captive arrangement. This will cater to 379 MW of Tata Steel and its subsidiaries power requirements with 70% load factor and enable reduction of over 2 million tonnes of CO₂ per annum.
2. Tata Steel has already signed a Power Purchase Agreement with Tata Power for purchasing 41 MW of solar power, which is under implementation and has other small renewable power projects, including rooftop solar projects, across India, Europe and Thailand.
3. Tata Steel is also engaging with renewable energy providers to explore opportunities for renewable electricity at our UK and Netherlands sites.
4. Tata Steel is a partner in Swansea University's SPECIFIC Innovation and Knowledge Centre, which has a full-scale demonstration programme to prove innovative technologies that generate, store and release solar energy through the use of solar energy roof panels which are greener, lighter, cheaper and flexible, and which can be printed on the steel used in buildings.

2. Provide the following details related to water discharged:

Parameter	Tata Steel India including its Indian subsidiaries		TSN		TSUK		TSTH & TSMC	
	FY2022-23	FY2021-22	FY2022-23	FY2021-22	FY2022-23	FY2021-22	FY2022-23	FY2021-22
Water discharge by destination and level of treatment (in million kilolitres)								
(i) To Surface water	12	11	0	0	0	0	0	0
- No treatment	0	0	0	0	0	0	0	0
- With treatment	12	11	0	0	0	0	0	0
(ii) To Groundwater	0	0	0	0	0	0	0	0
- No treatment	0	0	0	0	0	0	0	0
- With treatment	0	0	0	0	0	0	0	0
(iii) To Seawater	0	0	213	212	30	36	0	0
- No treatment	0	0	204	202	13	21	0	0
- With treatment	0	0	9	10	17	14	0	0
(iv) Sent to third-parties	0	0	0	0	0	0	0	0
- No treatment	0	0	0	0	0	0	0	0
- With treatment	0	0	0	0	0	0	0	0
(v) Others	0	0	0	0	0	0	0	0
Total water discharged (million kilolitres)	12	11	213	212	30	36	0	0

Note: Our steelmaking at Ijmuiden and Port Talbot are located near the coast. They leverage their location and use sea water for cooling purpose only and not in process (not contaminated). After a slight increase in temperature, they are pumped back to the sea.

3. Water withdrawal, consumption and discharge in areas of water stress:

Name of the area: Tata Steel's facilities at Jamshedpur, Kalinganagar, Meramandali, West Bokaro, Jharia, Noamundi, Katamati, Joda, Gamharia, Thailand and Canada

Nature of operations: Steelmaking: Jamshedpur, Kalinganagar, Meramandali and Thailand
Mining: West Bokaro, Jharia, Noamundi, Katamati, Joda, Gamharia and Canada

Parameter	FY2022-23	FY2021-22
Water withdrawal by source (in million kilolitres)		
(i) Surface water	60	81
(ii) Groundwater	0	0
(iii) Third party water	14	4
(iv) Seawater / desalinated water	-	-
(v) Others (Treated Sewage)	12	-
Total volume of water withdrawal (in million kiloliters) i+ii+iii	86	85
Total volume of water consumption (in million kiloliters) i+ii+iii+iv+v	86	85
Water intensity per rupee of turnover (litres per rupee of turnover)	0.04	0.04
Water discharge by destination and level of treatment (in million kilolitres)		
(i) Into Surface water	9	10
- No treatment	-	-
- With treatment	9	10
(ii) Into Groundwater	0	0
- No treatment	-	-
- With treatment	0	0
(iii) Into Seawater	-	-
(iv) Sent to third-parties	-	-
(v) Others	-	-
Total water discharged (in million kilolitres)	9	10

4. Please provide details of total Scope 3 emissions (As per Greenhouse Gas Protocol) & its intensity, in the following format:

Parameter	Unit	FY2022-23	FY2021-22
Total Scope 3 emissions	Million tonnes of CO ₂ equivalent	13.1	13.5
Total Scope 3 emissions per rupee of turnover	Metric tonnes of CO ₂ equivalent / rupee turnover	0.0000054	0.0000055

Tata Steel is not just focused on reduction of emission in its own operations but is equally focussed on reduction of its Supply Chain Scope 3 Emission reductions. Tata Steel is one of the few companies to measure end to end Scope 3 emissions for all modes of transportation, giving it the same focus as Scope 1 and Scope 2 emissions. These measurements systems are being strengthened through engagement with several partners, for example, IHS Markit in Shipping (FY2023-24 ongoing) and Optimum Voyage for route optimisation (in Europe). Tata Steel has also become the first steel producing signatory and 24th organisation to join the Sea Cargo Charter to measure and reduce environmental impacts of global seaborne cargo.

Tata Steel has taken several initiatives to reduce the Scope 3 emissions. Some Scope 3 emission reduction initiative of Tata Steel are listed below:

1. Alternate fuel-based fleet has been deployed in road and shipping transportation. In India, Tata Steel has already deployed about 69 Compressed Natural Gas/ Liquefied Natural Gas/ Electricity based vehicles in short lead road circuits and this will be almost doubled in FY2023-24. A total of 7 import shipments have been executed in FY2022-23 using bio-fuels/Natural Gas and is being increased to 28 shipments in FY2023-24 (~10% of shipments).
2. Volume transportation through greener modes such as Coastal & Waterways has been ramped up to replace road and rail movement in India.
3. Tata Steel's Critical Vendor Partners, Steel Processing Centres and Stockyards are all assessed annually on the Responsible Supply Chain Policy framework and continuous improvements are undertaken based on the findings. As an example, all Steel Processing Centres in India are transitioning from Furnace Oil to Low Sulphur Heavy Stock Oil. Solar Panel coverage is also being enhanced across all steel processing centres, stockyards and downstream units.
4. Tata Steel has also launched the Zero Carbon Logistics programme for its European operations, which consists of several dozen logistics sustainability projects regarding improvements in the logistics network, fleet efficiency and energy efficiency. The target is to achieve 30% reduction by 2030. Some key initiatives undertaken under the Zero Carbon Logistics programme are as below:
 - a) Tata Steel Nederland is the first steel company in the world to use the Global Logistics Emissions Council Framework for emissions reporting, which makes different logistics modalities comparable and enables identification and improvement of emission hotspots.
 - b) Use of Optimum Voyage for information and optimisation of the most fuel-efficient route for shipping logistics, which has resulted in savings of approximately 5% of CO₂ emissions.
 - c) Tata Steel Nederland has also focussed on replacing road transport with the more carbon efficient rail transport, with reduction in road transport of more than 5,000 trucks per year.
 - d) Tata Steel Nederland is working with its value chain partners on the use of alternative and cleaner fuels and is a member of the Sustainable Freight Buyers Alliance.
5. **With respect to the ecologically sensitive areas reported at Question 10 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:**

Tata Steel is keenly aware of the importance of having a net positive impact on nature and biodiversity in the areas of its operations. Tata Steel accordingly launched its Biodiversity Policy in 2016, aimed at integrating biodiversity into its business ecosystem for enabling a greener future. The Policy is a public commitment to conserve, enhance and restore biodiversity in the Company's present and prospective areas of operation and across supply chain, including the upstream raw material mining sites, the manufacturing plant sites and downstream processing units. Tata Steel is committed to avoiding operational activities near sites containing globally or nationally important biodiversity. The Policy aspires to achieve no Net Loss of Biodiversity.

