



सेल SAIL

SUSTAINABILITY REPORT 2009-10



Managing today for a

better tomorrow

स्टील अथॉरिटी ऑफ इंडिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED
भिलाई इस्पात संयंत्र
BHILAI STEEL PLANT

Sustainability Policy



Bhilai Steel Plant (BSP), is the flagship integrated steel plant of Steel Authority of India Limited, specializing in production of rails, structurals, plates, wire rods and merchant products. BSP is committed to improving its performance in accordance with the three pillars of sustainability viz. economic, environment and social in the area of operations and undertakes to:

- ◆ *Operate business in an efficient and financially sustainable way in order to satisfy its customers and add value to stakeholders.*
- ◆ *Optimise the eco - efficiency of its manufacturing processes through conservation of natural resources and increased energy efficiency.*
- ◆ *Foster health and safety of employees and provide healthy, safe and environmentally sound operations and products.*
- ◆ *Demonstrate social responsibility by promoting values and initiatives that show respect for people and communities associated with its business.*
- ◆ *Conduct business with high ethical standards.*
- ◆ *Engage stakeholders in constructive dialogue to help implement sustainable development.*
- ◆ *Achieve performance improvement through continuous monitoring and review of sustainability performance indicators.*

Contents



CEO Statement

1

Report Content

3

Governance, Commitment and Engagement

10

Economic Performance

24

Environmental Performance

32

Social Performance

50

Sustainability Assessment Report

71

GRI Index

72

List of Abbreviations

77



“

Public Sector Unit will be the Temple of Modern India.

- Pt. Jawahar Lal Nehru

”

CEO Statement

With two more Prime Minister's Trophies for the best Integrated Steel Plant in the country added to its long list of achievements, Bhilai is shining brighter than ever. As SAIL's flagship unit, Bhilai has also become a model of business excellence. While the plant and Shop leadership is engaged in creating & nurturing a work culture that supports flexibility & learning and is proactive to change, Bhilai's biggest strength is that we are all driven by purpose and sense of pride-whether it is in setting benchmarks in quality, product and process innovation, deployment of modern business tools or fulfilling our responsibility towards society and environment. Our performance in 2009-10 and in current fiscal has demonstrated this commitment. Our people are most valued resource for us. Each day, we challenge ourselves to live to our core values. One of these values is to demonstrate leadership in environment & stewardship of the social responsibility.

The year 2009-10 tested the resiliency of the Bhilai Collective where once again as in the past, Bhilai Steel Plant (BSP) emerged triumphant in Trial by Fire. The first three quarters of the fiscal 2009-10 saw best ever Hot metal, crude steel & saleable steel production & dispatch. A fire broke out in the cable gallery of Power & Blowing station in February 2010 disrupting the entire plant operation as the supply of cold blast to Blast Furnaces got stopped. The plant operations were revived in the shortest possible time through round the clock work by team Bhilai with the synergistic actions by different functions and departments. Bhilai spirit was at its best in the month of March 2010 in its efforts to offset the loss due to fire and a total of ten best ever monthly production records were achieved in major shops during the month.

BSP is committed towards sustainability in the context of economic, environment and societal performances. Sustainability means for us to maintain & enhance ecological, social and economic values day-to-day and we are committed to do business while respecting the principles of sustainability. We are fully aware that sustainability is an ongoing everyday-challenge and has to be continuously pursued in the company. We have always recognized the interaction and interdependence of economy, environment and society, and accordingly have instituted mechanisms to continually engage its key stakeholders. We believe in managing our business in a way that balances our environmental, social and economic impacts. Our success is founded in the commitment of our people: the employees and contractors labours who every day put these values into action.

The National Steel Policy 2005 had projected consumption to grow at 7% based on a GDP growth rate of 7-7.5% and production of 180 million tonne by 2019-20. BSP also crossed some important landmarks in the year 2009-10. The cumulative production since inception crossed the 150 Million Tonne for Hot Metal & Sinter, 100 MT mark for crude steel from SMS-I and 100 MT mark for semi finished steel from Blooming & Billet Mill. Despite severe challenges BSP continued to operate well above the rated capacity in all major areas of production achieving capacity utilization of 114.3 % in Hot Metal, 130.2 % in Crude Steel and 138.6 % in Saleable Steel. The gross margin to average capital employed continued to be the best in the industry.



“Our people are most valued resource for us. Each day, we challenge ourselves to live to our core values. One of these values is to demonstrate leadership in environment & stewardship of the social responsibility.”

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BSP has taken effective measures in the fields of resource conservation, pollution prevention, waste reduction and conversion of waste into wealth to improve environment inside the works area. BSP has been able to reduce its specific water consumption substantially through increased recycling and improved water management. The implementation of various water conservation & recycling schemes has resulted in bringing down the specific water consumption to 2.99 m³/TCS in 09-10 from 3.04 m³/TCS in 08-09. A 30 million liter/day (MLD) State-of-the-Art sewage (Municipal waste water) recycling plant has been commissioned during the year. This will be a step towards achieving the concept of “Zero Discharge“ which is a BSP's commitment towards cleaner environment. Bhilai Steel Plant initiated various drives for the rain water harvesting including construction of five recharge pits of more than 5000 m³ each in Township. Besides this rainwater harvesting system also implemented to 3 schools and 3 office buildings.

Visible efforts are being made to reduce the raw materials and energy consumption. Climate change continues as a high-profile challenge for business and governments. Even in the absence of binding legislation, we have moved forward aggressively with efforts to mitigate our impact on the climate. We have identified various projects under CDM and VER and benefits (both tangible and intangibles) are reflecting in the overall environmental performance of the company. Bhilai Steel Plant has identified 24 Clean Development Projects (CDM), amounting 9 lakhs CER are at various stage of implementation. Three projects of BSP, have been certified under Voluntary Emission Reduction (VER). These projects will yield about 2, 00,000 T of CO₂ reductions every year till the completion of 10 year cycle period. BSP has taken effective measures in the area of resource conservation. About 33,200 T of fines recovered through processing of 1,78,405 T of generated fines at Dalli Beneficiation Plant. For effective utilization of the slime and generated fines a pelletisation plant is envisaged.

BSP gives prime importance to the social concern of the region and implements various measures for ensuring improvement in the quality of life of employees and community. To meet this goals of social responsibility, BSP has provided educational support through schools, high class medical services, health camps, health education, community welfare programmes and adoption of villages under peripheral development, recreation facilities through infrastructure for sports, games, parks, gardens, zoo, civic amenities like construction of roads, bridges, safe drinking water facilities,. With a key objective of woman empowerment, BSP supports Bhilai Mahila Samaj, which provides training and employment for needy women in sewing, knitting, production of cottage products, masala products, and stationery.

BSP has a mix of old and new technology. About 45 % of its production is through twin hearth furnace route which need replacement by BOF processes. The major challenge ahead for BSP is to implement various construction projects under 7 MT expansions. Availability of iron ore will be a major concern as reserves of captive mines are fast depleting. Development of Rowghat Iron Ore Mine has therefore been given prime importance.

This Sustainability Report shows how we have adhered with sustainability principles. To be in a sustainable business, we have to change the way we think, and sustainability – as a common set of principles that persuade management practices – must become well-established. Culture of excellence at BSP popularly known as “Bhilai Culture” is the key to its sustainable and consistent achievements. The cultural elements are continuously reinforced through a host of carefully designed steps and actions i.e. two way dialogues, encouraging openness and participation, role modelling, recognition and awards, empowerment and above all creating a sense of a well knit community.

The Report concentrates on matters of economic aspects, environmental protection, the areas of sustainable development, occupational health and safety, and social aspects of sustainable development. It acknowledges the contribution of BSP collective and its excellent work culture which has enabled us to peak in sustainability indicators. The report is dedicated to the people of Chhattisgarh.

This report has been prepared in accordance with the 'G3' guidelines of GRI Sustainability Reporting. It represents balanced presentation of our organization's economic, environmental and social performance”.

The dearth of natural resources, the rising burdens on the ecosystem, and social requirements are major factors that influence our business decisions. I am thrilled about the journey we are on but also understand the significant challenge we have set for ourselves. I would like to appeal to our stakeholders to enhance our contribution towards sustainable development.

Thanking you

(V K Arora)
CEO

Report Content



The goal of sustainable development is to “meet the needs of the present without compromising the ability of future generations to meet their own needs.” BSP aims to create knowledge sharing organisation, develop new opportunities to generate prosperity, enhance quality of life and resolve the risks and threats to sustainability in context of social relations, environment conservation and long-term economic growth. BSP endeavours to implement innovation and technology in its activities, products and services. We focus on effective stakeholder engagement, consider social impacts in investment decisions and incorporate transparency in all our activities.

This report provides a platform for measuring & disclosing information related to “sustainability context” of our organisational performance. The content has been made to meet the requirements of our internal and external stakeholders. The report represents the balanced and reasonable presentation of our positive and negative contributions. The reporting principles of materiality, stakeholder inclusiveness, sustainability context and completeness have been applied in the report. Respective tests of the reporting principles have also been checked and verified internally.

The standard disclosure of the report includes strategy, profile, governance, and management approach and performance indicators. While applying the reporting principles approach, attempt has been made to address all the core indicators and relevant additional indicators. The appropriate topics and indicators were selected based on its significance on economic, environmental and social performance of the organisation and its substantial influence on the assessment and decision of stakeholders. The wider context of sustainability of our organisation presenting reasonable expectation of the stakeholders; the challenges in balancing these expectations are also discussed. Systematic and generally accepted stakeholder engagement process has been implemented. The outcome of the stakeholder engagement process and our strategies are described in the report. The report takes into account of upstream and downstream processes which have significant influence on our organisation.

This report has also considered the reporting guidance for Boundary Setting. While deciding boundary, assessment has been made on those entities over which whether BSP exercises control (power to govern the financial and operating policies, so as to obtain benefits from its activities) or have significant influence (power to participate in the financial and operating policy decisions of the entity).

Scope of the Report



This is the eighth sustainability report of Bhilai Steel Plant. It covers reporting period from 1st April 2009 to 31st March 2010. The reporting principle and methodology recommended by Sustainability Reporting Guidelines issued by Global Reporting Initiatives (GRI) have been adopted.

While considering the boundary setting, it has been ascertained that the boundary of the report is limited to activities, product and services of Bhilai Steel Plant (BSP) and its captive mines of Iron Ore at Dalli-Rajhara, Limestone at Nandini Mines and Dolomite Mines at Hirri. The scope limitations have been indicated at the relevant locations. BSP being unit of SAIL, does not enter into Joint Venture on its own, hence reporting on JV is not in the scope of the report. For the same reason, information related to SAIL shareholders, Board of directors, corporate governance, General Body Meetings, and other supporting guidelines have been incorporated at relevant locations. There are no significant changes w.r.t. to previous reports with regard to scope, boundary and measurement methods applied in the report.

This report focuses in the following three broad sections of sustainability namely economic, environment and social aspects. The report specifies the overall context and approach of BSP performance towards its strategy, profile and governance. It also describes the management systems, policies, practices, objectives & targets for addressing the sustainability issues of BSP. The identified core and additional indicators that reasonably present the economic, environment and social performance of BSP, have been reported.

Statutory audit of economic & financial systems are conducted by auditors. Internal audit is also carried out within organization. Being public sector unit, Government auditors also conduct verification and review. Environment audits are conducted by External Auditors/Internal Auditors/personnel from Environment Management Department on regular basis.

Organizational Profile

The following Criteria / definitions are used for preparation of this report:

- ❖ Financial Reports are prepared as per the guidelines provided in Company Law in India.
- ❖ Energy and CO₂ calculation as per WSA guidelines.
- ❖ Monitoring, measurement and calibration is carried out as per relevant Indian standards. Documentation & communication are done as per the requirement of ISO-9001, IS/ISO-14001, OSHAS 18001 and SA 8000. Norms and procedures prescribed for workplace safety under Ministry of Labour & Welfare (Factories Act) & Ministry of Environment are followed.

No acquisition has been done by BSP. No unit has been closed, divested or relocated during the year. The last sustainability report was prepared for the year 2008-09. BSP has been publishing sustainability reports every year based on GRI guidelines since 2002-03. The current report for 2009-10 has been self verified against the criteria in the GRI application levels. BSP has decided to self-declare its reporting level based on its own assessment.

For additional information about the BSP efforts towards sustainable growth, users can directly contact at the following address:

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Steel Authority of India Limited (SAIL), a Government of India undertaking, is India's largest steel producer with a production of 13.5 million tonnes of crude steel and 16th largest steel producer in world. Offering about 50 mild, special and alloy steel products in 1000 qualities and 5000 dimensions. With diversified portfolio of long and flat steel products the company not only dominates the domestic steel industry by market share close to 37%, but also has a considerable international presence with SAIL steel finding ready acceptance in over 30 countries worldwide. The government holds majority of shares (85.80%) with the remaining being held by different Financial Institutions, Banks, Mutual Funds, FIs and the general public. SAIL is also a leading business organization of the country in terms of market capitalization and profit.



Bhilai Steel Plant is the flagship unit of Steel Authority of India Limited (SAIL), contributing close to 50% of the total profit of the company. BSP derives significant competitive advantage through key SAIL organizations viz. Central Marketing Organization (CMO)-the largest industrial marketing network in the country, Research and Development Centre for Iron and Steel (RDCIS), Centre for Engineering and Technology (CET), Management Training Institute (MTI), Raw Materials Division, Environment Management Division, Growth Division and Safety Organization. BSP has its own captive mines resulting in significant competitive edge in the form of secured availability of key input raw materials i.e. iron ore and dolomite.

Operational Structure

Head Office : Steel Authority of India Limited,
Ispat Bhawan, Lodhi Road
New Delhi - 110003

Plant office : Ispat Bhawan, Bhilai Steel Plant,
Bhilai, Chhattisgarh - 490001

The plant is headed by CEO, who reports to Chairman, SAIL. At the plant-level, the top management comprises of CEO and his DROs at ED / GM level who are functional heads. The senior level is made up of the Zonal Heads/HODs who are DROs to their respective functional heads, mostly GMs / DGMs. The middle level comprises of sectional heads at DGM / AGM level, and the frontline executives consist of Senior Managers down to Junior Managers. Total number of executives and non-executives on 01.04.2010 is 3779 and 28764 respectively. The qualifications required for different functions and disciplines are well defined. The executives' qualifications include BE/B.Tech in engineering, MBA, CA, ICWA etc.

SAIL is an equal opportunity employer that has employed both women and men of caliber. BSP employs about 1675 women employees in both technical and non-technical areas, which is around 5.14% of the total employees.



The corporate governance of the company is characterized by systems, structures and processes. SAIL Board comprises of a Chairman, whole time Directors and Non-Executive Directors including independent Directors. SAIL-level committees are in place to facilitate the Board to take effective measures on issues related to business ethics. Internal Audit function undertakes audit of systems, processes and activities to ensure ethical practices. Integrity Pact has been made mandatory for all tenders, contracts, long term agreements valuing Rs. 100 Crores and above. Governance has been strengthened through Sustainability Reporting. The code of conduct for senior officers is established. Vigilance department is the key agency to ensure compliance of CVC guidelines

Major technologies and facilities

BSP is a fully integrated steel plant having all the basic facilities including captive mines, sinter plants, coke plant, blast furnaces, steel melting shops, rolling mills and service departments.

Rails for Indian Railways are produced exclusively through modern BOF Converter – Ladle Furnace – RH Degasser – Continuous Casting route for the highest quality and consistency. A world-class long rail manufacturing complex has been set up at BSP where rails are produced of rolled lengths of 80 meter and welded panels up to 260 meter. The mill has sophisticated technologies viz. Online Eddy Current & Ultrasonic Testing Machines for Rails, Laser Straightness Measurement, Laser Controlled Presses for Rails, etc.



Plate Mill has advanced facilities for ensuring high product quality i.e., On-line Ultra-Sonic Testing Machine, Hydraulic Automatic Gauge Control, Plan View Rolling, Normalizing Furnaces, etc.

BSP has acquired state-of-the-art technologies through systematic planning processes involving expert bodies namely RDCIS, CET and MECON. The modern technologies include 7.0 m tall Coke Oven Batteries, Sintering Machine of 320 m² area with circular cooler, Paulwurth Bell Less Top charging, Hoogoven's stove design, INBA slag granulation, VAD, RH Degasser, Ladle Furnace, Desulphurization unit, etc. The Expansion and Modernization Plan, drawn under the framework of Corporate Plan 2012, envisages installation of new technologies for improvement in productivity, yield and quality and for reducing operational cost.

IT has been deployed extensively in all the major functions for numerous on-line applications for higher efficiency and greater speed on optical fiber network (ATM) criss-crossing the plant. Major legacy IT systems have been replaced by ERP.

The breakup of zone-wise manpower as on 01.04.2010

Works	Admn.	Township & Medical	Projects	Mines	Total
22804	2929	3133	437	2896	32563

Regulatory Environment

For ensuring compliance to regulatory acts in two major areas i.e. Safety and Environment, dedicated departments are in place viz. Safety Engineering Department and Environment Management Department. Environmental Management System as per IS/ISO 14001:2004 standard has been installed at 38 major production units and service departments along with the Township. BSP has implemented Occupational Health and Safety Management System based on OHSAS-18001 standard in all its 43 factories. BSP has implemented SA: 8000:2001 based Social Accountability Management System in all the factories inside the works area.



Key Customers & Market Segments

BSP's products, its market segment, key customers and market share are given below.

Main Products	Key Segment	Key Customers	Market Share
Railway materials	Railway Track	Indian Railways	78%
Plates	Heavy M/c. Boiler & PV Line-pipe – water Line Pipe- Crude & Gas Construction/Fabrication Export	Thermax Ltd. Indian Oil Corporation Ltd. Essar Ltd, Ispat Ind. Bharat Earth Movers Ltd. Nagarjuna Construction Co. BPCL	24%
Bars, Rods & Structural	Wire Rods Electrode Qlty Wire drawers Construction TMT Bars & Structural	L&T Ltd. Gammon India Ltd. KEC International Limited NTPC, BHEL	Bars & Rods-5.2% Structurals – 7.4%

RINL, Tata Steel and JSPL are main competitors in Long products whereas in the area of heavy and wide plates BSP is the only major supplier. In view of the emerging competition in this product, BSP has taken urgent steps and installed new technologies in SMS-II and Plate Mill.

Prestigious Infrastructure Projects

- ☒ Worli – Bandra Sea link, 8 lane bridge
- ☒ 340 km J & K Rail link having 64 bridges
- ☒ Tsunami Rehabilitation Social Infrastructure Project
- ☒ Barh power Project of NTPC (3x650) MW
- ☒ Windmills by Suzlon
- ☒ Lower Subansiri Power Project
- ☒ Assam-Arunanchal border by NHPC
- ☒ Mumbai and Delhi Airport
- ☒ Bansagar Canal Project on Sone river
- ☒ Delhi Metro
- ☒ Korba Power Plant



Product Development

Demand analysis for various steel products for different end users is carried out by the Market Research Group of CMO. Based on the common attributes, these end users are clustered into various segments. The segment specific requirements in terms of demand, quality and other parameters like certification, packing, delivery etc are frozen by regular interactions with the customers. Focused attention is paid to the key account customers who are strategically significant to Bhilai Steel Plant contributing major share of revenue earnings.

A competent technical team visits the customer premises to address the problem related to BSP products with the changing customer needs where new requirements emerge regularly. The leadership has established a simple and powerful policy to create a robust product development process meeting the newer and anticipated requirements of customers. The policy is one new product every month. The thrust of the top management is evident from the performance results in the area of new product development. The total no of new products developed was 12, 12, and 12 in 2007-07, 2008-09 & 2009-10 respectively.



New Products Developed: 2009-10

1. $\Phi 25\text{mm}$ Earthquake Resistant TMT Rebar in Fe-500 grade
2. Creep resistant plates as per EN10028 Gr.16Mo3
3. Boiler quality (ASTM A516 Gr70) thicker gauge plates (100mm) with Ultrasonic soundness & sub-zero impact toughness.
4. Nitrovan treated High Tensile plates in SAIL HITEN 690AR quality.
5. High Tensile EN 10025 Gr.S355J2 plates with through-thickness properties ('Z' tested)
6. EN 10025 Part-5 S355J0W High Tensile plates with improved corrosion resistance.
7. Rolling of Ni-Co-Mo-Ti alloyed Maraging steel plates in MDN 250 grade
8. Z' quality DMR 249A plates in 140mm thickness (rolled in 60mm plates with Q&T at RSP).
9. 100mm thick HSLA Corrosion resistant ASTM A588 Gr.A plates.
10. 150mm thick Structural steel plates with Impact toughness & ultrasonic soundness.
11. ASTM A-537 Cl.1 Plates with ultra-low temperature (-62°C) impact toughness and through-thickness ductility.
12. Pressure vessel quality SA-387 Gr.12 Class-2 steel for normalized and tempered plates.