Tata Steel is constantly striving to significantly reduce its impact on ecosystem and biodiversity through its active habitat restoration initiatives and avoidance of property acquisition which could result in loss of critical habitat. Where deforestation is unavoidable, Tata Steel is committed to offsetting the forest loss with compensatory afforestation, leading to no net deforestation with the ultimate aim of achieving no Net Loss. Tata Steel also conducts periodic assessments of its sites to determine the exposure to critical biodiversity.

The Biodiversity Policy is operationalised on the ground through actionable Biodiversity Management Plans (BMPs). The BMPs are designed on the foundation of mitigation hierarchy (avoid, minimise, restore & offset) tool after a baseline assessment. It includes biodiversity studies, ground truthing studies, secondary research, stakeholder interactions and understanding the risks from the Company's operations and community behaviour to eco-system service. The BMPs thus prepared are integrated with the requirements of progressive mine closure plans as well as environment clearance conditions, while including requirements of global standards on biodiversity conservation and mine restoration.

6. 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 outcome of such initiatives, as per the following format:

Sl. No.	Initiative undertaken	Details of the initiative	Outcome of the initiative
1	Reduction in coke moisture by super absorbent polymer spray	<p>Coke is a key raw material for hot metal production through the blast furnace route and lowering of coke cost is a major focus in the operation of blast furnace, as coke contributes to 64% of the cost of hot metal. Therefore, coke quality parameters have a significant impact, with coke moisture being one of the most essential quality parameter. It has an adverse impact on productivity, fuel rate, and carbon dioxide emissions.</p> <p>Super absorbent polymers have high moisture absorption and retention capacity. Therefore, reduction in coke moisture by super absorbent polymer spray methodology has been developed at a lab scale and implemented at several locations. Use of super absorbent polymers show a reduction in coke moisture of 2.6%-3.0% from a level of 6.5%-7.0%.</p>	Use of super absorbent polymers resulted in reduction of coke rate by 15-20 kg and CO ₂ emissions by 40-45 kg/tonne of hot metal production.
2	Metal Chalcogenide generators to generate green electricity	<p>Ammoniacal liquor is produced from the ammonia stripper unit at 100 m³/hr, with a temperature of 105 to 110°C. This needs to be cooled to 40°C before sending to the biological treatment unit. In this process a significant amount of cooling water is required.</p> <p>To utilise this unused energy, a thermoelectric generator has been installed at the ammoniacal liquor lines at one of Tata Steel's By-product Plants. The thermoelectric generators produce electricity using the Seebeck effect, where an electric potential is generated due to a thermal gradient across 2 surfaces. This is achieved by stacking Thermoelectric modules in the generator in such a way that the surfaces come in contact with hot liquor and cold water to create a temperature difference, which will ultimately generate electric power.</p>	The present system produces 1 kW/hr of green electricity and the generated power is used to light the area around the ammonia stripper unit.
3	Increasing hydrocyclone yield in our wet iron ore processing plant by improving the dewatering screen efficiency	At one of Tata Steel's iron ore processing wet plants, hydrocyclone underflow product is dewatered through high frequency dewatering screen having conventional 2D panels. The Research & Development team is working towards introducing 3D screen panels in place of 2D panels based on encouraging results as obtained from discrete element method simulation and demo scale trials (25 t/h) at the plant site.	Increasing hydrocyclone yield for processing of iron ore.
4	Throughput improvement in one of our washeries by improving concentrate thickener operation by new design feed well	Tata Steel has taken up a project to improve fine clean coal yield and throughput by improving the fine clean coal thickener performance of a coal washery. Our studies suggested that an improved feeding arrangement through new feed well design will enhance the reagent-particle and particle-particle interactions and lesser air entrainment.	Improved resource efficiency through higher fine clean coal yield.
5	Innovative pulse iron ore sintering	Tata Steel has developed an innovative technology in iron ore sintering called "Pulse Sintering". Unlike conventional sintering process where the suction in the sinter bed is continuously downdraft, in pulse sintering, pulsating action in the suction wind boxes creates back pressure and thereby broadens the flame front and also increase sinter heating index by improving heat transfer rate of flowing gas. This concept was successfully implemented in the sinter plant.	Improvement of sinter yield by 1.8% by decreasing the sinter return fines
6	Enhancement of iron ore grinding process in ball mills through surface charge modifiers	To improve the grinding of iron ore during ball milling, a polymer-based surface charge modifier has been established and implemented in the pellet plant. Neutralised surface charges on the ore particles during grinding improves particle breakage, leading to an increase in ball mill throughput and a drop in rejects.	An improvement of 2.7% in ball mill throughput was observed during plant trials at one of our pellet plants.

Sl. No.	Initiative undertaken	Details of the initiative	Outcome of the initiative
7	Sacrificial anode at Tata Steel Limited	A High phosphorus pig iron (HPPi) based sacrificial anode has been developed, which is useful for enhancing the life of metallic structures inside sea, soil and concrete. The pilot trial has been successfully done and product is ready to be explored on a commercial scale. The manufacturing of HPPi uses steel slag and Tata Steel hold multiple patents in this domain.	Enhanced life of metallic structures inside sea, soil and concrete
8	Antimicrobial coating at Tata Steel Limited	Polymer coated steel sheet is a primary product for white good sector, appliances and construction application. Our objective was to incorporate antimicrobial functionality in polymer coating product that can sustain throughout the product life. The antiviral paints were developed initially at a lab scale which complies to the JIS Z 2801 and ISO21702 standards. The developed paint is not changing any existing product properties and the antiviral paint was used on an actual product in trial, which confirmed the feasibility with respect to the plant.	The antiviral product, when in use, will reduce the secondary transmission of virus & bacteria and therefore will be healthy to use for in house applications in houses, community centres, hospitals, schools, railway stations and airports.
9	Mesh seam welding at Tata Steel Limited	A mathematical model to map the weldability lobe for resistance mesh seam welding of high strength and high thickness grade was developed at Tata Steel. Time-temperature profile during mesh seam welding provides online assessment of weld quality and prevents coil breakage in line.	Improved weld quality and lower coil breakage.
10	Development of hot rolled complex steel with minimum Ultimate tensile strength of 780 MPa for Tata Steel Limited	The project aims at developing a hot rolled complex phase steel, consisting of different phases like bainite, ferrite and martensite. This steel grade is suitable for manufacturing various automotive components. The advantage of this grade is an excellent combination of strength, toughness, and flanging properties. The in-house development of this advanced high strength steel grade comprises various steps, such as alloy design, laboratory scale heat making, thermomechanical simulation and pilot scale hot rolling in laboratory. On the development of satisfactory mechanical properties and microstructure in pilot scale, a plant trial has also been conducted recently, which led to the plant scale development of a multi-phase high strength steel.	Improved resource efficiency through steel with higher strength, toughness, and flanging properties.
11	High-Turbulence Roll Cooling in Hot Strip Mill	The conventional high-pressure (~16 bar) work roll spray cooling has been replaced by a low-pressure (~3 bar) High-Turbulence Roll Cooling (HTRC). HTRC consists of a cooling shield, that has a similar curvature to the work roll and is positioned close to the roll surface. The cooling water in the narrow gap between the roll surface and the HTRC unit creates a high-turbulent flow regime with a high heat transfer coefficient. The advantage of using HTRC is that 2 of the 3 high-pressure pumps which are needed for the high-pressure conventional spray cooling, are now redundant.	The average, monthly electricity consumption of the pumps dropped from ~2,600 MWh to ~900 MWh.
12	Increased slab temperature at the Direct Sheet Plant	At the Direct Sheet Plant, thin slabs are cooled using spray water cooling. The slabs are fed into a tunnel furnace and reheated. Large amounts of natural gas are needed for reheating to the target temperature of 1,140°C. New spray water cooling patterns were introduced, reducing the cooling intensity in small steps to increase the slab temperature at the tunnel furnace entrance, so that less reheating is needed.	Successful trials in FY2022-23 have already saved 17,000 m ³ of natural gas. Potential savings of up to 1.5 million m ³ per annum are foreseen when introducing further reduction of spray cooling.
13	Commercial start of Protact – Trivalent chromium-coating technology (TCCT)	Within the packaging sector, we have had two major developments over the past year: a) Protact has been developed as an alternative or lacquered products in the packaging market. Protact has Electrolytic Chromium Coated Steel (ECCS or tinfree steel) as a substrate b) TCCT has been developed as a Chromium-6 (Cr6) free alternative for ECCS/ tinfree steel. The combination of Protact on TCCT has been further developed and is now approved for use with several customers, replacing the existing Protact -ECCS.	The combination of Protact on TCCT gives a direct cost benefit and at the same time reduces the use of Cr6 chemistry in our plants.
14	Launch of Zeremis® Carbon Lite and Optemis™ Carbon Lite at Tata Steel Nederland and Tata Steel UK, respectively.	In Europe, we have also already launched low carbon steel products. Zeremis® Carbon Lite, is a steel with an allocated carbon footprint reduction of up to 100%. This will enable our customers to make greener end products.	We have entered into several agreements with customers to supply low carbon 'Zeremis®' green steel at a significant premium.

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

Yes, Tata Steel has “Onsite Emergency plan & Disaster Control” measure in place, focusing on business continuity to address disruptive events like explosions, fire, cyber-attacks, acts of terror, etc. The practices have been developed through benchmarking against best practices at other organisations with mature Business Continuity Management practices and reference to ISO22301 standard on Business Continuity Management System. Under the plan, there are defined responsibilities for each & every group and individuals involved in handling emergencies. Tata Steel has also established ‘Tactical Centres’ for business continuity management during emergency situations.

Additional information on the Company’s IT Business Continuity and disaster management plans:

Cyber Security

Cyber Security is one of the key foundational components of Tata Steel’s Digital Transformation strategy. It is imperative to ensure that the system we run and the data we generate or collect have to be safe and secure from continuously evolving cyber threats. Hence, Tata Steel Cyber security is designed in a well thought manner, based on established best practices. Our cyber security policies and practices take all stake holders into consideration, including employees, customers, suppliers, regulators and other associated third parties. Some of the key aspects of Tata Steel’s cyber security are described in the subsequent sections.

1. Tata Steel systems are hosted in a combination of Multi-Cloud and On-Premise architecture using the best practice of three level perimeter, as per ISA 95 Standard Architecture. First level perimeter is between Public network (Internet) and Business Network (Level 3), the second perimeter is between Business Network (Level 3) and Process Network (Level 2), and the third perimeter is between Process network (Level 2) and Programmable Logic Controllers and Instruments used in manufacturing (Level 1). All these perimeters are secured using Next Generation Firewalls with hardened rules and policies. Zero Trust Principles are embedded when dealing with public systems for any kind of data exchange. Systems are hardened as per best practices of configuration hardening. This perimeter strategy and system hardening, combined with stringent network access and authorisation control, ensures that the systems and network remains safe and secure for data exchange.
2. Systems are protected using multiple technologies to create defence-in-depth layers. Technologies like Active Directory, Anti-Virus, Mail Advanced Threat Protection, EDR/XDR (Enhanced Detection/Extended Detection Report), Virtual Patching, Mobile Device Management and Secure Work from Home, Zero Trust Internet Gateway, Next Gen Firewall, and DDoS (Distributed Denial of Service) protection work in unison to create these protection layers.
3. Data inside systems are protected using multiple technologies and best practices combined with stringent access and authorisation in applications and databases. Technologies like Storage Replication, Storage and Backup Encryption, Containerisation, Privilege Access Management, Data Leak Prevention, Legal Hold Archiving and Retention come into picture for data protection. Privacy Controls are implemented as per need of regulation like EU’s General Data Protection Regulation and Indian Data Privacy Regulation.
4. The systems and data protections are continuously monitored for any suspicious events on 24x7 basis by Tata Steel Security Operation Centre (SOC). SOC comprises of state-of-the-art technologies and practices along with services from well-established partners in the field and use multiple technologies like Security Incident & Event Monitoring (SIEM), Syslog, Cloud Access Security Broker (CASB), Attack Surface Monitoring, Vulnerability Management System (VMS) etc. In addition, Periodic Cyber Drills are conducted to respond in calibrated manner to any cyber incident ensuring business continuity.
5. To ensure right governance, a Cyber Organisation has been designed with proper segregation of duties incorporating the concept of makers and checkers. There is segregation between IT organisation and Chief Information Security Officer Organisation. Any systems moving into production goes through cyber security clearance. In addition, there is corporate audit organisation, which conducts regular Internal Audits, Standard Audits and Statutory Audits. Ethical hacking is carried out by external organisation engaged by the audit team.