Awards, Recognition & Certifications



- ❖ Bhilai Steel Plant was adjudged winner of The Prime Minister's Trophy for the best integrated Steel Plant in the country for two years in succession for the financial years 2006-07 and 2007-08. The plant has achieved the unique distinction of having won the trophy 9 times out of a total of 16 times that it has been awarded.
- ❖ BSP won the Golden Peacock Eco-Innovation Award 2009 in June 2009.
- ❖ BSP won the Greentech Environment Excellence Gold Award for the year 2009 in October 2009.
- ❖ Under the Sustainability Awards constituted by CII-ITC Centre of Excellence for Sustainable Development, New Delhi, and BSP has been awarded with "Certificate of Commendation for Significant Achievement" in the field of sustainability based upon its contribution while working with triple bottom line approach i.e. Economic, Environment & Social Aspects. This is third consecutive year that BSP had won this award.
- ❖ Managing Director, BSP, Shri R Ramaraju has been conferred the Best CEO for 2009 Award by the Quality Circle Federation of India (QCFI). The award was given away at Bangalore on the 18th of December 2009.
- ❖ BSP won the Performance Excellence Award 2008 instituted by Indian Institution of Industrial Engineering in May 2009.
- ❖ BSP got 1st place in INSAAN – for "Excellence in Suggestion Scheme" for year 2008. Award was received in April 2009.
- ❖ 20 employees of BSP in four groups – two groups for Wire Rod Mill and one group each from SMS-II and Coke Ovens were awarded the Vishwakarma Rastriya Puraskar for 2007 in New Delhi on 17th September 2009.
- ❖ MD of Bhilai Steel Plant, Shri R Ramaraju has been honoured with the Rajbhasa Shree Samman.
- ❖ BSP won commendation Certificate of the National Energy Conservation Award on 14th December 2009.

Governance, Commitments & Engagements

The philosophy of the company in relation to corporate governance is to ensure transparency, disclosures and reporting that conforms fully to laws, regulations and guidelines, and to promote ethical conduct throughout the organization, with the primary objective of enhancing shareholders value while being a responsible corporate citizen. The company is committed to conforming to the standards of excellence in corporate governance in the country. It recognizes that the Board is accountable to all shareholders and that each member of the Board owes his/her first duty to protecting and furthering the interest of the company.

The Board of directors of SAIL comprised a full time Chairman, 5 whole time directors and 5 non-Executive Directors (as on 15/01/2011). The percentage of the Board of Directors that are independent, non-executive Directors is 50% (5/10). Nomination of Board of Directors has been carried out as per the guidelines and directives of Govt. of India. Corporate governance has been carried in accordance with the clause 49 of Listing Agreement. The Directors are selected through the well established procedure of Public Selection Enterprises Board. The Board of Directors is guided by organization's vision & credo. The board members regularly review the performance of the organization on economic, environmental & social issues. SAIL being a public sector enterprise, the compensation to the board of directors, executives and other employees is provided as per the negotiated agreements at different time intervals as decided by the govt of India. Performance of individual unit is also taken into consideration in disbursing incentives & rewards to the employees. The minutes are prepared for proceedings of Annual General Meeting. These minutes include the suggestions, comments and feedback from the shareholders. The concern of shareholders are discussed in the Board Meeting and after



prioritisation of these concerns, management integrates the same in business decision.

The SAIL Board committees are SAIL Audit Committee, Shareholders Investors Grievance Committee of SAIL, and Committee of the Board (COB). Number of shareholders complaints received during the period from 01.04.2009 to 31.03.2010 were 51. During the year, all 51 complaints were resolved and no complaint was pending for redressal as on 31.03.2010.

The company has in place a Code of Conduct applicable to the Board Members as well as the senior management and the same has been hosted on the company's website. All the Board members and the senior management personnel have affirmed compliance with the Code of Conduct as on 31st March 2010. There were no instances of non-compliance by the Company, penalties, strictures imposed on the company by Stock Exchange or SEBI or any statutory authority, on any matter related to capital, during the last three years.

The vision statement of SAIL, adopted by BSP is:

VISION

To be a respected world class Corporation and the leader in Indian steel business in quality, productivity, profitability and customer satisfaction.

The vision is reinforced by values in the form of credo.

CREDO

- ☒ We build lasting relationships with customers based on trust and mutual benefit.
- ☒ We uphold highest ethical standards in conduct of our business.
- ☒ We create and nurture a culture that supports flexibility, learning and is proactive to change.
- ☒ We chart a challenging career for employees with opportunities for advancement and rewards.
- ☒ We value the opportunity and responsibility to make a meaningful difference in people's lives.

In conducting our business, we value:

1. **Initiative** – Having the courage, creativity and discipline to lead change and shape the future
2. **High Performance** – Achieving superior business results, stretching our capabilities and valuing the contributions of every employee
3. **Win-Win Relationships** – Having relationships which focus on the creation of value for all stakeholders
4. **Stewardship** – A commitment to health, safety, environmental responsibility and our communities
5. **Safety** – A relentless commitment to working safely and looking out for the safety of our contractual labours and others with whom we do business
6. **Integrity** – Ethically and honestly doing what we say we will do
7. **Respect for the Individual** – Embracing diversity and inclusion, enhanced by openness, sharing, trust, teamwork and involvement

The Corporate Vision and CREDO guide the formulation of organizational objectives at BSP as well as the plant level policies (PI refer front-in and back-in cover), which reflect the organization's intent in its journey towards excellence. Major current and future challenges of BSP have been studied through SWOT analysis.

Vision, Sustainability Principles, Values, Challenges and Relationships are the overall umbrella under which the strategy evolution takes place. Directors' Workshops are held from time to time wherein the top management analyses business results and sets strategic direction keeping in view the anticipated market/customer requirements. Strategy for future growth also takes into account necessary HR interventions and process/ technology improvements that are required to sustain growth. ERP and KM integrating these business and functional strategies.

The strategy planning process starts with various internal and external factors such as present and Sustainability analysis etc. The overall strategy evolution process is a multilevel process in line with company's vision and corporate guidelines. The long term strategies with a time horizon of five years have been worked out and a planning exercise is going on to finalise a road map for 2020. These strategies are focused on volume growth, operational efficiency and value-added product-mix aimed at making Bhilai Steel Plant a leading integrated steel producer with a low-cost positioning.

Our approach to Sustainability: “Corporate sustainability is a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments.” BSP has identified key sustainability issues for its activities, products and services

Key Sustainability Themes and Principal Issues of BSP

		KEY THEMES	PRINCIPAL ISSUES
	ECONOMIC	1.0 Profitability and Growth 1.1 Earn return on investment and thus generate resources for development 1.2 Promote redistribution of income and wealth 1.3 Create employment opportunities 1.4 Promote balanced regional development 1.5 Assist the development of small scale and ancillary industries 1.6 Help in the rapid growth and industrialization of the country and create the necessary infrastructure for economic development.	Improved Productivity Consistent profit growth Employee satisfaction Supplier satisfaction Customer satisfaction Minimising defects Delivery compliance Cost competitiveness Raw material availability and cost. Labour Productivity Stock Price of Company Exports Value added Operating cost Return on capital employed Revenue growth Investment on new products and processes New product development
	ENVIRONMENTAL	2.0 Effective protection of environment 2.1 Resource Conservation 2.2 Byproduct Management 2.3 Pollutants reduction 2.4 Hazardous waste management 2.5 GHG reduction and carbon management, CDM 2.6 Environmental Studies 2.7 Eco-Products	Process management and technological parameters Expenditure on Research and Development Investment and strategic planning, Legal Compliance Energy use and efficiency Resource efficiency Waste management and recycling, Land use and Biodiversity Reduction of CO2 emissions Reduction of ozone depleting substances Hazardous waste management Green belt development Water Conservation Environment Accounting High Functionality environment friendly steel products Life Cycle Assessment Green Supply Chain
	SOCIAL	3.0 Social progress which recognizes the needs of every one 3.1 Respect for employee, its health & safety 3.2 Working with community 3.3 Partnership working	Training and skill development of employees Attract and retain the employees Equal opportunities Freedom of association and collective bargaining Equitable terms and conditions Maintaining morale and employee satisfaction Code of conduct and ethics Participation in decision making Quality of life Stakeholder engagement and accountability Expenditure on community development, education Health and infrastructure Value creating partnership Human rights issues Job opportunities

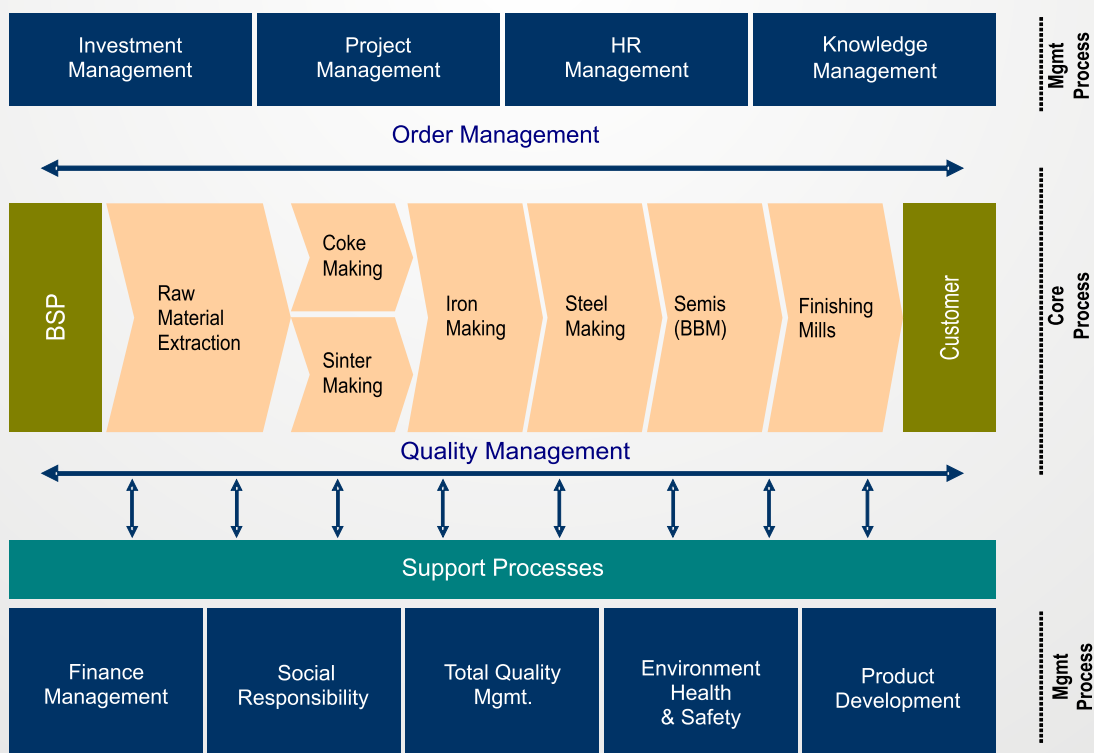
Various groups working in BSP for collecting and analyzing information, both internal and external, and making specific recommendations in each area for reviewing and updating policies and strategies. The external environment is scanned with the help of market research group of CMO, Business Planning Group in Corporate Office, Cross-functional teams and Consultants.

Various Groups in BSP for collecting & analyzing information for making domain specific recommendations

- | | |
|--|---|
| <ul style="list-style-type: none"> Expert committees <ul style="list-style-type: none"> Maximum capacity utilization Iron Making Steel Making Utilities Rolling Traffic Product Development Group Environment & Energy Management group Training & Development Joint Venture Task Forces Statistical Quality Control & OR Group Cost Control Group | <ul style="list-style-type: none"> Taxation Cell (Impact of Tax & Excise Changes) Import Cell (Exim Policy) Total Quality Management Group Knowledge Management Task Force. Task Force for Six Sigma Deployment Financial Management Project Management Group ERP Task Force MES Core Group Task force for logistics for sustaining growth plan. Task force for e-procurement and e-payment. |
|--|---|

At BSP, the policies and strategies are deployed through a framework of identified processes.

Flow of core processes, their interactions with support processes and Management Processes.



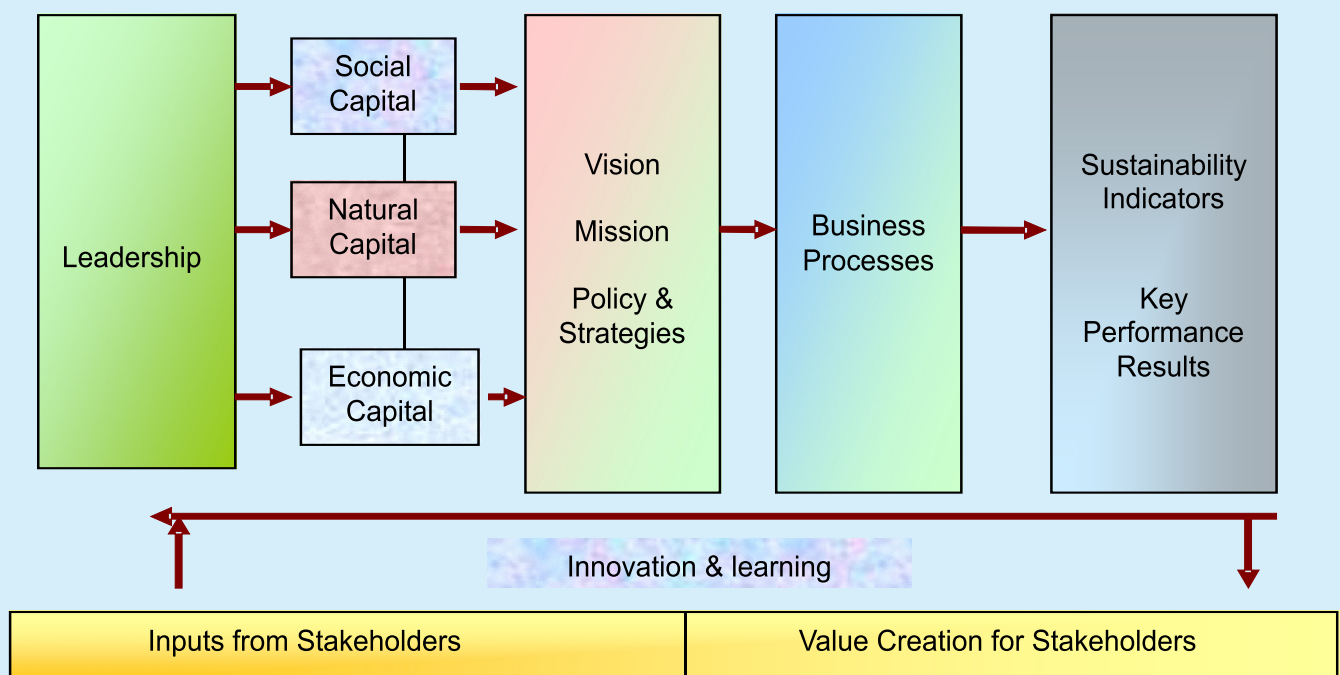
Management tools and concepts adopted by BSP

<input checked="" type="checkbox"/> Quality Management Systems (ISO 9001:2000)	<input checked="" type="checkbox"/> Environment Management Systems as per IS/ISO 14001	<input checked="" type="checkbox"/> Clean Technology/ Pollution Prevention
<input checked="" type="checkbox"/> Quality Circles	<input checked="" type="checkbox"/> Environment Performance Evaluation	<input checked="" type="checkbox"/> Environment consideration at design stage
<input checked="" type="checkbox"/> Knowledge Management	<input checked="" type="checkbox"/> Life Cycle Assessment	<input checked="" type="checkbox"/> Environment Impact Assessment
<input checked="" type="checkbox"/> Six Sigma	<input checked="" type="checkbox"/> Environment Management Information System	<input checked="" type="checkbox"/> Sustainability Reporting
<input checked="" type="checkbox"/> Benchmarking	<input checked="" type="checkbox"/> Clean Development Mechanism	<input checked="" type="checkbox"/> Occupational health & Safety (OHSAS 18001)
<input checked="" type="checkbox"/> ERP/MES	<input checked="" type="checkbox"/> Environmental Accounting	<input checked="" type="checkbox"/> Social Accountability (SA 8000)

Sustainability Model of BSP

Leadership of the organization at various level gives emphasis on balanced approach towards economic, natural and social capital. The utilization of these resources has been done in such a manner that the impacts of the operations are minimized and the value creation is maximized. Assessment of impacts on these capitals provides direction towards formulation of company's vision, goal, policies and strategies. These strategies are subsequently implemented across the various business processes of the organization. Key performance results are monitored by the management at various level through systematic identification of sustainability performance indicators.

Indicators provide fuel to the employees for innovation and learning, which is again used as feedback for re-envisioning and updation of strategies. Stakeholders of the company play a predominant role in identification of key sustainability issues. Inputs of the stakeholders are used for preparation of sustainability objectives and targets. After implementation of objectives and targets, the value creation is evaluated and communicated to the stakeholders. The diagrammatical representation of BSP's sustainability model is given below:



Sustainability Strategy



Bhilai Steel Plant's sustainability strategy aims to integrate the economic, environmental and social aspects. BSP not only focuses exclusively on improving the production, sales results and performance but also give thrust to achieve improvements on all fronts including safety and health of employees, environment and the all round development of nearby areas.

BSP has been committed to the major challenge towards its contribution to the welfare and well being of current generation without compromising the potential for a better quality of life of future generations. BSP has targeted itself to adopt environment friendly technology and ensure high level of health and safety standards for workers and communities while implementing the strategy to enhance shareholder value and ensure long term viability to the company. The business strategies along with environment, social and innovation approach adopted at BSP are summarized below

Business Strategies

- ❖ Profitability with sustained growth
- ❖ Retain/Enhance market share and deliver world class products
- ❖ Enhancing shareholders value and adherence to financial discipline
- ❖ Sustainable growth through investment in state of art technologies and timely completion of projects
- ❖ Ensuring profit through Innovation and new technologies
- ❖ Reducing cost of production
- ❖ Increasing the operational efficiencies and process yield
- ❖ Quality improvement and ISO 9001 implementation
- ❖ Flexibility to suit market dynamics and customer needs
- ❖ Customer & Supplier Partnership
- ❖ New product development to meet market/ societal needs

Environment Strategies

- ☒ Implementation of EMS-ISO 14001 standard
- ☒ Reducing Particulate emission, effluent discharges
- ☒ Enhancing solid waste recycling and toxicity reduction
- ☒ Resource Conservation
- ☒ Improving energy efficiency and reducing CO2 emissions
- ☒ Biodiversity – Afforestation
- ☒ Water conservation and recycling to achieve zero discharge
- ☒ Life Cycle Assessment and Benchmarking
- ☒ Rainwater harvesting
- ☒ Opting for renewable
- ☒ Development of CDM projects
- ☒ Creating Environment Awareness and skill development

Social Strategies

- ☒ Health and Safety of employees Implementation of OHSAS - 18001
- ☒ Attract and secure human resource skills and propagating the culture of Learning
- ☒ Compliance to SA 8000:2001, ILO conventions and GRI
- ☒ Structured stakeholder engagement & Providing services to the community
- ☒ Conduct business with high ethical standards.
- ☒ Sports and Cultural activities
- ☒ Ancillary development
- ☒ Community Initiatives
 - Employment Generation and sustainable livelihood
 - Medical & Health Care
 - Education
 - Infrastructure Development
 - AIDS Control
 - Water and Sanitation
 - Women Empowerment



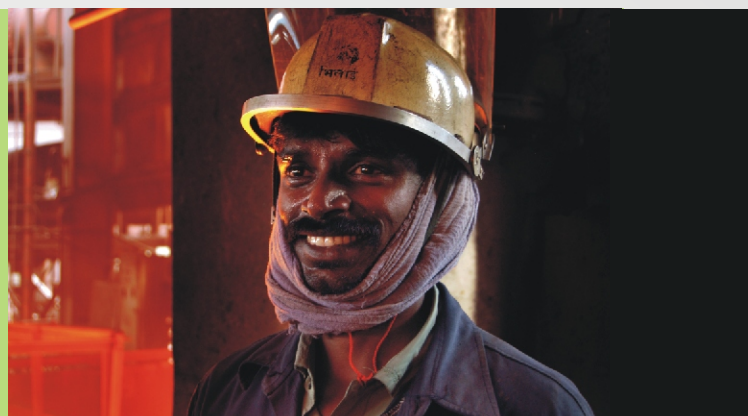
Innovation

- ☒ Process Innovation - Larger Blast Furnaces, Coal dust injection, continuous casting, walking beam furnaces, Yield improvement, energy efficiency improvement projects
- ☒ Material Innovation- Use of Iron ore fines, application of slag, recycling
- ☒ Product Innovation- High functionality steel products, light weight , high strength, longer service life, high temperature and fire resistant
- ☒ Management Innovation- Benchmarking, IMS, Six sigma, Knowledge management, ERP
- ☒ Application Innovation- Ship building, construction, ATM, boiler quality plates, long rails
- ☒ R&D in product & process development , material & energy conservation



Identification of Key Sustainability Indicators

For evaluating the sustainable performance of steel industry, all the three pillars of sustainability viz. economic, environmental and societal performance are addressed. The sustainability indicators for the corresponding sustainability issues have been identified. Quantitative indicators were selected for the various dimensions of sustainability. The identified key sustainability indicators for economic, environmental performance and societal performance are discussed in their respective chapters.



Key Opportunities and Risks

More than two decades of continuous profit, building new capabilities, massive social infrastructure with one of the largest green blanket coverage in an urban locale, adopting tribal children for bringing the underprivileged into the mainstream, free education and health facilities for poor are shining symbols of triple bottom line excellence leading to Bhilai becoming an industrial and educational hub in Central India. BSP has been awarded and recognized by eminent institutions and bodies for excellence in a wide area of activities.

The most critical strategic challenge for the organization as of present times is the ongoing implementation of Modernization and Expansion projects which envisage BSP to become a 7 Million Tonne plant at an estimated investment of approx. Rs 17000 crores. The development of Rowghat Mines is being undertaken on priority after the much awaited clearance was obtained from Government agencies. SWOT matrix of BSP is given in the following figure.