As an integral part of Cyber Security Control, Tata Steel has a business continuity plan for IT systems, network infrastructure and other related assets. All IT systems have their backup and recovery plans as per the agreed business needs. Business Impact Assessment of the IT system on a scale of 1 to 3, considering IT and non-IT factors, is carried out in consultation with the business process owners. These assessments consider the impact on the business in case of non-availability of the IT system, identifies related risks, followed by discussion, planning and execution of remediation measures. Periodic restoration of the back-ups is also carried out for all production systems to check the sanctity of backups.

Tata Steel also has recovery plans prepared for systems with Disaster Scenario Matrix. Roles & responsibilities for each plan, periodic disaster recovery drills, reviews and lessons learnt are documented and implemented.

As part of Digital transformation, Tata Steel enterprise system are hosted on Hybrid Multi cloud environment with no chance of all cloud/systems going out of the grid simultaneously. The Company's Work from Home solution is such that users get a feel of Working from Office just after switching on their laptop and getting connected over the internet. The solution was designed to be scalable irrespective of user count featured, with centralised deployment and monitoring with almost zero user intervention and Anytime Anywhere secure access to applications by auto connecting to nearest Cloud Data Centre globally, with state-of-the-art security irrespective of boundaries using Zero Trust principle.

Business Resilience

Tata Steel uses the Remote Operations and Supply Chain visibility programmes to view, instruct and inform our operations remotely. This has helped us to get remote expertise during the Covid pandemic for major shutdowns and has also created capabilities to access such expertise faster during breakdowns/emergencies. We have also sharpened our Quick Response Team protocols to detect and respond to any safety, security or surveillance issue contributing to our resilience and recovery capabilities

Tata Steel has deployed CFIN – Central Finance project on SAP, which has connected all our subsidiaries to our central S4 Hana system, increasing our capabilities of inter-company reconciliations and closing our books of account faster. This reduces audit touch time and diminishes risks via tighter supervision across the different legal entities globally. Tata Steel is also in the process of deploying Anaplan for integrated planning and forecasting purposes across the Tata Steel Group.

We have further created plug and play Mergers & Acquisitions capabilities via our single instance SAP and surround systems, whose deployment allows us to integrate acquisitions with speed and minimum disruptions. This has been demonstrated twice, during the acquisition and integration of Bhushan Steel and Neelachal Ispat.

Tata Steel has further consolidated and outsourced various transactional activities, ensuring a diminishing cost profile for the same transactions on one hand, while leading to better Service Level management on the other. End to end visibility on 'order to cash' and 'procure to pay' processes with a large and reliable partner has reduced the overall risk in our ability to scale up or down the processes.

Geopolitical developments that have an impact on technology and the implications for the steel industry/Tata Steel, are being monitored by engaging with experts from Geotechnology advisors and technology advisors.

Tata Steel works with world leaders in digital technology to ensure it has cutting edge computing power, connectivity, data quality & accessibility and Artificial Intelligence capabilities available to its employees. Robust governance with partners is set in place, with partners incentivised to collaborate with each other to bring the best products, services, solutions and ultimately the desired outcomes to Tata Steel. It has also contractually protected itself against changes in regulation by working with partners to localise data pro-actively, where required.

8. 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:

There has been no significant adverse impact arising from the value chain of Tata Steel.

Tata Steel has a long-integrated value chain that extends from mining to finished steel products, with an interconnected network of suppliers, mines, ports, manufacturing locations, stockyards, warehouses, processing facilities, channel partners and customers, handling over 100 million tonnes of material in a year. The production, transportation, storage and handling of materials like iron ore, coal, limestone, refractory, aluminium, zinc, ferro alloys etc. have a negative impact on the environment, including greenhouse gas and other emissions. These materials also have adverse impact on the environment during their use in iron and steelmaking.

As a responsible corporate, starting in FY2022-23, Tata Steel has started studying the Environment, Social & Governance risks associated with the above-mentioned commodities extensively, considering their sourcing geographies, understanding the impact of key developments, and identifying likelihood of price volatility/supply chain disruption and their impact on the steel industry. Such an exercise will allow the Company to formulate risk scores for specific or a group of commodities and help in decision-making.

To contribute to the Company's goal of 'Zero Waste' using the 3R (Reduce, Reuse & Recycle) principles of circular economy, Tata Steel has collaborated with suppliers and taken up several projects for refurbishment of equipment under use, thereby improving their life and preventing unnecessary waste. In a first-of-its-kind initiative in India, Tata Steel successfully recycled 12,000 tonnes of used refractories, contributing towards its sustainability goals. Through the refurbishment of critical imported spares in India, the Company has been able to reduce 200 metric tonnes of CO₂ equivalent in FY2022-23. Tata Steel plans to continue this effort in FY2023-24 with a target of 25% further reduction in CO₂ emissions through similar initiatives. Tata Steel also initiated trial runs with its suppliers to switch from using high speed diesel to alternate fuels, such as Liquefied Natural Gas, to decarbonise its mining operations.

In addition to implementing a Responsible Supply Chain Policy, Tata Steel is also collaborating with its suppliers to take up projects for jointly tackling climate change issues. In FY2022-23, the Company initiated partnerships with strategic suppliers to reduce its Scope 3 emissions, to decarbonise its operations, and to explore innovative solutions.

For its downstream supply chain, the Company is exploring third-party logistics, modern state-of-the-art warehouses, use of energy-efficient and newer design eco-friendly ships, coastal shipping to reduce landside tonne miles and use of digital means to simplify the cargo flow of raw materials and other bought-out goods and services. Please refer to the Social and Relationship Capital section of Tata Steel's Integrated Report for FY2022-23 for other specific initiatives on sustainable logistics.

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

Tata Steel's Responsible Supply Chain Policy focusses on the four principles on Environmental, Social, and Governance (ESG) parameters - Fair Business Practices, Health and Safety, Human Rights and Environmental Management. Additional information on Tata Steel's approach on the above four principles is included under Section C, Principle 2 of this report.

A summary of value chain partners assessed by key Tata Steel entities is provided below:

Parameter	% of value chain partners assessed (by value of business)		
	Tata Steel Limited	Tata Steel Nederland BV	Tata Steel UK Ltd.
Environmental Impact	78%	77%	100%

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

Essential Indicators

1. a) **Number of affiliations with trade and industry chambers/ associations:**

Tata Steel Limited has 12 affiliations with trade and industry chambers/ associations. Additionally, Tata Steel’s subsidiary companies have affiliations with various industry chambers/ associations in their respective context. These would include state level, national and international bodies.

b) **List the top 10 trade and industry chambers/ associations (determined based on the total members of such body) the entity is a member of/ affiliated to:**

Sl. No.	Name of the trade and industry chambers/associations	Reach of trade and industry chambers/ associations (State/National)
1	Confederation of Indian Industry (CII)	
2	Federation of Indian Chambers of Commerce & Industry (FICCI)	
3	Indian Steel Association	National
4	International Chamber of Commerce	
5	Institute for Steel Development & Growth	
6	World Steel Association	
7	ResponsibleSteel™	
8	UN Global Compact	International
9	Eurofer	
10	UK Steel Association	

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:**

None.

Leadership Indicators

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

The Company works with all stakeholders, relevant government & regulatory bodies and apex industry associations. Industry associations include global, national and regional industry bodies, like the Worldsteel Association, Confederation of Indian Industry, Federation of Indian Chambers of Commerce & Industry and Indian Steel Association.

The Company is guided by the Tata Code of Conduct in all its advocacy. Some of areas where the Company pursues policy advocacy are listed below:

Public Policy Advocated	The Company’s public policy advocacy efforts are focused on helping the mining and steel industry improve its competitiveness and the country achieve its major strategic objectives. In particular, we focus on increasing steel demand and usage, improving the ease and cost of doing business, sustainability, environment and climate change, initiatives to decarbonise the Indian steel industry and alignment with United Nation’s Sustainable Developmental Goals.
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Method resorted for such advocacy	<ol style="list-style-type: none"> Engaging in discussions with government and industry peers for laying down the framework/roadmap for the decarbonisation of the steel sector in India and related policies for the short, medium and long-term Advocacy for putting in place a robust National Carbon Market in India for providing the right price signals for incentivising green growth Advocating a uniform 'Green Taxonomy' mechanism - e.g. formulation of a technologically agnostic definition of low carbon steel in the Indian context, along with the advocacy for strengthening circular economy, to accelerate the transition to lower carbon emission steel through increasing the availability of scrap and scrap processing facilities in the country, deeper adoption of Life Cycle Cost analysis, etc. Advocacy for adoption of Best Available Technologies for improving energy and material efficiencies in steel operations Advocacy for increasing availability of transition fuel and technology for smoothening the steel sustainable transition pathway. E.g. Greater access and affordability of Natural Gas Access to lower cost 'Green Finance' for undertaking projects with low technological readiness pilot/ demonstration projects for decarbonisation Advocacy for accelerating adoption of deep decarbonisation technologies like Carbon Capture and Utilisation/Storage and the use of green hydrogen in steelmaking, etc. Advocacy for implementation of policies supporting 'Sustainable Mining' and recommending policies for boosting demand for low carbon green products.
Information available in public domain (Yes/No)?	Yes
Frequency of review by Board	Quarterly, as part of the Business Performance Update to the Board
Weblink, if applicable	Tata Steel publishes details of its public policy advocacy on its website. The website link is as follows: https://www.tatasteel.com/sustainability/esg-indicators-factsheet/

Principle 8: Businesses should promote inclusive growth and equitable development.

Essential Indicators

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

Not Applicable for this reporting period

- Provide information on project(s) for which ongoing Rehabilitation and Resettlement (R&R) is being undertaken by your entity, in the following format:**

Sl. No.	Name of the project for which R&R is ongoing	State	District	No. of project affected families (PAFs)	% of PAFs covered by R&R	Amounts paid to PAFs in the FY (in ₹ Crore)
1	Tata Steel's plant at Kalinganagar	Odisha	Jajpur	1,234	97.2% (1,200)	~7.3

- Describe the mechanisms to receive and redress grievances of the community:**

Tata Steel's grievance redressal mechanisms are customised based on specific requirements of each of its locations, so as to be most effective.

For its Indian operations, Tata Steel has incorporated a wholly-owned subsidiary called the Tata Steel Foundation (TSF), which acts as the fulcrum of Tata Steel Group's Corporate Social Responsibility activities in India, driving it in its entirety. TSF also leads Tata Steel's engagement with the local community in the areas where Tata Steel operates within India.

TSF predominately operates across 4,500 villages in the states of Jharkhand and Odisha through a 1,000+ member team, reaching over 3.15 million lives through our programmes in FY2022-23. TSF is focused on co-creating solutions with the tribal and excluded communities in order to address their development challenges. During this process of co-creation, TSF endeavours to develop and implement change models that are replicable at a national scale, enable significant and

lasting betterment in the well-being of communities proximate to the Company's operating locations, and embed a societal perspective in key business decisions.

Over the years, TSF has created a grievance redressal ecosystem that facilitates inputs to come in from communities in and around Tata Steel's sites. This ecosystem ensures real-time information flow with respect to Tata Steel's Corporate Social Responsibility initiatives on the ground and enables issues to emerge before they even reach the stage of a grievance, requiring redressal. The ecosystem consists of the following:

1. Contact numbers and names of Unit Heads and Key Personnel are prominently displayed in all TSF offices and in various publicly approachable places for anyone to approach them. This has resulted in easy and immediate approachability of senior leadership of TSF to anyone from the community. The TSF leadership team receives regular feedback regarding TSF's work on the ground, thereby ensuring corrective action is taken in advance and concerns are addressed.
2. Additionally, TSF offices across locations are always accessible to the communities as well as stakeholders who regularly visit the team to discuss their problems. Meetings are held at length on the concerns of community members as well as their feedback on the work being done by TSF. This is a source of continuous learning by identifying lessons and preventing recurrence of similar grievances in the future.
3. Tata Steel has set up several forums involving communities and their representatives, with significant participation from citizens. These forums are designed with a participatory approach in mind, rather than a formal grievance redressal system, and thereby not only ensures a free flow of input but also enables understanding of different perspectives & concerns. Thus, they help to establish a deep two-way relationship between the Company and the communities. Some of the key forums are:
 - a) Scheduled Tribe stakeholder's council
 - b) Scheduled Caste stakeholder's council
 - c) Citizens' forum of Jamshedpur

Furthermore, since TSF is deeply intertwined with communities and panchayats, wherein there are continuous one-to-one interactions between communities and the TSF team. TSF interacts with communities and stakeholders every day on ground to implement Corporate Social Responsibility initiatives of Tata Steel. This enables continuous feedback on work done to flow back to the TSF team, including any grievances that communities may have. In most cases, the concerns are addressed swiftly to the satisfaction of relevant community. This is further supported by many of the team members of TSF being recruited from local communities, which helps them become a bridge between the Company and communities as they have a good and comprehensive understanding of different perspectives and are familiar with the ground situation.