SWOT Analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• Huge repository of knowledge in iron / steel making and Skilled Manpower• Excellent work-culture• Adaptability to change• Economy of scale• Captive Iron Ore Mines and Flux Mines• Diverse product mix (Plate, Rail, TMT etc)• Energy efficiency• Strong financials• Customer loyalty• Countrywide marketing network of CMO• Adequate land bank for future expansion• Research facilities – RDCIS / CET• Good Training Facilities (MTI, BMDC,HRDC)	<ul style="list-style-type: none">• Outdated technology in many areas• Dependence on imported coal• Structural bottlenecks• Increasing silica in iron ore as the mining is going deeper.
Opportunities	Threats
<ul style="list-style-type: none">• Growing domestic and World demand• Low domestic per capita steel consumption• Increased demand for value added products• Investment opportunity for growth	<ul style="list-style-type: none">• Rising input costs; Imported coal availability• Emerging competition in Rails and Plates• Depleting iron ore reserves in currently operative mines• Dumping of steel by foreign Companies.

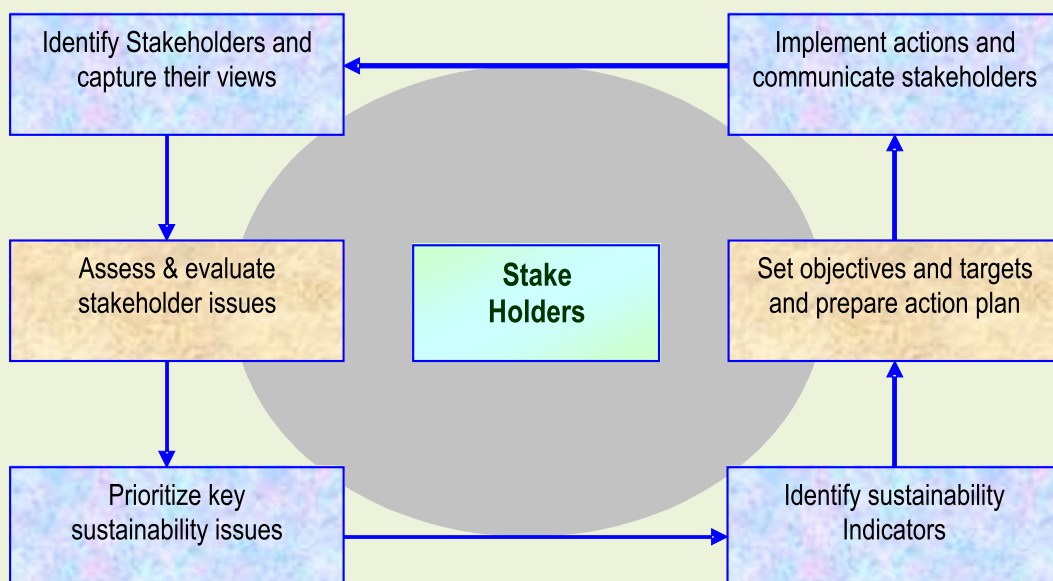
Stakeholder Engagement

Engagement is an essential element of our business. The aim of the engagement is to ensure benefit to both stakeholders and company. It helps us to learn from stakeholders to identify and manage risks, to build trust and strong relationships, and to identify ways to improve our performance.



Right since inception of BSP, social responsibility has been embedded in our management system, which enables us to give prime importance to society. The identification of stakeholders originates from the vision of the company. The vision indicates that all efforts shall be directed towards profitability, customer satisfaction, employee satisfaction, establishing value partnership with suppliers and social development through contributing to nation. Thus the stakeholder base of the company encompasses Government, Shareholders, Customers, Suppliers, Community and the Employees as a part of implementation of strategies for addressing critical success factor.

A survey has been conducted for stakeholder management. Based on the feedback from various levels of the organization and stakeholder's perceptions, their concerns are identified and prioritized which are described. The information related to sustainability is gathered from stakeholders by concerned departments of BSP. Key sustainability issues are prioritized by Management. Objectives and targets are set for the corresponding sustainability indicators and budgets are allocated for its implementation. The stakeholder engagement process for BSP is shown.



Stakeholder Concerns, Responsibilities & their Benefits

Stakeholders	Prioritised Stakeholder Concerns/perceptions	Responsibility (Process Owners)	Benefits
Shareholder	Profitability of the company, Creation of wealth, Stock price, Grievances & complaints	Core, support & mgmt Processes, Marketing, Finance	Wealth creation for shareholders
Employees	Safe and healthy working condition, Good remuneration packages & professional growth, Quality of life & welfare measures, Training & career development	Personnel, Town Services, HRD, Safety & Health	Motivated, satisfied and enthused workforce
Suppliers	Partnership with value creation, Timely payment, % of local suppliers, Supplier satisfaction	Materials management, Finance, AD&VD	Satisfied suppliers
Customers	Partnership with value creation, Product Quality, delivery compliance & customer satisfaction, Complaints, Consumer privacy	Marketing, RCL, Concerned shops	Lasting relationship, satisfied customers
Community	Quality of life, Job opportunities, Education, Welfare measures, Medical facilities	Personnel, CSR, Town Services, M&HS	Socio-economic development of the region, Partnership in progress
Government	Revenue and tax distribution, Profitability, Employment & contribution to GDP, Safe working & environment compliance	Core, support & mgmt processes, EHS	Contribution to exchequer to Govt, employment opportunities, import independence
Banks & Insurers	Financial risk, Debts and borrowings, Potential liabilities, Compliance to statutory requirements	Finance, Law, Projects	Safe investment, contribution to economy
NGOs	Environment quality, Human rights issues, Freedom of association, Compliance to Child & forced labour	Personnel & Admn, EHS, PRO	Safe and healthy workforce, environment friendly operations, ethical operation, compliance to standards
Regulators	Environmental compliance, Human rights issues, Number of accidents, Compliance to ILO conventions	EHS, Personnel & Admn, Law	Legal Compliance, beyond compliance
Professional	Partnership with value creation, Employment & contribution to GDP, Training & development, Ethics violations	HRD, CSR, EHS, Personnel & Admin	Knowledge building, value creation, collaboration
Competitors	Knowledge sharing, Partnership with value creation, Anti competitive behaviour,	Core, support & mgmt Processes, marketing, PRO, R&D	Knowledge sharing, best practices, ethical business

Stakeholder Concerns, Responsibilities & their Benefits

Stakeholder	Forum for Assessing Requirements, Communicating Directions & Receiving Feedback	Frequency
Shareholders*	Annual General Meetings; Quarterly and half-yearly reports to shareholders; Shareholder Relations; Meets, Investors Survey	Annual As per plan As per Plan
Customer	Customer meet; MD's conferences with customer groups, Sales Visits to Customer & Customer Visit Report, Customer Satisfaction Survey, Prime Minister Trophy survey and feedback	Annual & or As per plan
Suppliers	Vendor meeting, Meeting with Suppliers,	As per plan
External Public/ Govt./regulators	Meetings with Central & State Govt./Steel Ministry/ Trade Bodies, Industry Association, NGOs, Visit of Parliamentary committee, PM's Trophy team, Visit of central and state Govt. officials, Ministry of Environment & Forests etc.	Regularly through meeting / publications
Community	Community meeting, Mahila Samaj Meeting, Interaction of Doctors on health issues, Involvement of senior Officials as a chief guest in local society functions (education, health, sports, culture etc)	As per plan
Employees	Production committee meeting, Safety and welfare committee meeting. Communication with employees discussed in social performance indicators	As per plan
NGOs/Professional bodies	Visit to plant, seminars, conferences	As per plan

* BSP as such does not directly communicate with shareholders. Communication is being done at SAIL level.

The following information is generated by stakeholder consultation/ engagement

- ☒ **Shareholders** essentially provide a feedback on the overall performance of the SAIL and its implications as regards market capitalization and creation of shareholder value. The process primarily aims to serve as a platform for the shareholders to express their opinion, views, suggestions, etc., to understand the influencing factors in their investment decision making process, to gauge the communication gap, if any, and to build and strengthen the relationship between the Company and its shareholders.
- ☒ **Employees:** The communication channel with employees at different levels and the issues discussed are given above. The information on civic amenities in the town like hospital services, water supply and electric supply, education, etc. is received from the employees during the discussions and is used in business decision-making process.
- ☒ **Supplier** engagement aims to create win-win collaboration between BSP and the suppliers, who are increasingly being seen as business partners rather than suppliers.
- ☒ **Customer** engagement provides information essentially on the user needs; need satisfaction and product quality and functionality.
- ☒ **Society:** Top Management reviews the status of the efforts undertaken by BSP for community and rural development. The ED (P&A) carries out the regular reviews of jobs undertaken by Town Services Department for peripheral development and the activities for the welfare of women.
- ☒ **Government and External Public:** The meetings with Government, Steel Ministry, Environment Ministry, and Trade Bodies are aimed at understanding the requirement under statutes related to steel and allied business. This also includes the meetings with Factory Inspector, Labour Commissioner, Police, District Administration, State Pollution Control Board, State Electricity Boards, Electrical Inspector, and Boiler Inspector etc.

Use of information from stakeholder engagements



The feedback received from shareholders at SAIL level is often manifested in the market capitalization and share price performance of the company. This feedback forms one of the significant inputs to the strategic plan development and the consequent strategic objective setting. The inputs received from customers form the basis for product improvement and products & services development initiatives, necessary for customer retention, market penetration and development. The information generated during supplier engagement essentially focuses on identifying areas with conflicting goals such as payments, material rejection information etc. This has a bearing on Working Capital Management and inventory management primarily.

The feedback is also used to finetune the vendor rating and evaluation procedure. The expectations of employees are also systematically captured and actions are initiated to align the goal of company and that of the individual for ensuring professional growth, retainment and motivation. The feed back from these stakeholders is inherent in the performance indicators like, Customer Satisfaction Index & Employee Satisfaction Index. The feedback received from the villagers, local people is used to plan for their development in the areas of road, health & hygiene, sanitation, drinking water, irrigation, etc. The feed back from Government officials is used to implement the guidelines and directives from **central and local authorities**



SAIL Board Committees [SAIL]

Audit Committee

The primary function of the Audit Committee is to assist the Board of Directors in fulfilling its oversight responsibilities by reviewing the financial reports; the Company's systems of internal controls regarding finance, accounting and legal compliance that management and the Board have established, and the Company's auditing, accounting and financial reporting process generally. The Audit Committee reviews reports of the Internal Auditors, meets Statutory Auditors and discusses their findings, suggestions and other related matters and reviews major accounting policies followed by the Company. The Audit Committee reviews with management, the quarterly and annual financial statements before their submission to the Board. The minutes of the audit committee meetings are circulated to the Board, discussed and taken note of.

Shareholders Investors Grievance Committee of SAIL

A Shareholders/Investors Grievance Committee under the Chairmanship of a non-executive director comprising of two whole time Directors as members is functioning to look into the redressal of shareholders and investors complaints like non-transfer of shares, non receipt of balance sheet, non receipt of declared dividend etc. Number of shareholders complaints received during the year was 51. All, 51 complaints were resolved during the year

Committee of Board

The terms of reference of the Committee of the Board (COB) are to approve capital expenditure schemes

within the stipulated limits and also to periodically review the Company's business plans and future strategies. Being a Government company the nomination and fixation of terms and conditions for appointment as Director is made by Government of India.

The Non-Executive Directors are paid only sitting fees for each Board/Board Sub-committee Meetings attended by them. The salary of the whole time directors is fixed and does not include performance linked incentive except amount payable as per the Productivity Linked Incentive Scheme of the Company.

There were no transactions of material nature by the Company with promoters, the directors or the management, their subsidiaries or relatives etc that may have potential conflict with the interests of company at large. The non-executive Directors had no pecuniary relationships or transactions vis-à-vis the company during the year except receipt of sitting fee for attending the meetings of the Board/Board Sub-Committee.

Quarterly results are published in prominent daily newspapers as per requirements. The quarterly/ Annual results are made available at the website of the Company. The Management's Discussion & Analysis Report forms part of the annual report. Any shareholder including small scale investors are communicated about annual general meeting.

The company has in place a Code of Conduct applicable to the Board Members as well as the senior management and the same has been hosted on the company's website. All the Board members and the senior management personnel have affirmed compliance with **the Code of Conduct as on 31st March 2010.**

Governance System & Policy

The various issues pertaining to management of economic, environmental and social areas collected, compiled & monitored through various Divisions of Corporate SAIL Office. For the Board meeting, the agenda papers along with status report on economic, environment and social performance including legal compliance are made with the help of information provided by various units in advance to all the Board Members before meeting for review, comments and suggestions during the meeting. The feedback from board members is analysed by the top management and considered for business decision-making. The executive compensation is based on the achievement of individuals in the financial and non-financial area. The financial benefits are based on the performance of the individual shops in the form of incentives. Incentives are fixed on the basis of the performance & quality targets finalized during the beginning of the year. Non financial benefits include various motivation schemes & awards.

Programme and Procedure for Sustainable Development

The various departments of BSP like Personnel and Administration, Environment Management, Safety, Occupational Health Services, Town Services, Finance, Medical and Health services etc have programmes and procedures for achieving the sustainability objectives and goals. For addressing the triple bottom line, programmes and procedures are described for societal, environmental and economic aspects of BSP.

Overarching Policies and Management Systems

National's interest shall be the top most concern for the organization, which is duly reflected through the Company rules. The essence of the public sector is to provide a platform for enhancing the socio and cultural development of the region. The organization is committed to follow the govt guidelines pertaining to Central Vigilance Committee (CVC). To this end the company has organised many vigilance awareness programmes for employees, vendors and customers. Thrust has been given to e-commerce & e-payment. This has increased transparency in company's mode of conducting business.



Environmental & Social Programs for Contractors

Stringent procedures have been detailed under Environment and works safety policy guideline for contractors, including strong punitive actions for defaulters. Such norms and guidelines are communicated to all the contractors. These issues are discussed at different levels of the management. All new "entrants" from the contractors are taken through a Safety and Environment Induction training without which gate passes are not issued to them for working inside the Works premises.

Product & Services Stewardship Initiatives

Life Cycle Assessment is carried out from cradle to gate for all steel products to systematically analyse the inputs and outputs which can have adverse impact on environment. Targets are set as a part of annual business plan to continually improve the environmental and social impacts of our products, services and activities.

ECONOMIC PERFORMANCE INDICATORS

WSA Sustainability Indicators for Economic Performance: 2009-10

No.	Indicator	Units	Indicator value (World Avg.)	BSP's Value
1	Investment in new processes and product	% of revenue	9.0	7.9
2	Economic value distributed	% of revenue	70.4	93.68



The financial strategy of Bhilai steel plant is to maximize its profitability through optimal use of resources. This is driven by the organizational objective of becoming a leader in steel business in quality, productivity & profitability. The achievement of financial results over a period of time indicates the efforts made towards optimal use of financial resources in achieving the objective. Capital Expenditure Plan is made for a period of 5 years indicating estimated outlays drawn up in line with long term policy and strategy of SAIL. Estimation & Planning of financial resources is derived from the Annual Business Plan of BSP, both short and long term Schemes are prioritized according to their need & relative strategic importance.

BSP is the market leader in Rails & Plates and new facilities are being added to maintain this leadership position. The key new facilities planned to come up at Bhilai Steel Plant are Universal Rail Mill (1.2 MT), Bar and Rod Mill (0.9 MT), Steel Melting Shop (SMS-III) of capacity 4.0 MTPA, Higher capacity Blast Furnace of 4060 cum (BF-8) and Coke Oven Battery No. 11 - 7 M tall COB. With these facilities BSP will be producing 7.0 MT Crude steel by 2012-13. Most of projects are in different stages of execution. The cost of 7.0 MT expansion is Rs. 17,000 crores.

SAIL-Econometric model, which is being used to forecast demand of steel products, considers GDP as well as Index for Industrial Production (IIP) depending upon the products for particular market segment. The outcome is presented in Annual Business Plan meeting. Analysis of demographic indicators has led to establishment of country-side Rural Dealership Network and Steel Processing Units (SPUs).

Strategies envisaged for ABP:2009-10

- ☒ Leveraging cost competitiveness by focusing on cost of major input.
- ☒ Achieving economy of scale
- ☒ Enhancement of special steel and value added products.
- ☒ Timely completion of existing and expansion linked projects.
- ☒ Achieving maximum commercialization of new products as planned.
- ☒ Product/ Process improvement/ customization as per customer requirements.
- ☒ Improving Techno-economic parameters
- ☒ Enterprise-wide IT enabled business process automation.
- ☒ Implement Cost Reduction and innovative measures.

For a financial year, an optimal product-mix is finalized after a series of deliberations amongst representatives from CMO, BSP and Corporate Office. Annual plan is duly supported by associated planning in all the functional areas including production, equipment availability, resources, environment management, human resource, etc. Annual plan is prepared for different shops/ equipments to help monitor performance.

While the product-mix strategies, in the annual plan, are based on business environment / market trends / demand forecast prevailing at the beginning of the year, it is continuously reviewed in line with the on-going market dynamics.

A structured interaction with representatives from CMO from different regions and plant is organised every month and the product-mix for the following month is finalised. Every month the Revenue Maximisation Team and Chief Executives of different units of SAIL meet to review and provide strategic direction.



Turnover, Gross Margin and Net Profit (Rs. Millions)

Year	Turnover	Gross Margin	Net Profit
2007-08	165178	56412	53664
2008-09	184967	52753	49655
2009-10	158743	46726	42705

Major products & Capacity utilization

PRODUCT	PARAMETER	2007-2008	2008-09	2009-10
Rails & Structural	Installed Capacity (IC) [thousand tonnes]	750	750	750
	Production Volume (PV) [thousand tonnes]	952.4	990.1	856.4
	% Utilization (PV / IC)	126.9	132.01	114.2
Plates	Installed Capacity [thousand tonnes]	950	950	950
	Production Volume [thousand tonnes]	1294.4	1203.2	1208.6
	% Utilization (PV / IC)	136.2	126.6	127.2
Merchant Products	Installed Capacity [thousand tonnes]	500	500	500
	Production Volume [thousand tonnes]	730.6	756.2	655.1
	% Utilization (PV / IC)	146.1	151.2	131
Wire rods	Installed Capacity [thousand tonnes]	420	420	420
	Production Volume [thousand tonnes]	625.6	655.0	627.01
	% Utilization (PV / IC)	148.9	155.9	149.2

Managing Risk to Financial Resources



The risk management process at Bhilai Steel Plant is done by timely analysis and reporting of various operational results/parameters. Risk management has also been identified as a part of strategy development process. For assessing risks and identifying ways of addressing these risks, Enterprise Risk Management (ERM) process has been started in BSP. M/s Delloite has been appointed as Consultant for rolling out ERM process across the organization. Risk Register has been prepared for BSP. Risks have been identified, categorized and ranking of risks has also been done. Risk officers and risk management committee under the chairmanship of MD have made action plans to mitigate them.

BUSINESS RISK	RISK ASSOCIATED WITH CAPITAL INVESTMENT
<ul style="list-style-type: none"> • Focus on increasing turnover, contribution margin & reduction in operating cost. • Reduction in Fixed Costs through thrust on reduction of various contractual expenditure. • Variability of Cash flow is controlled by prioritization of outstanding payment position to avoid any risk of business interruption 	<ul style="list-style-type: none"> • Prioritization of various proposals to meet the availability of fund, essentiality & to minimize the risk of obsolescence. • Sensitivity analysis is done for all major projects so that IRR is judged w.r.t. variation in capital cost, operating cost & net realization. • Physical & financial progress of Projects is monitored by PMC & finance to avoid the risk of time and cost overruns.
LEGAL & STATUTORY RISK	OTHER FINANCIAL RISKS
<ul style="list-style-type: none"> • Compliance to statutory requirements like Pollution control norms, issues related to Industrial and Factory acts, to avoid exploitation of BSP's financial resources in the form of penalty. 	<ul style="list-style-type: none"> • Mega Insurance policy to cover major assets against fire hazards. • Transit insurances to cover the transportation risks of materials/machinery, Corporate office covers the coal transit risks. • Fidelity Insurance and Cash in Transit Insurance to cover cash at BSP chest. • For non-turn key jobs, if the quoted values are less than 85% of the estimates, Bank guarantees are sought to ensure execution of the work. • For high value procurement as well as works contracts, the financial condition of the contractor/suppliers is assessed before award of the work. • Public liability insurance to cover risks

Economic value generated & distributed

(Rs. in Millions)

Economic value	2008-09	2009-10
Economic Value Generated	165882	149608.8
Operating Costs	108539.6	96440.5
Employee wage & benefits	21846	13833.4
Payments to providers of capital	649.9	1330.1
Payments to government	23436	17904.2
Community Investments	3548.3	2607.6
(Total Expenditure)		
Economic Value Retained	7862.2	17493

Export Performance

Year	Export (Rs. in Million)
2007-08	6452.9
2008-09	4614.5
2009-10	3013.6

Working Capital

Year	Working Capital (Rs. in Million)
2007-08	1948.50
2008-09	2126.87
2009-10	2414.7

Income Details

Income Details 2009-10	Rs. in Million	%
Home Sales	155580.3	91.85
Exports (including export incentive)	3162.7	1.87
Interest Earned	363.2	0.21
IPT	7317.4	4.32
Prov Write-back	27.5	0.02
Other Revenues	2925	1.73

Expenditure Details

Expenditure Details 2009-10	Rs. in Million	%
Raw materials	60119.5	53.87
Salaries & Wages	13833.4	12.40
Stores & Spares	10074	9.03
Power & Fuel	9515.8	8.53
Repairs & Maintenance	1989.9	1.78
Misc. Expenses(including freight)	12050.2	10.80
Depreciation	2691.1	
Interest	1330.1	

Net Sales & Other Financial Indicators for last three years



S. No.	Parameters	2007-08 (Rs Million)	2008-09 (Rs Million)	2009-10 (Rs Million)
a.	Gross sales	158743	184967	165178.1
	Excise Duty	12706.2	21658.7	22789.3
	Freight Outward	2660.1	2982.4	2739.6
	Export Expenses	72.8	79.7	42.8
	Conversion Charges	1173.4	977.5	446.4
	Contribution to JPC funds	0	0	0
	CMO's share of Expenses	1260	1332.8	1096.4
	Less: TOTAL	17872.5	27031.1	27114.5
	NET SALES:	140870.5	157935.9	138063.6
b.	Other Income	11813.4	8226.6	5004.6
c.	Total (a+b)	152683.9	166162.5	143068.2
d.	Total Expenditure	105957.9	113402.1	86648.6
e.	Operating Profit	46726	52760.4	56419.6
f.	Less: Interest	1330.1	649.9	589.1
g.	Profit before depreceation	45395.9	52110.5	55830.5
h.	Less: Depreceation	2691.1	2456	2166.8
i.	Profit before Taxes	42704.8	49654.5	53663.7
j.	Add: Balance brought forward from previous year	295245.9	245591.4	191927.7
k.	Balance carried over to Balance Sheet	337950.7	295245.9	245591.4

Modernization and Expansion Programme

During 2009-10 capital expenditure incurred for projects was Rs. 1450 crore, which is the highest expenditure during a year since inception.

Project Commission

(Other than 7.0 MT expansion)

- ❖ Installation of HAGC & PVR at Plate Mill.
- ❖ Replacement of 2 Nos. Coal Charging Cars in COB # 2 & 4.
- ❖ Installation of End Forging Plant for Thick Web Roll.
- ❖ Installation of New Slab Caster, RH Degasser & Ladle Furnace in SMS-II.
- ❖ Rebuilding of Coke Oven Battery No. 5
- ❖ Installation of MSDS-V & Transmission Network for evacuation of 280 MW of Power BESCL expansion project (PP-3)
- ❖ Installation of MSDS-VI.
- ❖ Cleaning /Rehabilitation of underground pipelines by No-dig Technology and CCTV survey of cleaned/ repaired lines.
- ❖ Package-VI enabling facility for installation of 30 MLD Sewage Treatment Plant with recycling facilities at Township.
- ❖ Construction of 146 shops near existing vegetable market at Ruabandha.

Projects Completed (Under 7.0 MT Expansion)

- ❖ Package-III - Installation of Cooling Beds, Pliers & Other Equipment under modernization and Augmentation of capacity of Plate Mill.
- ❖ Package-VI - Installation of CNC Roll Grinding M/c under modernization and Augmentation of capacity of Plate Mill.



Financial implication and other risks and opportunities for the organization's activities due to climate change (2009-10)

Growth Strategy	Activity*	Expenditure (Rs. lakhs)	Benefit to Business (Rs. lakhs)
Clean technology solutions	Investments in clean technology measures like electrical energy & thermal energy conservation .	712.0	1472.0

* Apart from this various other projects have been identify under the CDM & VER. Investment and benifit for those projects are being estimated.

There was no financial assistance received from government during the year 2009-10.

Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.

Minimum Wages :

Skilled :

Rs 214 per day with 26 days Rs. 5564/-

Semi-skilled :

Rs 210 per day with 26 days Rs. 5460/-

Un-Skilled:

Rs 207 per day with 26 days Rs 5381/-

Standard entry level wages at BSP :

(Basic + DA) = Rs 11633/-

At present the ratio of standard entry level wage to minimum wages of skilled labour = 1.2

Policy, practices, and spending on locally-based suppliers at significant locations of operation.

In line with the guidelines issued by Bureau of Public Enterprises, Govt. of India to develop Small Scale Industries (SSI) in and around heavy industries, Bhilai Steel Plant took up an ambitious Ancillarisation programme in 1979 by declaring the then 31 existing SSI units as ancillaries and marched on to 199 units as on

date. SSI units situated in the entire State of Chhattisgarh and the ancillary units are given special concession during procurement of spares.

A separate department known as Ancillary development & vendor development under Material Management is functioning at BSP for addressing these activities.

BSP has an Ancillary policy wherein local industries are accorded Ancillary status. Effective operation of special Purchase Policy for Ancillary units has resulted in a mutually beneficial relationship between BSP and Ancillary units and getting strengthened with time. Support is provided to them in the form of technical guidance, preference in tendering, exemption from submission of earnest money deposit in tenders etc.

Factors affecting the supplier's selection

While selecting the vendors, in addition to capacity, capability, quality system and the cost factors, the commitment of vendors towards Social Accountability and Environment is also taken into consideration. Inspection at the premises of the vendors are also conducted to confirm their commitment towards social accountability and are advised to adopt better practices wherever necessary.

Development of large nos. of ancillary units and their working in tandem with BSP while complying elements of SA-8000, clearly indicates the multiplier effect across the Chhattisgarh state. Proportion of spending towards local based suppliers has been enhanced by around 42%.

Spending on local based suppliers: (In Million Rupees)

Year->	2007-08	2008-09	2009-10
No. of Ancillary Units	182	199	199
No. of orders	2442	1621	1466
Value of orders placed on Ancillary Units (In Rs. Crores)	1100.7	1186.1	68.79



Procedure for local hiring and proportion of senior management hired from the local community at location of significant operation

More than 98% of the skilled/unskilled employees are from the local communities of Chhattisgarh/ MP State. The directive of Hon'ble supreme court for PSUs on recruitment on all India basis are being followed. Executives are selected at corporate level on all India basis through common competitive examination wherein local communities are free to participate. Special training is given to develop supervisory skills to the local people and selected persons are inducted to management position.

Expenditure on CSR

Year	Budget (Rs. Million)	Expenditure (Rs. Million)
2007-08	180.0	175.0
2008-09	120.0	106.8
2009-10	167.7	155.4

Development and impact of infrastructure investment and services provided primarily for public benefit through commercial in kind, or pro bono engagement

BSP has brought a significant change in the lives of local communities through its investments in infrastructure. BSP's efforts in infrastructure development of local communities include transport links, utilities, community social facilities, sports centers, health and welfare centers etc.

The impacts of the new infrastructure extend beyond the scope of the organization's own business operations.

Indirect employment creation by BSP is estimated to be 1 lakh persons. The indirect economic impacts of BSP is development of small scale industries in the Bhilai area under local ancillaries, development of housing and infrastructure for the people, schools, universities, Engineering colleges etc.

Expenditure on Society and Other Social Activities

Sl. No.	Non-core infrastructure area	2007-08 (Rs. Million)	2008-09 (Rs. Million)	2009-10 (Rs. Million)
1	Township	1724.7	2144.6	1649.6
2	Education	429	492.8	427.2
3	Medical	707.3	824.9	484.9
4	Transport & Socio-cultural	49.9	86	45.9
	Total	2910.9	3548.3	2607.6

Environmental Performance Indicator

WSA Sustainability Indicators for Environment Performance: 2009-10

No.	WSA Indicator	Units	Indicator value (World Avg.)	BSP's Value
1	Green House Gas emission	Tonnes of CO ₂ /Tonnes of Crude Steel Produced	1.9	2.75
2	Material Efficiency	%	98.1	91.90
3	Energy Intensity	GJ/Tonne Crude Steel Produced	18.0	27.42
4	Environment Management System	% of total employees working in registered production facilities	86.6	89.62



BSP, as a responsible corporate citizen is fully committed to safeguard, maintain and improve the quality of the environment and protecting human health. BSP has adopted various environmental protection measures through natural resources conservation, pollution control systems implementation and waste minimization, recycling and reuse strategies. These efforts have resulted in minimizing the adverse impacts on the environment and health of employees and people inhabiting the surroundings.

BSP's Environment Management Department is equipped with modern Environmental Laboratory, ISO: 14001 certified, for monitoring and assessing the environmental quality in and around the plant for complying with the statutory requirements and improving the environmental performance. Pollution control systems are monitored on a regular basis and the environmental issues are reviewed by ED (Works) on weekly basis. Corrective and preventive actions are initiated based on the inspection reports. Regular meetings are also conducted at shop's HOD level.

Benchmarking of Environmental Parameters

Environment Performance Indicators	2009-10	Target after BSP Modernization	Int'l Benchmark
Particulate emission load (kg/TCS)	0.72	0.4	0.22 (POSCO)
Specific Effluent discharge(kg/TCS)	0.126	Zero Discharge	Zero Discharge
Solid waste utilization (%)	80.6	98	Zero Waste
Water consumption (m3/TCS)	2.99	2.8	2.35 (RINL)
Sp. Raw material consumption (t/TCS)	3.11	2.90	2.7 t/tcs (CORUS)
GHG emission (T/TCS)	2.75	2.4	1.8 (Rautraukki)
Energy consumption (Gcal/TCS)	6.56	5.5	4.5 (POSCO)

Environment Management has been an integral part of overall management system of Bhilai Steel Plant. Any new projects require environmental scrutiny from Environment Management Department. Environmental issues are also discussed during the business strategy formulation. The key current and future environmental issues are particulate emission, effluent discharge, solid waste management, water conservation, raw material

conservation, energy consumption and carbon dioxide emissions. Benchmarking has been done for these key areas.

The environmental issues are being addressed through series of action plans, considering the national and international benchmarks. These action plans are integrated into the Corporate Plan 2012 of Bhilai Steel Plant. Annual business plans are also prepared to achieve the environmental goal of the organization.

ISO 14001

Setting pace as a leader of Indian Steel Industry, Bhilai has obtained ISO: 14001 certification for its Environmental Management Systems as per ISO 14001:2004 standard covering all the major production units and service departments. The complete EMS documentation of BSP has been maintained in electronic format through web-enabled system on BSP intranet. EMS as per ISO 14001:2004 has also been implemented at BSP Township also.

LEGAL COMPLIANCE

BSP's Environment Management Department receives information from the corporate Environment Management Division at Kolkata and Delhi and also from CPCB, MOEF and SPCB on a regular basis, and based on the information, legal requirements of BSP are assessed. Actions are initiated for complying with the various legal requirements promptly. Regular monitoring and assessment of the environment quality with effective operation and maintenance of pollution control systems has resulted in ensuring 100% legal compliance.

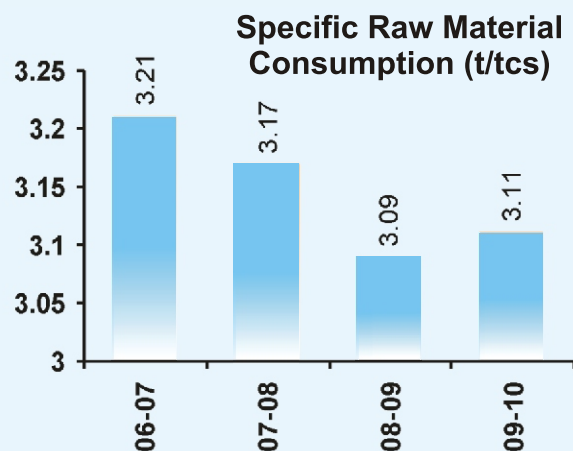
Environmental Legislations and Evidence of Compliance

Sl No	Name of Law / Regulation / Legislation / Authorisation / Consent Conditions	Year	Status of Compliance Prevailing
1	The Water (Prevention and Control of Pollution) Act & Rules	1974 (Amended upto1988) & Rules 1975	Measurement and analysis of effluent water, Operation & maintenance of ETP, Water Consent
2	The Water (Prevention and Control of Pollution) Cess Act & Rules	1977 (Amendment Act 2003) & Rules 1978	Payment to statutory authorities
3	The Air (Prevention and Control of Pollution) Act & Rules	1981 (Amended in 1987) & Rules 1982	Stack emission monitoring Work area environment & Ambient air quality monitoring , Operation & maintenance of PC equipment, Air Consent
4	The Environmental (Protection) Act	1986 (Amended in 1991) & Rules-1986 (Amended upto 2010).	Recycling / reuse of waste, Solid waste disposal Reduction of specific raw material consumption. Water consumption. Energy consumption
5	The Hazardous waste (Management ,Handling and Transboundary movement) Rules	2008 (Amended upto 2009).	Compliance as per HW rules 2008
6	Manufacture, Storage & Import of Hazardous Chemicals Rules	1989 and Amendment Rules 1994 & 2000	Safety Audits, MSDS, Disaster management plan & mock drills
7	The Public Liability Insurance Act & Rules	1991(Amendment-1992) & Rules, 1992 (Amendment-1993)	Composite Insurance by SAIL
8	The Noise Pollution (Regulation and control) Rules	2000 (Amendment Rules 2010)	Noise Monitoring & control of noise pollution
11	Ozone Depleting Substances Rules	2000	Complied. Filing of returns
12	The Battery (Management & Handling) Rules	2010	Complied. Filing of returns
13	Notification of Flyash utilization	Amendment upto 2003	Complied. Submission of annual report
14	The Bio-medical wastes (Management & Handling) Rules	1998 (Amendment upto 2003)	Complied
15	Gas Cylinder rules	Amendment upto 2004	Complied
16	Environment Impact Assessment Notification	2006	Complied.

BSP has no cases of Environmental non compliance registered by any legal authority till date. No fines/penalties were imposed during the year.

Raw Materials

Special attention is being taken to optimally utilise the raw materials. Internal scrap is recycled. Associated process materials (i.e., materials that are needed for the manufacturing process but are not part of the final product) are Refractories, Oxygen, Nitrogen, Argon, Acetylene, Compressed air, Propane, Sodium Hydroxide, Sulfuric Acid, Petroleum Coke, Aluminum, Bentonite, Fire clay, Kyanite, Casting powder, electrodes, molasses, synthetic slag, Graphite powder. Lubricants, Petro-fuels, Materials for packaging, wooden sleepers, metal strips, wire ropes etc.



Major Raw Material Consumption

Raw materials consumed (Tonnes)	2007-08	2008-09	2009-10
Iron Ore	8373326	8545571	8434847
Boiler Coal	220147	272761	202477
Coking coal	4744672	4770354	4894570
Other Coal	154890	196900	200589
Limestone	1459055	1071619	1030235
Dolomite	912734	1035613	999478
Mn Ore	7890	4066	7119
Ferro Manganese	39512	46066	44395
Ferro Silicon	6288	6451	5880
Silico Manganese	49289	50084	49057
Sulphur	12781	1433	13684
Quartz/Si-Sand	38585	40597	8897
Others	5424	2414	1612
Total	16024593	16043929	15892840
Crude steel production (MT)	5.054	5.184	5.11
Sp. Raw mat. Consumption (t/tcs)	3.17	3.09	3.11

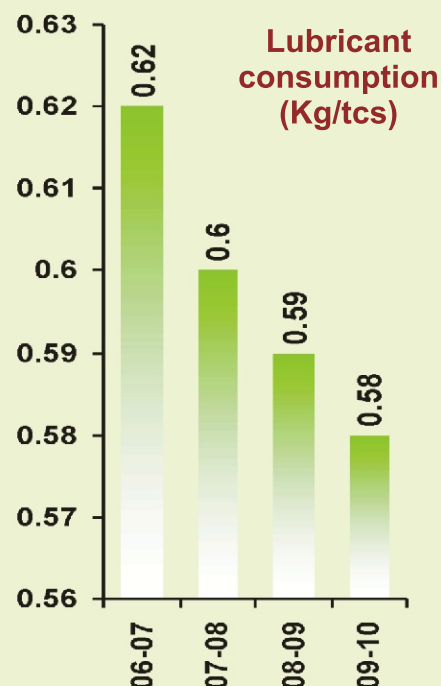


Materials used that are recycled input materials

Scrap	2007-08	2008-09	2009-10
Scrap use at SMS-1(t)	416079	393899	370676
Scrap recycling at SMS-2 (t)	277615	255659	281940
Total scrap recycled (t)	693694	649558	652616
Other materials	618966	927013	629971
Material used (t)	16024593	16043929	15892840
% of recycled materials used	8.2	9.8	12.39

Air Quality

Over the years BSP has been systematically maintaining and ensuring effective functioning of pollution control systems for improving its environmental performance and for complying with statutory norms. Earlier, process stacks were designed to 100 mg/Nm³. However, to achieve the international benchmark in stack emission load, BSP has designed process stacks for 50 mg/Nm³ as against the statutory norm of 150 mg/Nm³, in all expansion projects.



Air Pollution Control Measures during 2009-10

Fugitive Emission Control

- ☑ Water Sprinklers and Dust Suppression Systems at Raw Material Handling Plant (OHP) & Coal Yards of Coke Ovens
- ☑ Door & door-frame cleaning systems in coke oven batteries.
- ☑ State of the art air cooled doors in Coke oven Battery-3 & 5.
- ☑ Dust Extraction Systems (bag filters, scrubbers & cyclones) at material handling points of Blast Furnace, Coke Ovens, Sinter Plants, Steel Melting Shop, Power Plants.

Flue Gas Cleaning systems (Stack Emission Control)

- ☑ Wet scrubbers for Gas Cleaning Plants at Blast Furnace, Steel Melting Shop, Refractory Material Plant.
- ☑ Multi-Cyclones for flue gas cleaning at Sinter Plant-1 & 2.
- ☑ Electrostatic Precipitators (ESPs) for flue gas cleaning at Power Plants and Sinter Plant-3.
- ☑ Ceramic Welding m/cs. for Coke Ovens.
- ☑ Mist arrester at DCDA Sulphuric Acid Plant.

Source Apportionment Study: Fugitive Emission Control

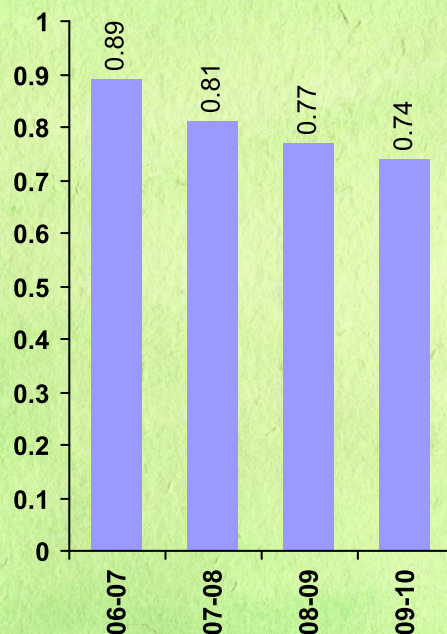
Ministry of Environment and Forest notified the new norms for 12 parameter of Ambient Air Quality (AAQ) in November 2009. Bhilai Steel Plant entrusted National Environmental Engineering Research Institute, Nagpur for "Fugitive Emission Studies to assess its impact on the AAQ at Bhilai Steel Plant.

The methodology known as "Chemical Mass Balance" will be used first time in India in any steel sector to access the contribution of pollutants by various sources and their respective share with respect to AAQ.

The modeling methodology known as Receptor Modeling will be used to derive the contribution of sources to a particular receptor.

Based on the study NEERI will recommend appropriate measures to reduce existing emission and development of an Air Environmental Management Plan for Bhilai Steel Plant.

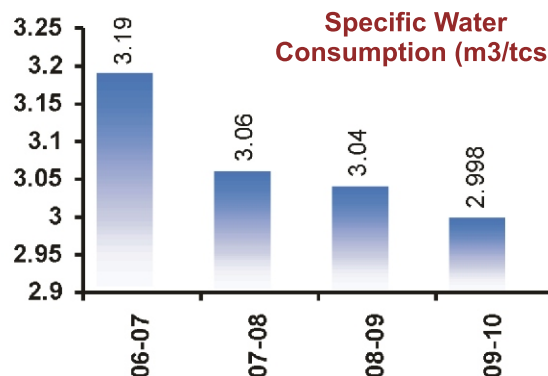
Particulate Emission Load, (kg/tcs)



Water Quality

The water quality through the plant outlets has been maintained well within the statutory norms. The thrust was on conservation of water through implementation of recycling schemes at various stages of water use. The implementation of various water conservation & recycling schemes has resulted in bringing down the specific water consumption to 2.99 m3/TCS in 09-10 from 3.04 m3/TCS in 08-09. The level achieved by BSP in water consumption is one of the best in the steel industry.

Specific Water Consumption (m3/tcs)



Water Consumption at Bhilai Steel Plant

Source			
Make-up water from canal/River to plant	25.736	25.994	25.44
Drinking water Supply to Plant	16.71	16.81	16.55
Drinking water Supply to Township	33.73	34.85	35.75
Total water drawn from Canal	85.04	85.189	83.15
Rain water collected	12.36	6.201	10.02

Make up water drawn from reservoir for plant was 83.15 Mm3 (Inclusive of supply to NSPCL storage & evaporation Losses) during the year 2009-10. No water source is affected by the withdrawals by the company.

Water consumption (industrial & domestic) at Mines (Mm3)

Name of Mine	2007-08	2008-09	2009-10
Rajahara Dalli etc.	11.59	10.74	8.23
Nandini	0.98	0.934	0.958
Hirri	0.48	0.501	0.413

Percentage and total volume of water recycled and reused.