TSF team members also regularly interact with community members during their visits to villages where TSF runs various Corporate Social Responsibility programmes. There is an in-built mechanism in the working of the TSF teams where the field staff, the programme team and the Unit Heads regularly speak with individuals and groups within the communities, as well as with various stakeholders, to ensure that any grievances reach appropriate attention at the senior most level. This is further supported through regular interactions between the communities and other stakeholders and the Thematic and Geographic Heads of TSF and the TSF leadership team.

During their visits, TSF team members conduct interactive sessions to listen to complaints of community members and provide the necessary assistance. On the basis of the grievances received, TSF also identifies the problem areas which are complaint-prone, which are then subjected to studies and remedial measures are put in place. Outcome monitoring and evaluation is also carried out internally to understand pain-points of communities to ensure all grievances are addressed timely and strategically.

Public hearing is also a mandatory step in the process of environmental clearance for certain projects. This provides a legal space for people of an area to come face-to-face with the project proponent and the government and express their concerns. The Company frequently faces public hearings where community members express their concerns. Based on the concern raised during the hearing, the Company takes up projects as special commitments to communities and stakeholders.

Similarly, in the Netherlands, in order to address concerns among residents and employees – who often also live nearby – Tata Steel has intensified communication with the community. Employees from neighbourhood towns often receive many questions from their community. Tata Steel updates its employees on a regular basis, so that they can, in turn, update their respective communities.

Tata Steel is also looking to leverage technology to enable the grievance redressal mechanism to the community, where necessary. In the Netherlands, Tata Steel has created an online link accessible to the community members to raise environment related grievance. For all other geographies where Tata Steel operates, there are means and measures to take feedback from all categories of stakeholders, including those on relatively smaller sites, wherein the management directly interacts with local communities.

To map the grievances experienced by the community as accurately as possible, Tata Steel has also initiated an online residents' panel in 2019 at IJmuiden, Netherlands. This enables residents from the community to share experiences and other feedback with the Company. The residents' panel consisted of 35 participants.

Tata Steel also uses various media to be easily accessible and traceable for stakeholders, especially in the community, across all its geographies. All stakeholders can contact the Company through the website and through Tata Steel's social media channels.

Tata Steel also published various newsletters and communications at various locations to share information on the Company with the community and other stakeholders and provide clarifications. One such example is the Staal & IJmond publication, which was started in May 2022 at IJmuiden. Staal & IJmond is an environment newspaper which is distributed door-to-door and has a circulation of 75,000 in the IJmond region, four times a year. In this newspaper Tata Steel provides updates on its measures for a cleaner environment, the decarbonisation route and Tata Steel as an employer. Other newsletters in the Netherlands include the digital newsletter RondonStaal (a digital newsletter with relevant Tata Steel news for the community) for the IJmond region and the 'Tata Steel & Omgeving' for the Wijk aan Zee region.

Tata Steel in IJmuiden has also started 'Open Vizier', a series of live broadcasts with the Chief Executive Officer of Tata Steel Nederland, where he personally interacts with local residents and other stakeholders. Tata Steel has also set up a sounding board group in which representatives of nature and environmental organisations, village and district councils and the business community in the IJmond come together to discuss Tata Steel's environmental measures.

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

Particulars	FY2022-23	FY2021-22 ²
Directly sourced from Micro, Small and Medium Enterprises/small producers ¹	32%	26%
Sourced directly from within the district and neighbouring districts ^{3,4}	41%	44%

¹ Share of the purchase across Maintenance, Repair and Operations, Services, Bulk Materials and IT Buy at Tata Steel's Jamshedpur, Kalinganagar and Meramandali operations, hence, defined as 'Total Addressable Spend'.

² Spend of Meramandali operations not included in FY2021-22.

³ Data considered for Tata Steel and its Indian subsidiaries, overseas entities are not considered.

⁴ District and Neighbouring district include suppliers from the states of Odisha, Jharkhand, and West Bengal.

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
Not Applicable	Not Applicable

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

Sl. No.	State	Aspirational District	Amount Spent (₹)
1	Odisha	Dhenkanal	15,75,64,799
2	Jharkhand	East Singhbhum (Purbi Singhbhum)	1,14,88,06,943
3	Jharkhand	Ramgarh	15,80,97,038
4	Jharkhand	West Singhbhum (Paschimi Singhbhum)	45,08,95,539
5	Jharkhand	Ranchi	1,81,79,538

Note: During FY2022-23, Tata Steel spent ₹ 481 Crore on CSR, out of which ₹ 234 Crore was spent in Jharkhand and ₹ 239 Crore was spent in Odisha.

3. (a) Do you have a preferential procurement policy where you give preference to purchase from suppliers comprising marginalised /vulnerable groups? (Yes/No)

Yes. Tata Steel has an Affirmative Action Policy, a preferential policy guided by the Tata Affirmative Action Programme focusing on three principles – Social Equity, Equal Opportunity, and Inclusion across Affirmative Action communities.

To support local communities and Affirmative Action suppliers, Tata Steel has taken several initiatives to develop their entrepreneurial capabilities by creating positive differentiation. c. 2,590 of the Company’s 7,049 suppliers in India, i.e. nearly 37% of its supply chain partners, are locals, of which 75 are Affirmative Action vendors (Scheduled Castes, Scheduled Tribes, and Partners displaced due to greenfield project of the Company).

- (b) From which marginalised/vulnerable groups do you procure?

Tata Steel procures from socially disadvantaged sections of the society such as the Scheduled Caste vendors, Scheduled Tribe vendors and from the displaced persons vendors under its Affirmative Action Policy.