Year	Maroda-I to Plant for industrial make up (2)	Industrial Water Recycled to Maroda-I (3)	Total Industrial Makeup water (2+3)	Makeup water % of total (2/4)*100	Recycled water % of total (3/4)*100
2007-08	25.736	53.89	79.626	32.32	67.68
2008-09	25.994	47.00	72.994	35.6	64.4
2009-10	25.44	44.36	69.8	36.45	63.55

Effluents

BSP has three outlets. Outlet-A consist effluent from BF, Foundry, OP-I, RMP-I, & storm water, Outlet-B consists effluents from MSDS-I, RTS, Diesel shed R&SM & storm water and Outlet-C consists effluent from COBPP, SP-I, SP-II & storm water etc. Only treated water is discharged through these outlets and effluent quality is meeting the norms.

The water is discharged to the rivers Sheonath & Kharun through the three outlets namely A, B & C. There is no impact on water sources and related ecosystems /habitats by discharges of water and runoff. No significant spills were observed during the year.

Effluent Discharges

Year	Outlet-A (m3/hr)	Outlet-B (m3/hr)	Outlet-C (m3/hr)	Sp. Effluent load (kg/tcs)
2007-08	51.2	80.4	930	0.126
2008-09	50	80	920	0.127
2009-10	57	88	880	0.130

Water Pollution Control Measures during the year 2009-10

- ❖ BOD Plant for treatment of phenolic effluent of Coke Ovens & Coal Chemical Department.
- ❖ Effluent Treatment Plants comprising chemical dosing with alum/poly-electrolyte/lime dosing systems, Radial Settling Tanks for Gas Cleaning Plants of Blast Furnaces, Steel Melting Shop-I & II.
- ❖ Primary & Secondary Settling Tanks for Sinter Plant-I & II for removal of suspended solids.
- ❖ Holding Pond for outlet-C to arrest Suspended Solids from the plant discharge water.
- ❖ Oxidation Ponds for treatment of fecal sewage.
- ❖ Ash pond for Power & Blowing Station.
- ❖ Recycling of water after treatment through recirculation systems/ Outlet-A.

30 Million Liter/Day Waste Water Recycling Project

A 30 million litre/day (MLD) State-of-the-Art waste water recycling plant has been commissioned during the year with following benefits:

1. Water conservation: The treated waste- water will be used as industrial make-up water in Mroda-I reservoir of Bhilai Steel Plant.
2. This will be a step towards achieving the concept of “Zero Discharge “which is a BSP's commitment towards cleaner environment.
3. Treated water recycled from 30 MLD plant to Maroda-I will be able to reduce BSP' dependence on the state Water Resource Department for makeup water.



Rain Water Harvesting

The water for industrial and domestic use in Bhilai Steel Plant is drawn from rivers and from an artificial reservoir, Maroda-I & II , constructed by Bhilai Steel Plant. Although, ground water is not being used in Bhilai Steel Plant & Township, the ground water level in the nearby area is fast depleting due to fast economic growth of the area. As a responsible corporate citizen Bhilai Steel Plant initiated various drives for the rain water harvesting including construction of recharge ponds & pits and organised various awareness programmes.

During the year following scheme has been implemented:

- ☑ Roof rainwater harvesting implemented at Plate Mill & Machine shops conserving about 35,000 M3 rain water.
- ☑ In Township the system implemented at 3 schools & 3 office buildings.
- ☑ A tank of 120000 m3 capacity has been completed in the township for rainwater harvesting.
- ☑ Study to harvest rain water & improve the recharging capacity at different location of Township has been completed. Based on the study Rainwater harvesting pits (5 nos) of more than 5000 m3 each installed in Township

Solid Waste Management

BSP has effectively adopted waste minimization strategies including conservation at source, recovery and recycling. Some of the initiatives that were undertaken, for increasing the recycling of solid wastes are sale of granulated slag, air cooled slag and recycling of flue dust, LD slag, lime and dolomite dust, mill scales and sludges.

The plant has achieved a remarkable 80.6% solid waste recycling rate, Looking into future, BSP has entered into agreement with M/s.JP Cement for setting-up of 2.0 MTPA JV Cement Plant, which will utilize 1.0 MTPA of additional granulated slag generated after 7.0 MT expansion, there by achieving 100 % BF-slag utilization. Solid waste generation and utilization figures for the year 2009-10 are shown in following table-

Solid Wastes	Generation	Recycling	Sold	% Utilisation
BF Slag Total	2199748	0	1875792	85.3
BF Flue Dust	51477	0	26094	50.7
LD Slag	341365	327426	0	95.9
LD Sludge	26297	9864	0	37.5
Other Sludges (SP, BF & THF)	95672	3317	0	3.5
Lime fines	66123	66123	0	100.0
Mill Scale	149784	149068	863	100.1
Cinder	4530	0	4515	99.7
Used/Rejected Refractory Bricks	28548	10599	9619	70.8
Lime Sludge	324.45	0	344	106.0
THF Slag	151250	0	0	0.0
Fly Ash	46612	63574	0	136.4
TOTAL	3161730	629971	1917227	80.6

Hazardous Waste Management

Guidelines given by MOEF are followed while handling, storage, transportation of Hazardous Wastes. Hazardous Wastes Material is sold to only customers authorized by MOEF/CPCB.

Use of Manifest, TREM Cards, Proper Labeling and provision of protective appliances for workers handling hazardous waste are being ensured. The handling and disposal of Bio-medical wastes has been outsourced to an approved agency.

Co-processing of Acid Tar Sludge with M/s ACC

As an innovative approach, Bhilai Steel Plant in association with ACC Cement Works, Jamul, developed co-processing of the acid tar sludge in Cement Kiln. Acid tar sludge is first neutralized with the lime powder; so as to form a dried neutralized mass & then co-process it in cement kiln (pyro-processing).

The co-processing of acid tar sludge in Cement Kiln saves huge space in the hazardous waste landfill, as the acid tar sludge has to be neutralized by lime / limestone which in-turn increases the volume / weight of total material to be stored, by two fold. The volume of acid tar sludge @ 6 Tons / day is very small in comparison with 1600 Tons / day raw materials used at ACC Jamul. However, the feeding of acid tar sludge to Cement Kiln is done keeping a close watch on operational parameters of the kiln, so that the quality of cement is not adversely affected.

Hazardous Waste Generation & Disposal at BSP in 2009-10

#	Types of Hazardous Waste	Quantity in Tonnes/KL	Neutralization & solidification
a	Used Oil & Grease	251.1	Sold/used as a fuel
b	Waste Oil	171.40	Sold/used as a fuel
c	Acid Tar Sludge	1778.40	Neutralization and Solidification
d	Tarry Waste	2829.48	Sold
e	Tar Storage Tank Residue	834.83	Sold
f	ETP Sludge	1092.47	Recycled
g	Skimmed Oil	31.43	Sold
h	Spent Solvent Type-I & II	61.33	Sold
i	Filter Cake	286.73	Recycled
j	Discarded Container of Hazardous Chemicals	190.0	Recycled (used as flower pot)
k	Copper Compounds	272.0	Recycled/sold
l	Lead Compounds	25.14	Sold
m	Discarded Asbestos	1.82	Sold
n	Mercury Are Rectifiers tank	Nil	-

Noise Control

Iron & Steel making processes in an integrated steel plant are potential sources of noise. These sources include turbo-generator, turbo-blowers, compressors, exhausters, steam & air leakages, rolling, forging, steam ejectors, pumps, extraction systems and other heavy machines. Noise is typical of an environmental issue where concern for the working environment is also directly relevant to the general environment.

☒ To reduce the impact of noise measures taken at BSP are given below:

- ☒ Bellow type tuyers at all Blast Furnaces.
- ☒ Snort Valve Silencers at Blast Furnaces
- ☒ Sound proof Acoustic Cabins at Power Plants, Oxygen Plants, and Pump Houses etc.
- ☒ Sound proof cabins at Rolling Mills.
- ☒ Blast by-pass silencers at Power Plant-I
- ☒ Acoustic silencers of Exhausters / ID Fans



सेल SAIL



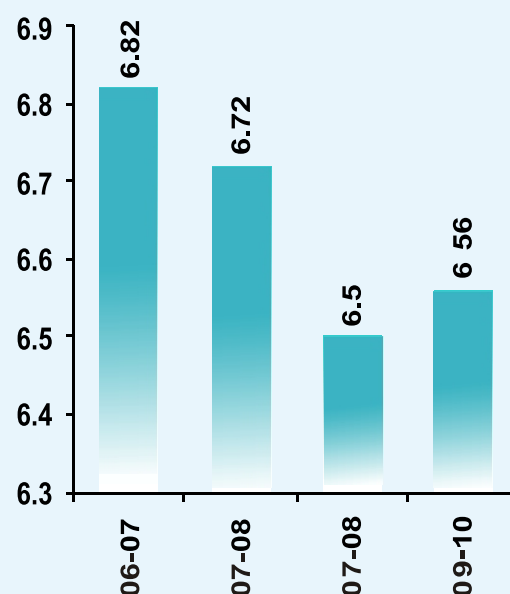
शोर के उच्चस्तर, हमारे सुनने की क्षमता को कम कर सकते हैं।
शारीरिक थकान एवं मानसिक थकान बढ़ा सकते हैं।

पर्यावरण प्रबंधक विभाग, भिलाई इस्पात संयंत्र

Energy

Energy conservation has been given prime importance in the organization. BSP has declared its energy policy and standard operating procedures are being followed to minimize the energy consumption. BSP is the only steel plant that produces 48.5% of its steel through energy intensive route of ingot casting followed by Blooming & Billet Mill. In 2009-10, Sp. Energy consumption of BSP was 6.56 Gcal/TCS. An increase of about 1.5% in energy rate over previous year has mainly been due to the plant operations coming to a total halt for a period of around 15 days in the first fortnight of February 2010, owing to a power failure in Power and Blowing Station of BSP. However, without losing heart at the unexpected set back, BSP collective rallied around to achieve the lowest energy rate of 6.333 Gcal/tcs in the month of March 2010.

Specific Energy Consumption (GCal/tcs)



Energy Purchased	Quantity (T)			Heat Content (TJ)		
	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10
Boiler Coal (Ton)dry	204736	250940	180361	3440	4216	3030
Coking coal(Ton)dry	4270204	4348809	4458229	116039	118175	121148
BF injection Coal/CDI Coal	136072	178389	184643	3698	4848	5017
LSHS (KL)	14950	13841	13034	567	525	494
Diesel (KL)	15690	13749	14079	621	544	557
Power Purchases(mwh)	1938149	1995446	2027029	19537	20114	20432
Total Purchased				143900	148421	150678
Coke	28740	9605	68170	781	261	1852
Tar products (t)	76398	24761	41651	2810	911	1532
Benzol Products (t)	17085	21687	18367	701	890	754
Total energy sold	-	-	-	4292	2062	4138
Net Energy Consumption	-	-	-	139608	146359	146540

Electricity purchased by Bhilai Steel Plant (Mwh)

Source of electricity (mwh)	2007-08	2008 -09	2009 -10
NSPCL	535411	497305	523672
DSP	76807	Nil	Nil
CSEB	1397482	1497522	659631
Total	2009700	2009952	1183303

Electricity purchased by Mines

Name of Mines	2007-08	2008 -09	2009 -10
IOC	26826343	26286686	24128919
Nandini	3761913	3011813	2660196
Hirri	1717142	1662490	1677886
Total	32305398	30960989	28467001

Energy Conservation

Some of the Energy conservation projects commissioned during 2009-10 is mentioned below.

Projects	Achievements of energy saving per year basis			Investment incurred (in lakhs)
	Power (MWH)	Heat (Gcal)	Total (Rs. in lakhs)	
Preheating of sinter charge by steam at intermediate bunker at SP-II	-	108885	337.4	Nil (in-house)
Magnetic water feeding to PMD and SMD for reduction of moisture addition in sinter mix at SP-II	-	7969.5	24.7	Nil (in-house)
Hot charging of slabs of Caster No. 6 to Plate Mill	-	57059	176.8	Nil (in-house)
Reduction in idle running of Flux routing equipment and Product Line No. 3 in SP-III	1820	-	225	Nil (in-house)
Energy saving in pump house of SMS-I by stopping idle running of pump	660	-	31.6	Nil (in-house)
Switching off of 2 nos. compressors and energy inefficient pumps in WMD and CAS	16800	-	606	Nil (in-house)
Replacement of 1200 mm dia. Mixed Gas feeding line to Plate Mill furnace with 1600 mm dia. pipeline	634	-	36	700
Installation of VFDs in Transfer Beds 17AB & 18 AB in R&SM	598	-	22.94	3
Installation of VFDs in Roll Tables 17AB of R&SM	190	-	7.61	3
Installation of VVVF drive for roller tables of MM	306	-	4	6

Modernisation for Energy Efficiency

BSP has benchmarked its energy consumption in line with WSA model for a model plant. Plan for investments have already been chalked out for modernization of the plant by the year 2012, where all energy efficient technologies will be adopted.

It is anticipated that after modernization, the present gap with international level will be eliminated and BSP will be one of the front-runner for energy conservation in steel industry. The projects conceived to achieve target Energy Rate of 5.5 Gcal/TC by the year 2012

GHG Emission

The combustion of fossil fuels like Coal, Furnace oils and other petroleum and coal based products at various process shops results in emission of Green House Gases mainly CO₂. The shops contributing to the emission of CO₂ emissions are Coke ovens (Batt. #1 to 10), Sinter Plants (No. 1, 2 & 3), Blast Furnaces (1 to 7), Steel Melting Shops (I & II), Rolling Mills (Plate Mill, Billet & Blooming Mill, Merchant Mill, Rail & Structural shop), Captive Power Plant (PP-1), Other auxiliary Shops like Foundries, Acetylene Plant, emissions due to movement of Vehicles like Locomotives, dumpers etc.

The other indirect relevant green house gas emissions are:

- ☒ Emission during transportation of raw materials from captive mines and other sources.
- ☒ Emission during transportation of products to customers.
- ☒ Emission due to movement of employees

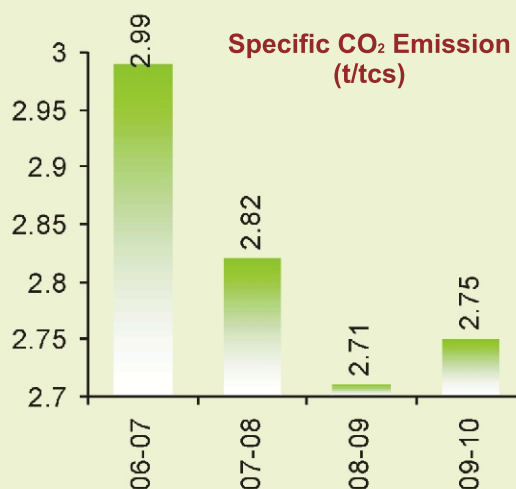
BSP endeavors to reduce environmental load through well-considered selection of transportation modes, reduction in distance, improvements in load efficiency, and introduction of information technology for communication with suppliers and consumers to reduce travel of personnel and improve their satisfaction level.

New Generation Products

The iron and steel industry can contribute to energy conservation and reduction of the carbon dioxide emission on the part of users by improving the quality, properties and application of steel products in addition to energy-saving in the manufacturing processes. Assessment of high-performance steel products will be carried out for estimation of reduction of CO₂ emissions during manufacturing and its use. We have identified some of the high functional steel products.

BSP eco-friendly products create value to customers and also help in reducing the GHG emissions during use stage by lower steel needs with high strength, high temperature resistant, fuel savings during light weight plates etc.

- Use of high-strength steels reduces the need for heavy load-bearing beams save energy and greenhouse gas emissions.
- Compared to concrete, steel intensive buildings have less impact on the environment during on-site work.
- The double-hull large vessels made from a new generation high strength and lighter steel plates increases fuel efficiency.
- Steel is the main material used in wind turbines. 3.0 megawatt wind turbine generates 280,000 MWh in 20 yr resulting in saving of about 230,000 t of CO₂.



Abatement of Green House Gases & Clean Development Mechanism

Bhilai Steel Plant has identified 24 Clean Development Projects (CDM) which have already been completed or will be taken-up under BSP, 7.0 MT expansion plan.

Three projects of BSP, have been certified under Voluntary Emission Reduction (VER). The implemented SP-3 waste heat recovery project has resulted in the reduction of 9,51,822 Tons of CO₂, BF-gas utilization in PP-1 has resulted in reduction of 6,32,000 T of CO₂ and BF # 3 & 4 Thyristorisation has resulted in 22,921 T of CO₂ till 2008-09. These projects will yield about 2,00,000 T of CO₂ reductions every year till the completion of 10 year cycle period.

The details of CDM projects taken-up at BSP

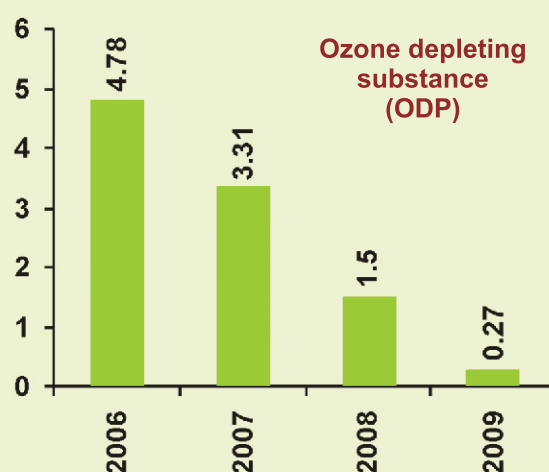
Completed Projects	Envisaged Projects
<ul style="list-style-type: none"> Heat recovery from Sinter Cooler of Sinter Plant #3. Coal Dust Injection (CDI) in Blast Furnace 1, 5, 7. Blast Furnace gas utilization at Boiler #6 of Power Plant-1. Thyristerisation of Blast Furnace #3&4 skip hoist electric supply for better operation efficiency and energy conservation. Additional BOF gas evacuation scheme for increased gas recovery. Resizing and improvement in design of impeller of Gas Cleaning Plant (GCP) in Steel Melting Shop #1. Independent Exhaust system for slab casters #2, 3, 4. Commissioning of Variable Voltage Variable Frequency (VVVF) drive ID fan motor at Steel Melting Shop #2. Modification in furnace of Rail & Structural Mill. Micro-processor control system at Reheating Furnace of Plate Mill. Replacement of CFC #11 by Li -Br based chilled water plant. Recycling of BOF slag through Sinter Plant. Installation of VVVF drive at BOF converter # 1, 2 and booster Fan 	<ul style="list-style-type: none"> Coke Dry Quenching (CDQ) in New Battery #10. Installation of Top gas Recovery Turbine (TRT) at Blast Furnace 7 & 8. Installation of gas fired boiler for power generation from gas of New Blast Furnace #8. Waste heat recovery from new Sinter machine. Hot stove waste heat recovery for Coal Dust Injection unit of new Blast Furnace #8 Replacement of Twin Hearth Furnace (THF) with BOF converters. Installation of energy efficient compressors in oxygen plant. Replacement of existing motors with energy efficient motors in Mills. Walking beam furnace at Mills Energy efficient shaft kilns at new Refractory Material Plant # 3

Ozone Depleting Substances

Under Montreal Protocol, as a part of phasing out ozone depleting substances, BSP has eliminated use of CFC-11 by replacing it with Li- Br based chiller unit, way before the target date of 1.1.2010. Procurement of Carbon Tetra Chloride (CTC) has been stopped and use of Trichloroethylene has been started. To control the chemical losses, vapour phase degreasing systems have been installed, which is implemented under the UNDP aid. Procurement of Halon based fire extinguishers have been replaced by FM 200 based units.

All industrial package air conditioners using CFC-12 will be replaced in phased manner by year 2011 by units using CFC free refrigerant.

BSP does not produce or export any ozone depleting substances.



Consumption of Ozone Depleting Substance

ODS Substances	Ozone Depleting Potential (ODP)	Year wise consumption in Tonnes		
		2007	2008	2009
CFC 11	1	0	0	0
CFC 12	1	2.19	1.241	0
Halon-1211	3	0.245	0	0
CTC	1.1	0	0	0
HCFC-21	0.04	0	0	0
HCFC 22	0.055	4.94	4.392	2.989
HCFC 142	0.06	1.944	0	1.026
HCFC 124	0.0125	0	1.005	0
Total		9.319	6.638	4.015
	Total ODP in Tonnes	3.31	1.50	0.225

Product Life Cycle

Steel products are 100% recyclable in their life cycle. However it is difficult to keep track after the product leaves the plant gate and hence information is not available. BSP recycles scrap, which is generated in the plant.

World Steel Association (WSA), Brussels is promoting Life Cycle Study for steel products. At present restricting the scope of the study is limited from mining of raw materials to the dispatch of material from steel plant gates. At Bhilai Steel Plant, LCA has proved to be very successful in analysing inputs to the processes and discharges to the atmosphere.

As per WSA norms the tracking of performance and significant impacts of products and services beyond the gate is not considered, hence has not been assessed and reported.

National Metallurgical Laboratory (NML) has issued 30 recommendations after review of the National level LCA study. All the 26 recommendations relevant to BSP have been implemented. BSP is participating in the LCA update 2008 organized by World Steel Association

R&D efforts in Resource conservation, process improvement:

In line with our efforts towards producing special steels which will also contribute in reduction in "Green house gas emissions, the following products have been developed in 2009-10:

- ☒ High strength abrasion resistant plates with through thickness ductility
- ☒ Development of micro-alloyed high strength cost-effective steels using nitrogen enriched vanadium at BSP.