In FY2022-23, Tata Steel also started the process of integrating persons with disabilities and women into its Affirmative Action supplier group and is developing a dedicated Affirmative Action Vendor Entrepreneurship Development Policy to scale up the capabilities of its Affirmative Action suppliers.

- (c) What percentage of total procurement (by value) does it constitute?

The business volume from Affirmative Action suppliers stands at ₹112 crore in FY2022-23, 60% higher than that of FY2021-22, and is 0.7% of the Total Addressable Spend of Tata Steel Limited.

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:

None

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:

None

6. Details of beneficiaries of Corporate Social Responsibility Project:

S. No.	CSR Themes	No. of People benefitted from the project	% of beneficiaries from vulnerable and marginalized groups
1	Public Health	10,46,438	95%
2	Education	9,01,734	95%
3	Livelihoods (Agriculture)	3,33,287	98%
4	Gender And Community Enterprises	2,73,190	100%
5	Tribal Identity	1,69,154	100%
6	Rural Infrastructure & Urban Services	1,59,239	55%
7	Drinking Water	1,58,068	62%
8	Livelihoods (Skill Development)	48,255	34%
9	Disability	26,330	34%
10	Development Corridor	16,495	5%
11	Environment	9,539	97%
12	Sports	5,008	53%
13	Disaster Management	4,941	100%
14	Embed Societal Perspective	517	0%
Total		31,52,195	90%

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:

Tata Steel's consumer centric approach views consumer complaint as an opportunity for raising the bar of consumer expectations for value creation with each subsequent supply. To achieve consumer expectations, Tata Steel's complaint management process has evolved over the years, thereby remaining agile to changing consumers expectations with respect to complaint acknowledgement and resolution.

Dissatisfaction expressed by consumers related to Tata Steel's product and services is regarded as a complaint and is managed through SAP based consumer complaint management system tool called "CRM Cruise", till its complete resolution to the satisfaction of the consumer.

The system has evolved over time to ensure relevant stakeholders across Tata Steel's value chain, including sales managers, application experts, hub managers, steel processing centre managers and the Technology Group, work in close coordination to provide speedy resolution to all consumer complaints. Dedicated application experts, sales managers & hub managers help in providing first response to consumers within 48 hours of the notification of a complaint. All complaints notified or reported by consumer are also flagged off to the Plant Operation and Quality Assurance team through the Daily Product Application Group Communication Report (DPCR) system. The DPCR system is a closed loop system, wherein all key stakeholders at the plant are immediately made aware about the quality issues faced by consumer. Defective samples are sent through the Integrated Product and Component Analysis (IPCA) system, where detailed analysis of consumer complaints is undertaken. IPCA system is also a closed loop system which helps to track and monitor the technical investigation of any consumer complaints.

Consumer complaints registered in CRM Cruise are classified into different categories based on defect types, occurrences, source etc., to facilitate a thorough investigation as well as to assign accountability for preventing recurrence. The IT platform

also routes them through ‘express’, ‘short’ and ‘long’ loop workflows, based on predefined classifications of defect type & material quantities, thereby ensuring that complaints are fast tracked to their resolution.

Similar processes, customised for local practices, are deployed across various subsidiary companies of Tata Steel in various geographies.

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

	As a percentage to total turnover
Environmental and Social Parameters	50
Safe and Responsible Usage	13
Recycling and/or Safe Disposal	19

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

	FY2022-23		Remarks	FY2021-22		Remarks
	Received during the year	Pending at the end of the year		Received during the year	Pending at the end of the year	
Data Privacy	0	0	Nil	0	0	Nil
Advertising	0	0		0	0	
Cyber security	0	0		0	0	
Essential services delivery	0	0		0	0	
Restrictive trade practices	0	0		0	0	
Unfair trade practices	0	0		0	0	
Product and service related complaints	5,596	223		5,515	159	

Note: The complaints cover the various categories such as, those related to payments, order entry and fulfillment, product quality, logistics etc

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

	Number	Reasons for recall
Voluntary recalls	0	NA
Forced recalls	0	NA

5. Does the entity have a framework/ policy on cyber security and risks related to data privacy? (Yes/No) If available, provide a web-link of the policy:

Yes, Tata Steel has a comprehensive policy on data privacy. Tata Steel’s Privacy Policy explains how Tata Steel may collect, use, store, disclose or otherwise process personal data, including personal data provided when accessing Tata Steel’s websites, and describes the rights with respect to personal data.

Tata Steel is committed to providing the highest level of protection regarding the processing of its employees’, vendors’ and clients’/customers’ personal data based on applicable data protection laws and regulations.

Personal data comprises all the details that Tata Steel collects and processes directly or indirectly about individuals, for instance information about their identity and contact details (such as name, email address, contact number etc.), including information received from third parties and information collected through the use of Tata Steel’s website(s), cookies or other similar tools. Tata Steel is committed to first and foremost comply with local law, where it exists.

Tata Steel’s Privacy Policy can be found on the following link: <https://www.tatasteel.com/privacy-policy/>

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 safety of products/ services:

There has been no such instance which has occurred during FY2022-23.

Leadership Indicators

1. Channels/platforms where information on products and services of the entity can be accessed (provide web link, if available):

All Tata Steel Group entities have dedicated sections on their websites where detailed information on products and services are provided. Some key websites are listed below:

- | | |
|--|--|
| 1. www.tatasteel.com | 8. https://aashiyana.tatasteel.com/in/en.html |
| 2. https://ecafez.tatasteel.co.in | 9. www.tatasteeleurope.com |
| 3. https://digeca.tatasteel.com/ | 10. www.tatasteelthailand.com |
| 4. www.tatasteellp.com | 11. www.tatasteeluisl.com |
| 5. www.tatametaliks.com | 12. www.tsdpl.in |
| 6. www.tatatinplate.com | 13. www.iswp.co.in |
| 7. www.tatasteelmining.com | |

Tata Steel has focused on creation of digital platforms to strengthen direct connect with customers and channel partners. These solutions are designed to provide innovative services and solutions for all segments.

For retail consumers, Tata Steel has continued to enhance & improve Tata Steel Aashiyana, a digital platform for individual home builders, with value added features like an inspirational design library, material estimator, service provider directory & e-commerce. In FY2022-23, Tata Steel Aashiyana successfully migrated to Adobe's Digital Experience Platform with features like hyper personalisation, vernacular content in 9 Indian languages & analytics-based insight generation.