Energy/resource conservation efforts

- ☒ Design of energy efficient combustion system for new in-house built normalizing furnace of Plate Mill

- ☒ Improvement in availability of soaking pits by using new monolithic in its wall. Resulting in fuel & time saving
- ☒ Optimisation of naphthalene crystalliser process in TDP to improve naphthalene yield at BSP
- ☒ Development of intelligent mill setup model for dynamic and adoptive control of plate mill
- ☒ Improvement in Performance of Reheating Furnace of WRM at BSP resulting in 5% reduction in specific fuel consumption

Environmental Expenditure



Total Environment protection expenditures and investments by type

Area	Revenue expenditure in Crores	Capital Expenditure in Crores
Pollution prevention	62.05	-
Global Environment Protection	-	18.47
Resource Circulation	30..90	-
Environment management activities	0.04	-
Research & development	2.25	-
Social activities	1.41	-
Others	0.56	-
Total	97.22	18.47

Land Use

Bhilai Steel Plant does not fall in protected or sensitive area. Areas of operation of the company do not have any World Heritage sites or Biosphere Reserves/ Protected areas. The Environmental Impact Assessment Studies conducted for all the units have revealed that, no reportable changes to natural habitats have occurred from the company's products, services and activities. Out of the land under Steel Plant , 1100 hectares is used for waste reservoirs

Unit	Revenue area in Hectares	Forest area in lease In Hectares	Non-forest area in Hectares
Bhilai Steel Plant (Works)	3248.9	Nil	3248.9
Bhilai Township	2939.9	Nil	2939.9

Land use pattern at Mines

Name of the Mine	Leased Area in Hectares	Forest Land in Hectares	Revenue Land in Hectares
Rajhara Mechanized Iron ore Mines	220.42	100.76	119.66
Dalli Mechanized Iron ore Mines	719.6	283.6	436
Dalli Forest range Manual Iron ore mines	100	100	Nil
Mahamaya dunki Iron Ore Mines	1522.67	1522.67	Nil
Kalwar Nagur iron ore Mines	938.06	938.06	Nil
Nandini Mechanised Lime stone Mines	526.34	Nil	526.34
Hirri Dolomite Mines	128.77	Nil	128.77

Mining lease area reclaimed & surrendered to Forest Department till date

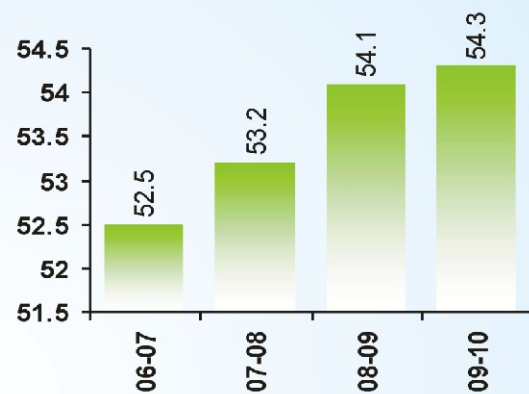
SI No	Name of Mining Lease	Original ML area (Hectares)	Present ML area (Hectares)	Area Surrendered (Hectares)
1	Pandridalli & Rajhara Pahar ML	291.49	220.42	71.07
2	Rajhara Hills ML	1038.58	719.6	289.81
3	Dalli Forest Range ML	244.94	100.00	144.94

Green Belt Development

Bhilai Steel Plant is committed to its environmental policy in which afforestation finds a pre-dominant place. BSP has put in a major effort to promote greenery in and around Bhilai. This includes organized tree plantation on large scale; development of gardens and parks in Mines, Works area and Township; rehabilitation of slag dumps; seed broadcasting and encouraging employees/ citizens / students to take up green belt development.

Today Bhilai and its mines has an estimated population of 54 lakh trees. This comprises of 30.5 lakh trees inside the plant, and township and 23.5 lakh trees in the mines.

Cumulative Plantation in plant, Township & Mines (in lakhs)



Development of gardens inside & outside the plant

The plant and township are replete with gardens and trees. Some of the gardens developed inside the plant & township are:

Inside Plant	<ul style="list-style-type: none"> ○ 15 gardens over 30 acres inside the plant ○ 3 nurseries with 25000 plants of 125 flora varieties.
BSP Township	<ul style="list-style-type: none"> ○ 6 major gardens including 'Maitri Bagh' the best garden in Chhattisgarh in 125 acres with zoo & Musical fountain.



Environmental awareness & Eco clubs

BSP has accorded top priority for environmental awareness amongst its employees, School children & general public. Several environmental improvement schemes have been taken up under quality circles by the employees, which has resulted overall environment improvement, energy & resource conservation. A Six sigma project for fugitive emission control was also implemented in coke ovens.

42 eco-clubs registered with MOEF are functioning in BSP schools under the National Green Corps (NGC) programme of Ministry of Environment & Forests (MOEF). The students participate in the various environmental activities and awareness programmes in the township and commercial areas as listed below:

- ☒ World Environment Day – 5th Jun.
- ☒ International ozone layer protection day - 16th Sept
- ☒ National Environment Day – 25th Nov.
- ☒ National Pollution Prevention Day – 2nd Dec.
- ☒ National Pollution Prevention Day – 2nd Dec.
- ☒ Mass tree Plantation
- ☒ Essays, Slogans & Poem competitions
- ☒ Field Trips to Observe surrounding industries (ACC) Organizing Lectures & Demonstration of Scientific Experiments
- ☒ Working Models
- ☒ Rallies
- ☒ Development of Vermi-composting practices'



These awareness programmes were attended by more than 20000 school children of various BSP & private schools. Activities and enhance awareness in the township and commercial areas by taking out rallies and door to door interaction.

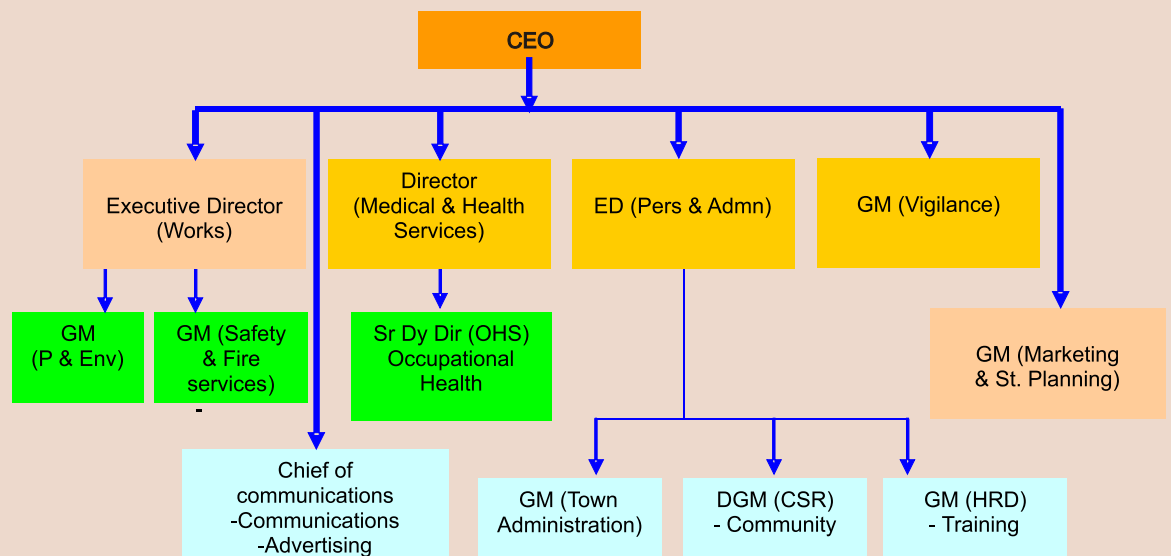
Social Performance Indicators

WSA Sustainability Indicators for Social Performance: 2009-10

No.	Indicator	Units	Indicator value (World Avg.)	BSP's Value
1	Employee Training	Training days/ employees	5.1	11.95
2	Lost time injury frequency rate	Frequency/ million hours worked	3.6	0.67



Bhilai steel plant has set-up a well-structured management system to assess and address the social performance of the organization.





Leadership of BSP has accorded a very high importance to the bigger objective of the organization i.e., support social responsibility initiatives and other stakeholders. BSP's commitment to the CREDO "values the opportunity and responsibility to make a meaningful difference in people's life" is demonstrating by commitment through new initiatives related to employee development, employee care, environment and social responsibility. Leaders participate and get involved in cultural functions, tribal welfare, education, festival celebrations, etc. "Upholding highest ethical standards in conduct of its business" (CREDO) has been reinforced by the decision to publish Sustainability Report and share information with stakeholders on economic, environment and social performance.

The top management is personally involved with key functions of the organization i.e. understanding needs and expectations of stakeholders, development of management systems, monitoring of business environment, goal setting and performance reviews which facilitate the identification of opportunities for improvement and implementation of new initiatives. The triggers for new initiatives also emerge from top management's interactions with stake holders, corporate planning and business planning exercises, market research exercises, participation in directors workshops, review meetings, audits & award assessments and suggestions from the employees. Identification of new initiatives is further reinforced by the outcomes of extensive interactions across the organization through laid down mechanisms in a participative and collaborative atmosphere, a hallmark of Bhilai Culture.

BSP has a long tradition of shouldering social and environmental responsibilities beyond the statutory boundaries driven by its commitment to the population in and around Bhilai. For addressing the triple bottom line,

i.e. societal, environmental and economic aspects of BSP, programmes and procedures are in place. BSP's approach towards sustainable development has been successful in creating an environment of growth and prosperity in the last five decades. This has facilitated a swift economic growth of the Durg-Bhilai-Raipur region which is according to a UN report, is the one of the fastest growing regions of the world.

Initially massive resources were committed to build a vast social infrastructure. Bhilai Township is today a bustling city with a center of many activities. BSP runs close to 42 schools for more than 26000 students, both BSP and Non BSP, for a nominal fee. It supports many schools and colleges by providing various facilities. Jawaharlal Nehru hospital, along with the chain of health centers in every sector and in the mines, caters to the needs of the entire society for its medical care requirements. Similarly BSP has been carrying out social activities in a many fields i.e. development of villages, cultural, sports, supporting tribal, senior citizen home etc.

WIDE COVERAGE OF CSR

- Peripheral Development
- Physically Challenged
- Model Steel Villages
- Women Empowerment
- Promoting Self Employment
- Employee Volunteering
- Ancillary Development
- Mining and Tribal Areas
- Supporting NGOs
- Medical and Health Care
- Education
- Senior Citizen Home
- Assistance during Natural Calamities
- **Sports and Culture**

Employment

Being a public sector Govt. organization, equal opportunities are provided to all without prejudice to gender, caste, religion and marital status. During career progression promotions are strictly based on merit. Female candidates are also given ample opportunity in the fresh recruitments. Over the years, more and more women are entering this non-traditional sector.

Employee profile

Total number of executives and non-executives on 01.04.2010 is 3779 and 28764 respectively. The qualifications required for different functions and disciplines are well defined. The executives qualifications include BE/B.Tech in engineering, MBA, CA, ICWA etc. The non-executives work force is highly educated and includes 4716 with higher secondary education, 6503 ITI passed 1516 diploma holders, 401 post graduate diploma holders, 248 graduate engineers, 3186 other graduates and 2815 post graduates.

Bipartite Forums operate on matters of employee welfare and other issues where the nominated employees (NMRs) under SA 8000 attend the meetings on welfare, as on account of court directives the Union Representatives are not participating presently. The Bipartite Forums cover production, productivity, safety and welfare of non-executive employees. To take care of the needs and welfare of executive employees, a recognized Officers Association is working within the umbrella of Steel Executive Federation of India (SEFI).

SAIL is an equal opportunity employer that has employed both women and men of caliber. BSP employs about 1675 women employees in both technical and non-technical areas, which is around 5.14% of the total employees. As per Central Govt. guidelines BSP has constituted a committee & a fool proof mechanism, for preventing and dealing with cases of work place sexual harassment.

Break-up of Employees

As on Date	Works	Admn.	Township & Medical	Construction.	Mines	Trainees	Total
1.4.2008	24059	3114	3374	386	3207	267	34407
1.4.2009	23184	3006	3138	358	3066	235	32987
1.4.2010	22804	2929	3133	437	2896	364	32563

Number of employees by gender and age group

Age	Male			Female			Total		
	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10
<30	387	376	422	42	36	50	429	412	472
30-50	19981	20750	20703	858	904	886	20839	21654	21589
>50	12134	10096	9763	1005	825	739	13139	10921	10502
TOTAL	32502	31222	30888	1905	1765	1675	34407	32987	32563

Employee Turnover

Age	Male			Female			Total		
	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10
<30	13	20	2	2	1	5	15	21	7
30-50	31	20	3	5	6	12	36	26	15
>50	4	5	0	0	2	5	4	7	5
TOTAL	48	45	5	7	9	22	55	54	27

Location-wise breakup of employees (as on 1.4.2010)

Location	Executives			Non-Executives			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bhilai	3324	226	3550	24672	1405	26077	27996	1631	29627
Mines (Dalli, Rajhara, Nandini, Hirri)	229	2	231	2634	31	2665	2863	33	2896
Regional Offices at Mumbai, Delhi etc.	15	3	18	14	8	22	29	11	40
Total	3568	231	3799	27320	1444	28764	30888	1675	32563

BSP does not maintain region-wise statistics. The turnover figures given above indicate only resignation cases.

Absenteeism

Year	Total man-days available	Unauthorised absentee Man-days
2007-08	9386400	192141
2008-09	9896837	178559
2009-10	8558079	148054

Employment Information

Item	2007-08	2008-09	2009-10
1. Total number of employees			
i. Number of permanent employees	34407	32987	32562
ii. Number of contract employees	6540	6703	6813
iii. Number of daily wage workers	2	1	1
2. Total number of management (officer) grade employees	3659	3544	3799
3. Ratio of non-management to management employees	8.40	8.30	7.57
4. Segmentation of total employees by gender			
Male	32502	31222	30888
Female	1905	1765	1675
5. Total employee benefits (Rs. Crores)	291.09	354.83	260.76
6. Net employment creation (Nos)	495	270	937
7. Employee turnover (%)	1028(3.01%)	1380(4.18%)	1351 (4.15%)
Resignations	55(0.16%)	54(0.16%)	27 (0.08%)
8. Learning /Training (Mandays/employee/yr)	11.5	12.67	11.95

Labour/ Management Relations

The HR Policy of BSP provides framework for fostering an organisational climate, which enables high degree of employee involvement, improvement and motivation. BSP Personnel Deptt monitors and prevents any discrimination in its activities and services. BSP code of conduct gives due importance to Freedom of Association. Freedom of Association is enshrined under constitution of India and in the Trade Union Act. BSP ensures that the laws of land are complied to.

The trade union movement has a long history in the country, as consequence of which Indian labour has legitimate rights for bettering its lot. As per the Madhya Pradesh & Chhattisgarh Industrial Regulation Act "Representative" bargaining power rests with the recognized union of BSP, which is the Steel Workers' Union affiliated to INTUC (The leadership of this union is under dispute in various courts for several years). The tripartite forums at BSP mines are functioning smoothly with recognized union there. The agreements signed with the recognized union are binding on all the employees. The Law applicable is Industrial Disputes Act-1947- which is complied with.

The emergence of a forum for a dialogue with the management by the officers is of comparatively recent origin. BSP has association of its Officers, called the Officers Association (OA), with whom negotiations are conducted in respect of the executives concerns.

SA: 8000:2001 has been implemented across the organization. As per the requirement of standard, NON-Management Representatives (NMR), essentially non executives, have been nominated from various departments.

Fair representation of female employees for NMR has been ensured. These NMRs are primarily responsible for establishing communication between workers and management and implementing various procedures, practices and action plans.



There is an established three tier Grievance Management System in BSP and it is ensured that no vindictiveness takes place in the process after the resolution of the grievance. The process is so effective that there had been no industrial unrest/strike till date. Against non executive employee strength of around 28763 ,only 6 nos of stage-3 grievances were received during the year. This indicates an enthused and satisfied workforce

Recruitment

SAIL, the holding Company has its recruitment policy and BSP is implementing the policy at unit level. BSP has also formulated its HR policy. Organisation has also framed its own rules and procedures covering service matters. At present, there are four sets of service rules on force at Bhilai Steel Plant:

- ☑ SAIL conduct, discipline & appeal Rules 1977
- ☑ Standing Orders (Plant)
- ☑ Standing Orders (Mines)
- ☑ HSCL Discipline & Appeal Rule

All the employees of BSP are covered by the Collective bargaining agreements; some agreements, which are department specific, cover the employees of those departments only. The notice period required, as per the provisions of the MP& CGIR Act, is 14 days.

Professional/ Employee ethics are clearly laid down in the service rules for all categories of employees. An employee shall at no time work against the interest of the company. He /she shall at all times conduct himself/ herself soberly on and beyond the organizational premises, and show proper respect and civility to all concern.

Benefits to its employees, beyond that legally mandated

All these benefits (mentioned above) are provided to permanent employees of BSP. 100% employees receive regular performance and career development reviews. BSP does not maintain statistics of minority group memberships. The overall male female ratio of BSP is 18:1. There is no difference in basic salary of employees of men and women. This depends on the policy on the scale of pay that they are in, and number of years of service etc.



- Free Medical services to employees and their dependant Family Members
- Free water, subsidized electricity
- Housing
- Monetary incentives
- Night shift allowance
- Washing allowance
- Subsidised education
- Fuel subsidy
- Festival advance
- Advances for purchase of vehicles
- Scholarships to wards of employees
- School uniforms upto Primary level
- Leave for Child Care/Development
- Accident compensation beyond legal limits
- Long Service Award
- Well stocked Public Library
- Recreation centers / Sports facilities
- Community Halls
- Free Medical facilities for self and spouse after retirement
- SEWA
- Employee Family Benefit Scheme
- Life Cover Scheme

Occupational Health and Safety

BSP has introduced the concept of total health care instead of need based curative services alone. Based on the ILO recommendations, an Occupational Health Services (OHS) of National level is functioning inside the plant. The implementation of Occupational Health Services at BSP ensures preventive, curative and rehabilitative services for keeping the workforce healthy and protected. OHS at Bhilai has been developed in a systematic manner for organizing work environment monitoring, biochemical and toxicology, work physiology, health education, psychological assessment, counseling and similar functions at work place with emphasis on preventive care. For recording and notification of occupational diseases as per the ILO guidelines a separate medical board consisting of Occupational Physician, Chest Physician, Radiologist, and Medicine specialist is functional under the Chairmanship of Director, Medical & Health Services. Exposed employees are at continuous observation/vigilance by Health & Safety Departments.

JCSSI – Joint Committee on Safety, Health & Environment in the Steel Industry is a strong bipartite forum between Management and Trade Unions. BSP is a core member of JCSSI. The committee since its inception pursues the objective of creating a culture of consciousness about ensuring a safe, healthy and environment friendly atmosphere in the work place. JCSSI meetings are held every year.

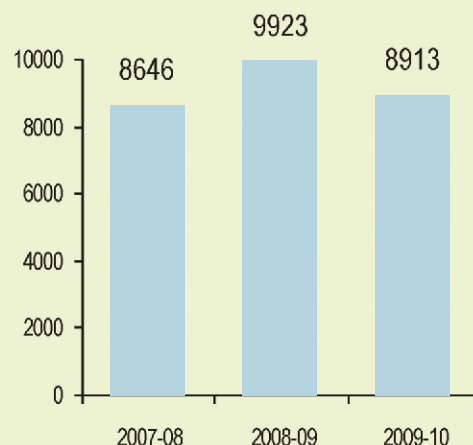
There is a tripartite forum consisting of representatives from occupation health services, employees and management to discuss the issues related to health problems of the employee in the work place. Departmental Safety Committee is a strong bipartite committee consisting of HOD, line manager, representatives of Safety Engineering Department, Departmental Safety Officers, employee representatives, safety stewards. In Bhilai Steel Plant, 230 Safety / Security Stewards (One for 100 employees working in the plant) have been nominated and trained for representing the issues of employees.



Committees for bipartite communication and representation such as Departmental Safety, Health & Welfare committee, Apex committee are actively prevailing in all departments of Bhilai Steel Plant. Cross level communication and lateral communication between the management and Safety Stewards are being exercised during these committee meetings. These committees are generally called for meeting once in a month in all departments and all the issues related to Health & Safety such as organisation's commitment, maintenance of good health & safety environment, Welfare of employees, Security of Plant etc. are being communicated, consulted and discussed thread bare. The issues raised or represented by the employees / trade unions are rightly taken up and action are complied immediately.

For recording and notification of occupational diseases as per the ILO guidelines a separate medical board consisting of Occupational Physician, Chest Physician, Radiologist, Medicine specialist is functional under the Chairmanship of Director, Medical & Health Services. Exposed employees are at continuous observation/vigilance by Health & Safety Departments. No reportable occupational disease case has been reported in Bhilai Steel plant till date.

Periodical Medical Examination



OHS Control Measures : 2009-10

- ☒ Main door glass of pulpit 9 & 10 fixed in the finishing section of Merchant Mill reduces the noise level from 95dB to 88 dB.
- ☒ Dedusting system of SRDC rectified dust concentration has been reduced from 6.5mg/m³ to 3.9mg/m³ at Sintering Plant-2.
- ☒ New HPMV lamps replaced at heavy bay section of MARS-2, illumination level increased from 150 lux to 450 lux.