The Tata Steel supply chain visibility digital solution – COMPASS, was redesigned in FY2022-23 with an improved user interface to provide better user experience. In terms of material visibility, greater than 90% of both road & rail movement can be accessed real time by Business-to-Business customers. A mobile app for the COMPASS platform has also been designed and launched to ensure easy accessibility on hand-held devices.

DigECA, an end-to-end lead management portal for micro, small and medium enterprise segment customers, has helped connect all major stakeholders in the value chain and provide live monitoring of sales and the opportunity loss in the form of "lost sales". In FY2022-23, DigECA Mobile app, with e-commerce enablement to enquire, negotiate and place orders & register complaints, was launched with an aim to enhance customer convenience in terms of access to key modules on the go.

Tata Steel has also launched an online portal, called MagicBox, for sale of 'extra to order' steel products to existing Tata Steel distributors via the online bidding route. Tata Steel in Europe also participates in events like Euroblech and Blechexpo for the Automotive and Engineering sectors and Metpack for the Packaging sector. We also organise webinars and steel courses to provide the requisite information.

2. Steps taken to inform and educate consumers about safe and responsible usage of products and/or services:

Tata Steel connects with its varied customer groups to spread awareness on the unique selling propositions of its products, their technical features and effective & responsible usage. Product information brochures are available on public platforms for information and shared with all channel partners to communicate product features and unique selling propositions to our customers.

Different brands of the Company also have periodic programmes to educate customers about effective usage, details of some select initiatives are provided below:

1. Under the name of "Create (Value in use-VIU)", "Techtalk" and "Skilling India", knowledge sharing sessions are conducted for micro, small and medium enterprise segment customers to discuss which products and services best suit their business requirements, share technology updates and help support upgrade their technical skills.
2. Customised Application specific micro segments meets, like Solarix for customer of Solar segment, Panorama for Panel segment, Applicon for Appliance segment, Ducticon for Ducts and Heating, Ventilation and Air Conditioning segment, are conducted to educate them on product usage. Tata Steel, in collaboration with industry experts, also conducts technical training sessions to resolve technical issues critical to quality, choice of materials and manufacturing.
3. Business to Consumer brands, like Tata Shaktee and Tata Kosh, run the Learner's Academy to upgrade technical, managerial and behavioural skills of the channel sales force. Tata Tiscon provides technical service to consumers as well as bar benders & masons through customer service engineers of distributors and Tata Pravesh organises product demonstration and awareness sessions through digital media and provides customer support through call centres, Whatsapp and chatbots.
4. Tata Shaktee and Tata Kosh brands also connect with the consumer through multiple platforms like BTL (Below the line), ATL (Above the line) & Digital medium.
5. Dealer, Consumer and Influencer (fabricator, mason, bar benders, farmers, etc.) meets are regularly organised to inform customers on right usage of Tata Steel's products.
6. Value Addition, Value Engineering, Early Vendor Involvement and Customer service team initiatives are periodically undertaken on usage of Tata Steel's products for large Business to Business segment.
7. Tata Steel's Product Application Group helps customers by suggesting suitable grades of steel to improve their end-product, productivity, service and cost and carries out knowledge sharing sessions.

Apart from the above, many of Tata Steel's brands/products have social media handle on Facebook, Twitter, LinkedIn etc., to connect and educate the consumers.

3. Mechanisms in place to inform consumers of any risk of disruption/discontinuation of essential services:

Tata Steel has put in place effective communication protocols, both formal and informal, to inform its customers on any supply disruptions, as listed below:

- a) The sales and marketing teams, the customer relationship management teams and the supply chain management teams are in constant touch with their counterparts in our customer organisation(s) and the dealership network. The teams promptly inform the customers and the dealership network of any disruption in supply.
- b) Tata Steel has launched the 'COMPASS' portal and the 'COMPASS' mobile app, which provide detailed supply chain visibility across various market segments for its Indian operations and keep customers up to date on the delivery during both normal times and during disruptions.
- c) In case of any major disruption, Tata Steel also has the ability to use its website, social media handles and press releases to inform customers of any disruption.

4. Does the entity display product information on the product over and above what is mandated as per local laws? (Yes/ No/ Not Applicable) If yes, provide details in brief:

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).

Product information: Yes, Tata Steel displays product information up and over mandated requirement in form of GreenPro Ecolabel, where applicable. Test certificates capturing mechanical and chemical properties are also provided to the customers for information on the product. Tata Steel has taken the lead in the Indian Steel Industry for environmental certification of its products. As on date, Confederation of Indian Industry's GreenPro certification has been conferred on the following products/brands of Tata Steel.

- a) Steel Rebars (Tata Tiscon)
- b) Tubes (Tata Structura, Tata Pipes, Tata Ezyfit)
- c) Steel Doors and Windows (Pravesh)
- d) Ground Granulated Blast Furnace Slag

Tata Steel in Europe is also the first steel manufacturer to become an approved Environmental Product Declaration (EPD) programme operator in Europe. Tata Steel is able to create product specific EPDs that comply with EN 15804 and ISO 14025 standards. Being able to supply product specific and externally verified EPDs, along with responsible sourcing certification, enables Tata Steel to help its construction supply chains to accrue points under building certification schemes.

In order to promote purchase of cleaner and greener products by customers, Tata Steel also conducts Life Cycle Assessment study for many of its products to evaluate their environmental impact considering various life cycle stages. The Life Cycle Assessment approach is a holistic and scientific way of understanding a product's environmental impact and Tata Steel shares the Life Cycle Assessment outcome with its customers to enable them to make choices based on the lowest lifecycle impact of the product on the environment. A summary of products for which Tata Steel has conducted Life Cycle Assessment is provided under Section C, Principle 2 of this report.

Customer satisfaction survey: Yes, Tata Steel conducts an annual customer satisfaction survey, covering its channel partners, direct customers and micro, small and medium enterprise segment customers, to measure customer satisfaction and arrive at a quantitative index (Customer Satisfaction Index). The index is arrived at through ratings received from respondents on a 6-point scale across attributes like Product, New Product Development, Delivery, Commercial, Relationship & Engagement, Complaint Handling and Technical Support. The findings and action plan taken are shared with the senior leadership team and used to develop future plans of the Company.

The trend of Tata Steel Limited's Customer Satisfaction Index over the last three calendar years is provided below:

	CY 2022	CY2021	CY2020
CSI Score Trend (out of 100)	83.8	83.3	82.3

5. Provide the following information relating to data breaches:

S no		FY2022-23	FY2021-22
1	Number of instances of data breaches along-with impact	-	-
2	Percentage of data breaches involving personally identifiable information of customer	-	-