Highlights of OHS Centre : 2009-10

- ☒ Special drive for Pre Employment Medical Examination of 541 Canteen Employees and 190 Medical executives.
- ☒ A New programme on "Vision conservation for the employees operating the moving machine" inside the plant has been started on 1st Oct 2009.
- ☒ 8913 no. of Periodical Medical Examination report of employees, Data regarding various examination done are compiled and booted and disseminated in computer which can be retrieved and analyzed at any point of time.
- ☒ 265 Work Environment surveys covering 1213 locations in 52 departments were conducted under Occupational Hygiene Survey. 65 % of the recommendations were implemented for improvement of work environment
- ☒ 18 Workshops includes "First AID", " Occupational Hygiene", "Stress Management" and "Womens' workshop"
- ☒ 3269 employees covered under "AIDS awareness programme" at shop floors, NOHSC & Mines.
- ☒ 2995 employees covered for Audiometry test, 1936 for pulmonary function test 3221 for ECG test and 2030 for X-Ray.

Sickle – Cell

Normally the shape of the hemoglobin (HBA) present in our blood is of sphere shape, which is a carrier of Oxygen. But in some cases, the shape of this hemoglobin is a sickle shape which may lead to a disease is called sickle cell.

Sickle – Cell screening of all the BSP schoolchildren was undertaken under the CSR Scheme. The programme started – off in August 2007 and by March 2009 screening of all the School Children completed. Screenings of 22460 school children were done and out of which 1121 cases were found to be positive.

After the evaluation, for those children who are found to have sickle cell positive, their family members were also tested for sickle cell at sector-9 Hospital. Later on depending upon the results of the family member, special immunization and rehabilitation programme is being done.



AIDS Control

The NACO has recognized JLN Hospital, Bhilai as a Zonal Centre for AIDS Control .The most important rationale for workplace interventions for Prevention of HIV/AIDS emanates from the fact that the population category worst affected by the disease is the 15 – 45 age group, which constitutes the Economically Active Population and thus apart from the emotional and psychological trauma, the spread of infection if not arrested, will give rise to economic upheavals and problems in the workplace.

In line with the company's policy of HIV-AIDS the organization regularly conducts the awareness programmes, which are organized by Occupational Health Department and Medical Department of the Company. AIDS awareness programme were conducted covering large cross section of the society. BSP also organizes AIDS prevention programme for high risk sections of the society such as truck drivers and contractor workers on regular basis. Non-discrimination and Complete anonymity is maintained in regard to the employees affected by HIV/AIDS. (BSP has installed two nos. of automatic condom vending machines to help control HIV)

Safety

Safety of persons has always been the prime concern for Bhilai Steel Plant. A three-tier Safety Management System has been established with the central Safety Engineering Department functional at the Apex (Plant) Level, Departmental Safety Officers at unit level (43 registered factories) and Safety Committees and Safety Stewards – cutting across the grass root level. Overall focus and direction of Safety Management is centered on complying with various legal requirements at plant and unit levels, Risk Management through Hazard Identification and its elimination (control) at departmental (factory) level, and improve upon the safe human behavior of all employees including contract labours.

Several pro-active and reactive tools have been devised and practiced in the plant, with the sole objective of making our plant a safer place to work, through consistent risk reduction and accident prevention. Regular technological upgradations and training of employees also helps in achieving the same.

BSP has implemented internationally approved Occupational Health and Safety Management System (OHSAS: 18001) in all the 43 registered units of its works area and is being verified and certified by independent certifying agencies since 2006.

Safety Statistics

Frequency rate

Year	Frequency Rate (number of accidents per million man-hours worked)		No of employees (R+C) Inside plant premises	Mandays lost due to reportable accident (R + C)	Manhours worked	Injury rate (number of accidents per two lakh man-hours worked)	
	Reportable + Fatal	Total (Rep.+Fatal + non rep)				Reportable + Fatal	Total (Rep.+Fatal + non rep)
2007-08	0.082	0.74	29200	207	0.72×10^8	0.0165	0.149
2008-09	0.111	0.68	29200	167	0.72×10^8	0.0222	0.136
2009-10	0.194	0.67	29000	792	0.72×10^8	0.0389	0.133

(Including regular and contractual labours; man-hours : (8 hours/day for 310 days)
(IR= Number of injuries*200000/Hours worked; FR= No. of accidents *106 / Man hours worked)

Lost day rate

Year	Total (Fatal + Reportable+ Non reportable)
2007-08	0.57
2008-09	0.464
2009-10	2.202

LDR = No. of days lost * 200 000/ hours worked

Accident details

Year	Fatal		Reportable		Non-reportable		First Aid		Total		Grand Total
	R	C	R	C	R	C	R	C	R	C	
2007-08	2	2	2	0	50	0	65	0	119	2	121
2008-09	5	0	3	0	41	0	43	0	92	0	92
2009-10	1	1	11	1	34	0	69	1	115	3	118

R = Regular

C= Contractor

Training & Education

BSP is a learning organization where HRD interventions and training are a continuous process.

Pre-employment training is given by the Bhilai Technical Institute, for training operatives, trade apprentices and graduate engineers. Post-operative training is also being imparted. Bhilai Management Development Center caters to the needs of executives at the induction stage and later. BSP has full fledged in-house training facilities for imparting various kinds of training to employees including skill development. Management Training Institute at Ranchi equipped with well qualified faculty and provides high level training in the field of management and technology aspects to the employees



Training Data

Performance indicators	2007-08	2008-09	2009-10
% covered against training plan	182.7	225.5	214.85
% of employees trained	72.63	96.39	98.53
Training man hours/ employee	11.50	12.67	11.95

Item	Executives			Non- Executives		
	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10
Fresh entrants	218	161	214	98	271	965
Technical enhancement	987	847	1020	9116	12824	8933
Managerial Competence enhancement	1835	2940	3332	3775	2042	1222
Specific areas	842	1191	1141	5818	7266	11932
Foreign training	85	92	25	16	24	13
External training (including MTI/ CPTI)	1193	1566	1185	897	1030	419
Other areas	525	560	2160	-	984	1117
Total	5685	7357	9077	19720	24441	24101

Environmental Training in 2009-10

Programme	No. participants	Agency
ISO 14001 awareness for employees & contractual labours	3000 (Non-executives)	In-house faculty
Other specialized training hazardous chemicals, hazardous waste management, advanced waste water treatment, CDM, Sustainability, ESP operation and maintenance etc.	100 (Executives & Non-ex)	By Expert agencies

Till date more than 65 employees of different departments have undergone ISO-14001 Lead Assessors' Training Programme at BSP and at MTI, Ranchi.

Competency Mapping

Competency Assessment of Executives in the area of Managerial Competency and Functional / Technical Competency is done by respective reporting / reviewing officers as part of appraisal review / interviews and is reflected as developmental needs for the individual. The training programmes are organized at HRDC/BMDC to build the competency level. For corporate cadre executives (E6 and above), competency gaps are assessed by the respective HOD and sent to Management Training Institute (MTI) of SAIL for organizing the training. The Executive Performance Measurement System (EPMS) has the facility of online capturing of training need data.

The assessment of competencies of Non-Executives are done by their supervisors and sectional heads based on the performance gap arising out of skill and knowledge gap, change in nature of activities, changes in process / equipments, etc.



Competency Mapping for knowledge, skills and behavioral attributes was carried out for 25,000 employees with the help of 248 internal resource persons who were trained to perform the task. Out of this, during the year 2009-10, 6559 employees have been imparted training for building competency level

Out Bound Training

During 2009-10, enhancement in daily average blast furnace production was taken up through cross functional team involvement to take care of the growing demand. Key members from blast furnace with all the internal customer departments like coke ovens, mines, sinter plants, SMS-1, SMS-2, T&D departments etc. were picked up as a part of massive outbound team building exercise which was held at Dongargarh around 90 km away from Bhilai. Various team building exercises like building mutual trust and confidence, Managing Risk and Challenges, Role play as leader etc. were carried out. After the training, action plans were made by the participants and the same was implemented. The result was then measured and the target of enhancement in daily average production by 200 T/day was achieved.



BSP has a pool of resource personnel, who are equipped with TOTO (Training of Training Officers) skills, Occasional Trainer (OCT) skills and presentation skills.

Diversity, Equal Opportunity, Human Rights, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labour, Forced Labour, Complaints and Grievance Practices, Security Practices & Indigenous Rights.



Being a public sector Govt organization, equal opportunities are provided to all without regard to gender, caste, religion and marital status. During career progression promotions are strictly based on merit. Female candidates are also given ample opportunity in the new recruitments.

BSP is an equal opportunity employer that has employed both women and men of calibre. Since its inception, women have held positions of responsibility.

The organization is committed to equal employment opportunities for attracting best available talent, ensure cosmopolitan workforce, the quality of life of its employees, developing their talent and maximizing their productivity. It ensures openness, transparency, fairness and equity in all its dealings with the employees is another component of the organization's HR Policy. BSP Personnel Department monitors and prevents any discrimination in its activities and services. BSP code of conduct gives due importance to Freedom of Association. Freedom of Association is enshrined under constitution of India and in the Trade Union Act. BSP ensures that this law of land is complied with.

There are no such operations in BSP where right to exercise freedom of association and collective bargaining is at significant risk. BSP encourages its employees to exercise their freedom of association and collective bargaining. There are no incidents in BSP of violations involving rights of indigenous people.

The various issues related to human rights impacts are addressed and are enlisted below:

- ☑ No use of Child & Forced Labour.
- ☑ Training of each and every contractual employee on safety, health and environment
- ☑ Follow the Operational Control Procedures under ISO14001 and Occupational Health Management System
- ☑ Ensuring non-violation related to minimum wages
- ☑ Deduction of Provident Fund and Gratuity as per rules prevailing in the country/region.

The various segments of Personnel Department in association with Department's concerned conduct training programmes for understanding the health, safety, environment requirements needed for improvement in quality of life through, interaction with works, inculcation team building, work culture and code of conduct.

The contractors working in the premises of the organization are required to adhere to the employees benefit schemes of BSP including payment of minimum wages, deduction of provident fund and prohibition of child labour as explained above. The departments concerned along with safety Department monitor the contractor's performance and wages are paid under supervision of HR. All long-term contractors are required to pay wages through cheques/bank. The tender notices and enquiries issued to the contractors during reporting period include clauses on human rights, safety and health which the bidders are required to conform.

Bhilai Steel Plant emphasizes on equal opportunities and non-discrimination. There is no forced or compulsory labour in Bhilai Steel Plant. Legally it is prohibited in India. Standing orders & Personnel Manual of Company addresses the various issues of disciplinary practices/code of conduct, which are strictly implemented and followed. These orders are in line with Standing Orders Act of India. Suppliers and contractors are finalized as per the guidelines of Government and company rules.

Factory act and various Standing Order to BSP, forbid the use of child labour. The minimum age required for the employment is 18 years. It is also ensured that no contractual labours having age below 18 years are engaged in the activities, product and services of the organization. The recruitment process requires furnishing of appropriate proof of age. BSP does not employ child labour.

There is an established three tier Grievance Management System in BSP and it is ensured that no vindictiveness takes place in the process after the resolution of the grievance. The process is so effective that there had been no industrial unrest/strike till date.

BSP has full-fledged and services of Central Industrial Security Force (CISF) for ensuring security in and around the plant. A battalion of CISF has been posted with a special training centre, dedicated to the training of security personnel on issues like security practices and human rights at Bhilai. Trained personnel & employees of CISF and Fire Brigade Service assist the District Administration as and when required and fully associate in the off-site emergency planning in the region.

Fire Service Department caters to the needs of Steel Works, the people of the industrial Township with a population of more than 0.2 million approximately and all the local industries. Awareness training by Fire Brigade Department for the employees and students is organized. Fire Brigade Department received praise from Chhattisgarh Govt. for providing help in this region. A Govt. organization on Civil Defense is also working in tandem, for providing help during **on site and off site emergency situations.**



BSP does not come under high concern or controversy with regard to human rights. BSP does not have agreements that specifically include human rights clauses or agreements that have undergone human rights screening. There are no violations of human rights in BSP.

BSP does not rely heavily on outsourcing and global networks. No screening of significant contractors and suppliers based on human rights is being undertaken by BSP

There are no known cases of discrimination any grounds whatsoever in BSP.

SA-8000:2001 addresses the fair practices implementation in the supply chain. The information related to compliance of SA 8000:2001 pertaining to child labour, forced labour, on discrimination, freedom of association; health and safety of employees are sought through a structured questionnaire from suppliers. The practices of SA-8000:2001 are promoted amongst suppliers.

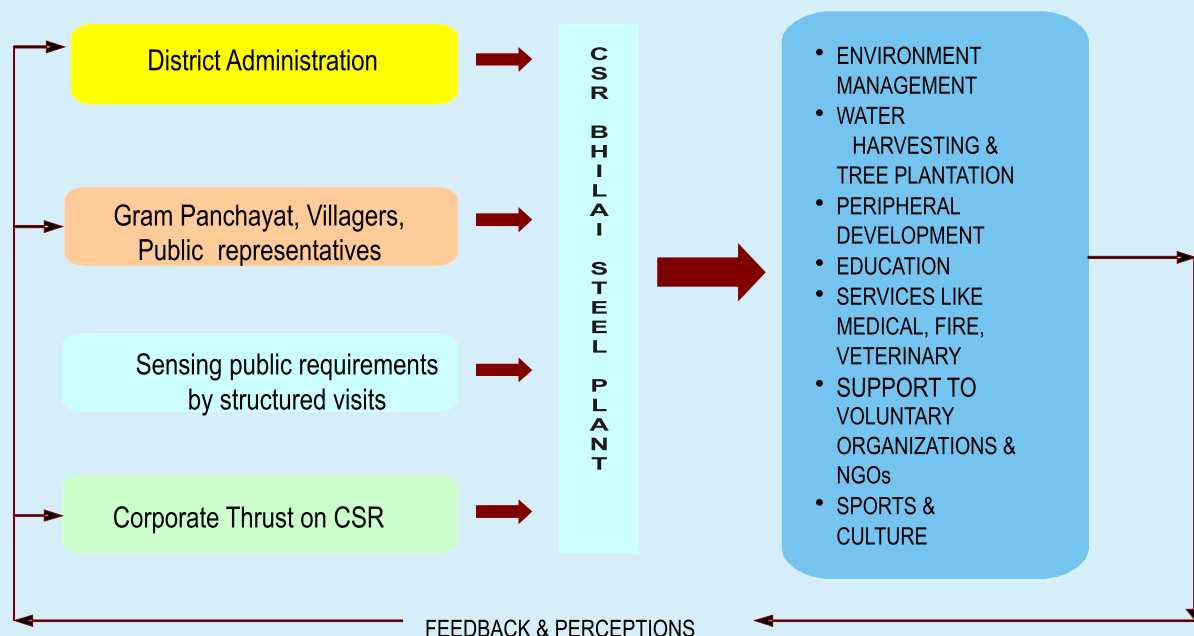
Community:

Since inception, BSP has endeavored to discharge its social obligations by contributing to the welfare of its customers, employees, suppliers and communities. In this context, BSP's initiatives cover an entire gamut of societal concerns including environment management, increased access to health, education, improved water and sanitation, electricity, roads, ancillary development, etc. to ensure overall development in its areas of operation. Thus, through these initiatives, BSP has made social responsibility a business maxim, integrating it into its business vision and processes.

The major areas where Bhilai Steel Plant has taken up social responsibilities are:

- ☑ Education
- ☑ Adoption of tribal children
- ☑ Bhilai Ispat Kalyan Chikitsalaya
- ☑ Promoting sports & cultural activities
- ☑ Support to differently abled
- ☑ Teaming up with voluntary organizations
- ☑ Support to Mahila Samaj activity
- ☑ Development of Model Steel villages

CSR Model of Bhilai Steel Plant



Every operation and business process is designed and operated keeping in view of their impact on society which has earned respect for BSP in the region as a responsible member of the society and as an employer that cares for its people. BSP has deployed a full fledged CSR department with a DGM as its leader and the activities are reviewed quarterly by ED(P&A). Inputs from assessors of PM's Trophy, FICCI and corporate thrusts also provide direction to the CSR activities. Bhilai Steel Plant has been a firm believer in the power of people and harnessing the same for productive outcome and deliverance of business objectives. The Quality of Life perspective added to HR Policy continued the generic orientation to employee care activities in 2009-10.

Quality of Life and its sustained enhancement, both at the workplace as well as outside, is a renewed thrust area for the management. Housing, health care, education, family welfare, counseling, sports and cultural and recreational activities are duly recognized as imperatives for employee morale and motivation. While the top management right up to the level of CEO gets involved in the decision making process, the Head of Works as well as the Head of Personnel & Administration also play stellar roles in planning activities and their identification, prioritization and execution. The visibility of the top management is pronounced in a big way and it serves a salutary purpose.

CSR Initiatives related to community at Bhilai Steel Plant



A separate cell by the name of Corporate social responsibility (CSR) has come into existence from September 2006. The objective behind the formation of this cell is to strengthen and sustain a harmonious relationship between Bhilai Steel Plant and the Society. With this objective, it was decided to develop the peripheral villages in a radius of 16 kms around Bhilai. Thus, the existence of 21 MSVs (Model Steel Villages) came into pictures, which are to be developed in a comprehensive manner (in the area of Medical, Health, Education, Women empowerment, creating employment generation, etc.)

Adoption of Tribal Children:

BSP has adopted 134 tribal children of BPL category of the district since 2002 on the basis of their class V marks and then takes care of all their educational, boarding and lodging needs. From the academic year 2009-10 onwards, 20 children are being adopted at Rajhara mines, in place of Bhilai.

Tribal girls for Nursing course:

Six girls from tribal area near Rowghat Mines have been sponsored for the nursing course.

Health and Eye Camps:

Health camps have been organized in each MSV every month. Free medicines were provided. 240 camps were organized and 10,577 patients got benefited in the year 2009-10. During the check-ups, more than 600 patients were treated and 148 patients were identified ailing from cataract. Subsequently, patients were admitted in Sector-I hospital by BSP transport and Intra Ocular Lens was transplanted to 48 patients free of cost and Post operational care is being extended to all the patients who underwent the operation.

Bhilai Ispat Kalyan Chikitsalaya:

With an objective to provide health care to the underprivileged population, a health centre "Bhilai Ispat Kalyan Chikitsalaya" was inaugurated on August 15, 2007, where free treatment and medicines are provided. The Hospital has an inflow of about 80 patients per day, most of whom can not afford treatment at any private hospital.

Bhilai Ispat Vikas Vidyalaya:

BSP, with an objective of fulfilling its social obligations and uplift of the down trodden population, has started a separate English Medium CBSE Primary School "Bhilai Ispat Vikas Vidyalaya" for children below poverty line of urban area of Bhilai, on 9th July 2007 with 180 students, extending free facilities like education, supply of school kit including books, uniform, mid-day meal, to and fro transport facility. In the year 2009-10, class VII has been added with the no. of students being increased to 198.

Bhilai Ispat Kaushal Kuteer

To provide vocational training to village youth, a vocational training centre "Bhilai Ispat Kaushal Kuteer" has been started in the month of March 2010 wherein young boys from peripheral villages are being imparted training on fabrication work.

Before starting Kaushal Kuteer a basic course of 15 days for carpentry was also imparted with the help of HRDC. 8 unemployed youth from villages attended the training & successfully completed the course. Presently following courses are being run at Bhilai Ispat Kaushal Kuteer.

- a) Electrical House wiring
- b) Gas welding
- c) Basic Computer Course – Basic knowledge of MS Office and Internet browsing
- d) E-Chetna – computer awareness, training for housewives / girls



Akshay Patra Mid – day meal: SAIL-BSP has entered into an MOU with Akshay Patra Foundation to provide mid-day meals to under privileged school children from government schools of Durg and Bhilai areas. At present, 25,000 school children (approx.) are being covered under this scheme.



Breed Improvement/Animal Husbandry: Good quality breeding bulls are being supplied and local scrub bulls are castrated. Also, periodical veterinary camps are being organized for proper medication/ vaccination of cattle.

Chhattisgarh Lok Kala Mahotsav & Grameen Lokotsav

BSP has been organizing Chhattisgarh Lok Kala Mahotsav annually since 1976. It has served as a platform to launch internationally reputed artists such as Smt. Teejan Bai (Padmabhushan), the famous Pandawani exponent, Late Sri Devdas Banjare (Panthi Dancer), Ms. Ritu Verma (Pandawani Singer), etc. Five Gramin Lokotsavas have also been organized in MSVs in the year 2009-10.



CSR Initiatives related to community at BSP

Income generation schemes: Apart from infrastructure development, health and eye camps, Income generation schemes in 21 Model Steel Villages for BPL families have been started like breeding poultry, goats, promoting fishery, tailoring of school uniforms by villagers, manufacturing of Achar, Papad and Agarbatti, installation and fabrication of smokeless chulhas, manufacture of school bags, etc.

In the year 2009-10, stitching of school bags/fancy bags has been started at MSV Doomerdihi by 20 BPL ladies. In the year 2010-11, making of sweet boxes has been started at MSV Kachandur by 20 BPL ladies.

Sports coaching: School children were given intensive coaching in various disciplines viz; Athletics, Football, Volleyball & Khokho from the blocks of Narayanpur i.e. Orchha, Kollibeda & Antagarh.

Further, since 2006, an annual 'Khel Mela' is being organized for tribal children at Narayanpur. The children excelling therein are identified and then given a chance to get enrolled in the 'SAIL Athletics Academy' at Bhilai, based on trials.

In addition, a Football tournament was organized in Antagarh in November, 2009 for school children, to promote sports activities amongst the tribal population in the region, and earn their goodwill for BSP.

Swayamsiddha Shop: A shop is identified at Sector-10 market, Bhilai to facilitate marketing of swayamsiddha products such as Achar, Papad, Agarbatti, School bags/ Fancy bags, school uniforms etc. by a group of ladies under self help groups.

Welfare initiatives for contract labour: BSP considers the contract labour working herein as one of its major stakeholders. Accordingly, BSP takes various far-reaching welfare initiatives measures for them from time to time.

In 2009-10, the following major initiatives were taken by BSP:

- ☒ Special allowance for all contract labour @ Rs.10/- per day of actual attendance (w.e.f. 1.11.2009)
- ☒ Payment of Additional Welfare Amenity (AWA) to contract labour. (w.e.f. 01-10-2009) @ Rs. Rs. 38.46 per day of actual attendance subject to maximum of Rs.1000/- per month

Further, as a major policy decision, in case of death of a contract worker in a fatal accident while at work, one of his/her eligible dependents is being given employment on compassionate grounds in BSP. Earlier, this provision was applicable only to the regular employees.

Canteen Restructuring: As a part of the massive canteen restructuring exercise undertaken in 2009-10, 26 kiosks were opened by the reputed company M/s.CDX at various locations of the plant to provide a wider and better range of choices to employees. Tea/coffee, hot Snacks, pre-packed items and bakery items of good quality are provided therein at reasonable prices.



Smokeless Chulhas

Under this scheme it was decided to install smokeless Chulhas in each BPL family house in 21 Model Steel Villages. These Chulhas are fuel efficient and generate less smoke compared to conventional Chulhas. Under this scheme 5 women were trained for making Chulhas and 5 women were trained for installation. During 2009-10 approx. 878 Chulhas are manufactured in 7 Model Steel Villages viz. Khapri, Pahandor, Doomerdih, Bodegaon, Borigarika and Pauwara. This project was started in association with Sri Sri Institute of Agriculture science technology (NGO).



Thus, this eco friendly Chulhas not only provided with fuel efficient and smokeless Chulhas but also provided an opportunity to generate income during fabrication and installation. Women engaged in fabrication earn Rs. 25 per Chulhas and Rs. 50 earn for installation.

BSP initiative gives new vision to Hirendra (An Article Published in Local Daily “The Hitavad”)

The four years old child Hirendra, who lost the sight of his left eye when it was injured while playing, is now able to see clearly with his left eye. Thanks to the initiative of Bhilai Steel Plant management in extending the benefits of its progress and development to the populace from region, even to the people from remote rural areas. Hirendra is the son of 28 years old Durjan Singh, who is from village Gulavan in Antagarh Block, and earns his livelihood by working on his own small farm and also for other farmers in his village. The left eye of his four year old son was seriously injured when he fall flat on his face while playing with friends.

Durjan Singh tried to get his child treated by few more local doctors, but it proved futile. But soon he availed the opportunity of getting his son's eye checked at the free health check-up and treatment camp conducted by Bhilai Steel Plant, where Director (Medical & Health Services) Dr. Sobodh Hiren, after thoroughly checking up Hirendra's left eye, referred him to JLN Hospital. After the check-up by specialists, it was diagnosed that the retina from left eye was impaired and the delay for treating it has made the case more complicated. Dr. R K Jain and Dr. Shailaja from the ophthalmology department of JLN Hospital conducted the much needed operation successfully on the left eye of Hirendra. Within few days, Hirendra recovered completely and the vision of his left eye was also fully restored.

Corruption, Public Policy, Anticompetitive Behaviour and Compliance

BSP as a part of public sector organisation is committed to follow the Central & State Govt guidelines for prevention of bribery and corruption in the organisation. Central Vigilance Guidelines are strictly followed through the procedures formulated and implemented by Vigilance Deptt. System improvement and close examination of high value contracts and purchases continued to be the thrust area for the Vigilance Administration during the year.

Bhilai Steel plant does not encourage any kind of political lobbying and political influence in its working pattern. However, BSP gives respect to all National and State level political representatives. Bhilai Steel Plant has not paid any money to any political party during the reporting year. There is no case pertaining to violation of anti-trust and monopoly regulations.

When ever any incident of corruption is noticed, necessary action is taken for improvement in system & procedures to strengthen them. If necessary, new procedures are also formed. When ever it is proved that the intention of the individual in the incident of corruption is malafied, punitive action is also taken.

There was no fines and non-monetary sanctions for non-compliance with laws and regulations during the year.

Product Responsibility

Customer Health and Safety

The main products of BSP are various kinds of steel products and process by-products. The steel products are generally environment friendly and do not pose any health or safety hazard during their use. Therefore, specific procedures for preserving customer, health & safety during the use of its products are not required. BSP addresses the environmental issues of the products by carrying out Life Cycle Assessment studies to reduce the environmental burdens during mining to production stages.

The process by-products like slags and some hazardous wastes material is also generated. Use of safety appliances like Safety helmet, Safety Boots, Chemical Splash Goggles, Nose Mask, Hand Gloves is mandatory. Hazardous wastes handling is done as per Hazardous waste management, handling and transboundary movement Rules 2008. There is no incidence of non-compliance with respect to regulations and voluntary codes concerning health and safety impacts of products.



“We are the engineering manufacturing contractor for Delhi International Airport which includes building runway, terminal building and other small buildings. It is worth mentioning we are having long old associations with SAIL/BSP and let it be any material either, flat products or section or TMT we are relying/procuring the same from SAIL/BSP”.

Shri KP Sudish Kumar,
Purchase In-charge DIAL Project,
New Delhi

Product and Service Labeling

The product information regarding BSP products is widely publicized through the SAIL website www.sail.co.in which contains details with regard to grade, sizes and applications. The published product catalogues help in informing the customers regarding the products. The stamping and embossing on prime steel products ensures proper product identification. All the norms for physical dimensions, chemical composition and technical delivery conditions for the associated specification are strictly adhered to during production and dispatch of various products manufactured by BSP. Tests certificates are issued along with the deliveries to the customers. There is no incidence of non-compliance with respect to regulations and voluntary codes concerning product and service information and labeling.

Customer Satisfaction

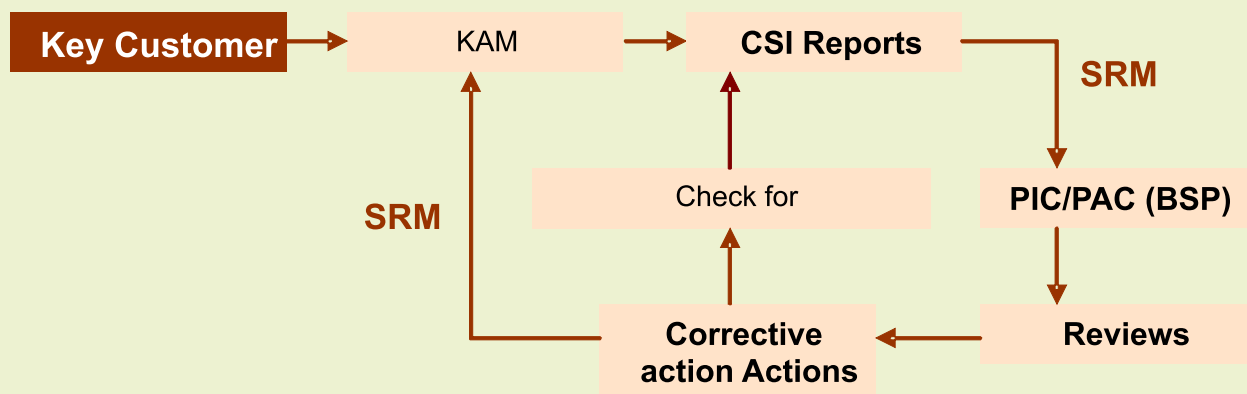
Bhilai has been leveraging the key business drivers to provide superior value to customer on sustainable basis. In reaching out to customer, Central Marketing Organisation (CMO) is our partner for marketing of our products. BSP has devised specific strategies for enhancing customer satisfaction. The various strategies adopted by BSP in enhancing customer satisfaction are enlisted below.

- | | |
|------------------------------------|----------------------------------|
| ☒ Market segmentation | ☒ Internal customer satisfaction |
| ☒ New product development | ☒ Quality Improvement |
| ☒ Customisation. | ☒ Customer service through IT |
| ☒ Maximising Value added products. | ☒ Partnership with customers |
| ☒ Key Account Management | |

There is structured process adopted by Top management of BSP for monitoring/review of customer satisfaction and taking appropriate measures through provision of resources to enhance customer satisfaction.

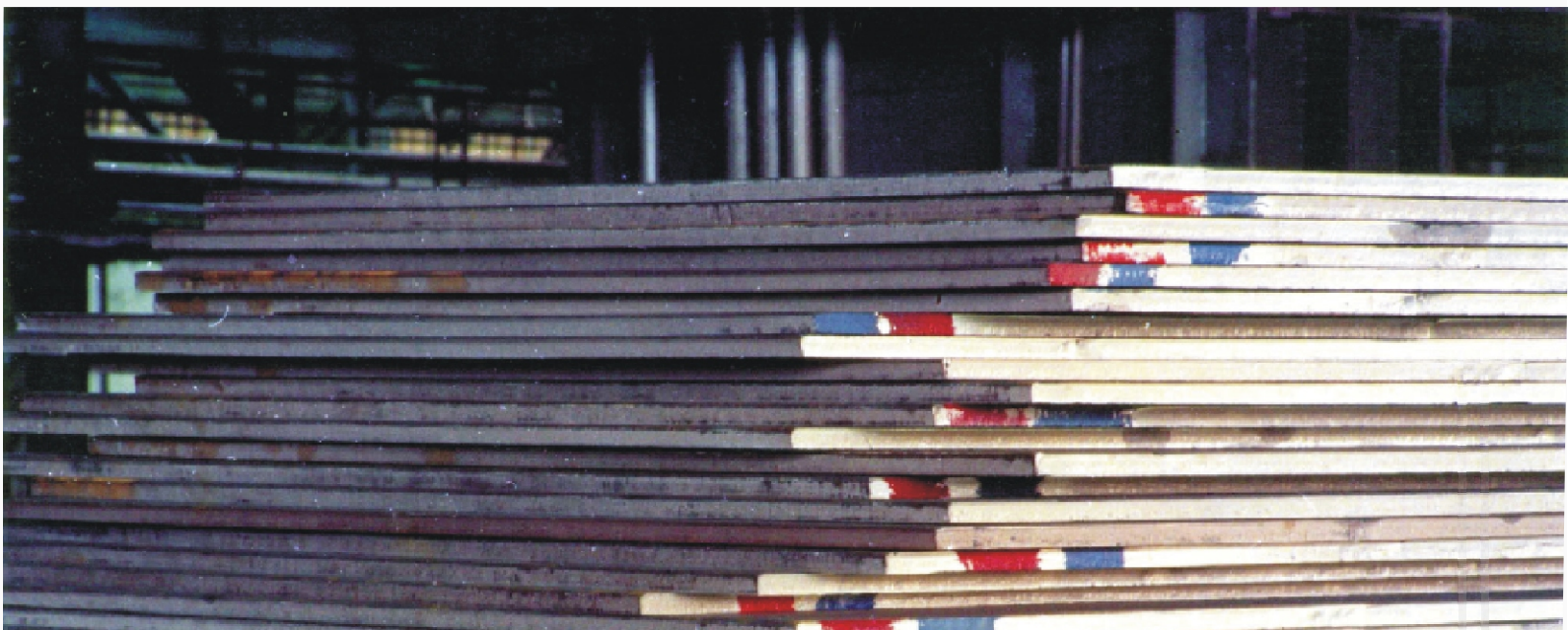
BSP has various channels for gathering feedback from customers. The Key Account Managers (KAM) and Application Engineers of CMO along with our market development officers are constantly in touch with customers to get regular feedback regarding our products / services. Feedback gathered from these sources is discussed every month in the “Quality Improvement Committee (QIC) meeting chaired by Head of Quality. Future course of action is decided and responsibilities fixed for improvement at the shop floor. This has resulted in a number of improvement initiatives taken at shop floor thereby enhancing customer satisfaction.

Customer Satisfaction Review and Improvement Process



“With supplies of long rail the quality of riding on tracks has improved considerably and field engineers are demanding more and more long rail. In future we are planning to get more and more long rails from Bhilai. Further, I would like to put on records that all the persons concerned with supplies of rails are very cooperative and whenever, we interact with them they listen to our problems

Shri A K Mittal, Chief Track Engineer (WR), Indian Railway



Details of settled/closed Complaints

Details	2007-08	2008-09	2009-10
Total No of Complaints (Nos.)	14	5	4
Quantity under complaint (T)	215	48.76	192
Total Saleable Steel Despatches (T)	4394203	4438307	4389813
Quantity under complaint as % of total saleable steel dispatches	0.005	0.00011	0.004

There are no cases/incidents filed by consumers on the safety aspects.

The customer survey is conducted every year by an independent agency for assessment of the organization from customers perspective and the inputs are provided which facilitates towards further improvement. The same is taken for the purpose of assessment for PM's Trophy for the best integrated steel plant also.

BSP ensures that its marketing communication practices conform to generally accepted standards. One of the credo of SAIL clearly states that "We uphold highest ethical standards in conduct of our business".

SAIL as a whole has a comprehensive system of advertising addressed by corporate communication department for its corporate image and product promotion. The advertisements related to BSP for regional and global levels are managed by SAIL at corporate level. Advertisement campaigns viz. "Steel Green", "Steel in Need SAIL in Deed", "This butterfly comes to our plant in search of flowers; Not all our customers want steel" are conducted on regular basis. In addition to this, BSP in line with communication policy of SAIL also advertises it's image in the local region, to permeate the grass root level. There are no incidents of non-compliance with regulations and voluntary codes.

The privacy related to consumer information, such as, the specifications of special products developed for specific consumers are protected through confidentiality agreements. No complaints regarding breaches of customer privacy and losses of customer data received. No fines were imposed for No incidences of noncompliance with respect to laws and regulations concerning the provision and use of products and services and no fines was paid during the year.

Sustainability Assessment Report

2009-10

A team comprising of internal sustainability assessors has conducted the sustainability assessment of various departments of Bhilai Steel Plant. The major objective of the assessment was to verify the various policies, practices, management systems, processes, statements, performance indicators and other information reported in the sustainability report of Bhilai Steel Plant for the year 2009-10.

Assessment has been conducted in such a way that the adequate evidence is verified to support the information given in the report. Robustness of the systems and procedures were also verified. Processes for identifying sustainability issues, risks and opportunities and sustainability impacts of the organization for short term and long-term basis were examined. The criteria for self-declaration application level of GRI have been followed. The main principles viz. Materiality, Completeness and Responsiveness were assessed. Evaluation of Stakeholder views and actions initiated by BSP for ensuring inclusive growth has also been considered during the assessment.

The sustainability report of BSP for the year 2009-10 demonstrates fair and balanced presentation of organization's sustainability performance. BSP has implemented the sustainability management practices and procedures across the organization. BSP has well established process to engage its stakeholders in order to capture their needs and expectations and accordingly formulate action plan. The various departments viz Finance, Environment Management, Personnel & Administration, Water Management, Safety, Occupational Health & Safety, Corporate Social Responsibility Cell, Town Services etc. are carrying out the Sustainability related jobs as per the annual plan. Communication channels for awareness on sustainability aspects are in place. BSP is also comparing its performance for the economic, environmental & social performance indicators with the WSA sustainability performance indicators.

The internal audit committee assessed the report content against the GRI criteria and concludes that the report fairly represents the Application level 'A' of GRI. The application level grid is as follows:

Report Application Level		Report Self-Assessed- 'A'	
G3 Profile Disclosures	Output	Reporting done on 1.1 2.1-2.10 3.1-3.13 4.1-4.17	✓
G3 Management Approach Disclosures	Output	Management Approach Disclosed for each indicator category	✓
G3 performance Indicators & sector supplement indicators	Output	Each Core G3 and "Sector Supplement" indicator addressed with due regard to materiality principle	✓

GRI INDEX

We provide an index to our sustainability reporting based on the GRI reporting elements and performance indicators as defined in the GRI G3 Sustainability Reporting Guideline 2006. The index shows how and where we are addressing the GRI elements and indicators throughout this report.

● Fully reported

◐ Partially reported

1.0 STRATEGY AND ANALYSIS

- | | | | |
|-----|--|-------|---|
| 1.1 | Statement from the most senior decision maker of the organization (e.g. CEO, chair or equivalent senior position) about the relevance of sustainability to the organization and its strategy | 1-2 | ● |
| 1.2 | Description of key impacts, risks and opportunities | 2, 17 | ● |

2.0 ORGANIZATIONAL PROFILE

- | | | | |
|------|--|------|---|
| 2.1 | Name of the organisation | 5 | ● |
| 2.2 | Primary brands, products, and/or services | 7-8 | ● |
| 2.3 | Operational structure of the organisation including main divisions, operating companies, subsidiaries and joint venture | 5-6 | ● |
| 2.4 | Location of organization's headquarters | 6 | ● |
| 2.5 | Number of countries where the organisation operates and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report | 5 | ● |
| 2.6 | Nature of ownership and legal form. | 5-6 | ● |
| 2.7 | Markets served (including geographic breakdown, sectors served and types of customers/beneficiaries) | 7-8 | ● |
| 2.8 | Scale of the reporting organisation | 5-7 | ● |
| 2.9 | Significant changes during the reporting period regarding size, structure, or ownership including. Awards received in the reporting period. | 3, 5 | ● |
| 2.10 | | 9 | ● |

3.0 REPORT PARAMETERS

Report Profile

- | | | | |
|-----|---|---|---|
| 3.1 | Reporting period (e.g. fiscal/calendar year) for information provided | 4 | ● |
| 3.2 | Date of most recent previous report (if any) | 5 | ● |
| 3.3 | Reporting cycle (annual, biennial, etc.) | 5 | ● |
| 3.4 | Contact point for questions regarding the report or its contents | 5 | ● |

Report Scope and Boundary

- | | | | |
|------|--|-----|---|
| 3.5 | Process for defining report content | 3-4 | ● |
| 3.6 | Boundary of the report (e.g. countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers) See GRI Boundary Protocol for further guidance | 4 | ● |
| 3.7 | State any specific limitations on the scope or boundary of the report. | 4 | ● |
| 3.8 | Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations and other entities that can significantly affect comparability from period to period and/or between organizations | 4 | ● |
| 3.9 | Data measurement techniques and the basis of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report | 5 | ● |
| 3.10 | Explanation of the effect of any re-statements of information provided in either reports and the reasons for such re-statements (e.g. mergers/acquisitions, change of base years/periods, nature of business, measurement methods) | 5 | ● |
| 3.11 | Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report | 5 | ● |

GRI Content Index

- | | | | |
|------|--|-------|---|
| 3.12 | Table identifying the location of the Standard Disclosures in the report | 72-74 | ● |
|------|--|-------|---|

Assurance

- | | | | |
|------|--|-------|---|
| 3.13 | Policies and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s) | 4, 75 | ◐ |
|------|--|-------|---|

4.0	GOVERNANCE, COMMITMENTS AND ENGAGEMENT		
	Governance		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organization oversight	10-22	●
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement)	6	●
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	10	●
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	10	●
4.5	Linkage between compensation for members of the highest governance body, Senior Managers and executives (including departure arrangements) and the organization's performances (including social and environmental performance)	10	●
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	10	●
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental and social topics	10	■
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic environmental, and social performance and the status of their implementation	10-11	●
4.9	Procedure of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	22-23	■
4.10	Process for evaluating the highest governance body's own performance, particularly with respect to economic, environmental and social performance	22-23	■
	Commitment to external Initiatives		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	15, 23	●
4.12	Externally developed economic, environmental, and social charters, principles or other initiatives to which the organization subscribes or endorses	14, 16	●
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization	14, 16	●
4.14	List of stakeholder groups engaged by the organization	19-20	●
4.15	Programmes and procedures pertaining to economic, environmental, and social performance	12-14	●
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	18-20	●
4.17	Key topics and concerns that have been raised through stakeholder engagement and how the organization has responded to those key topics and concerns, including through its reporting	19-21	●
	Economic performance indicators		
5.0	ECONOMIC PERFORMANCE		
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	24, 27-30	●
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	29	■
EC3	Coverage of the organization's defined benefit plan obligations	30-31	●
EC4	Significant financial assistance received from government	30	■
	ASPECT: Market Presence		
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	30	●
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	30	●
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	31	●
	ASPECT: Indirect Economic Impacts		
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in kind, or pro bono engagement	31	●
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	31	●

6.0	ENVIRONMENTAL PERFORMANCE INDICATORS		
	ASPECT: Materials		
EN1	Materials used by weight or volume	35	●
EN2	Percentage of materials used that are recycled input materials	36	●
	ASPECT: Energy		
EN3	Direct energy consumption by primary energy source	42	●
EN4	Indirect energy consumption by primary source	42	●
EN5	Energy saved due to conservation and efficiency improvements	43	●
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and	43	●
EN7	reduction in energy requirements as a result of these initiatives	43	●
	Initiatives to reduce indirect energy consumption and reductions achieved		
	ASPECT: Water		
EN8	Total water withdrawal by source	37	●
EN9	Water sources significantly affected by withdrawal of water	37	●
EN10	Percentage and total volume of water recycled and reused	38	●
	ASPECT: Biodiversity		
EN11	Location and size of land owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas	47-48	●
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas of high biodiversity value outside protected areas	47	●
EN13	Habitats protected or restored	47	■
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	48	■
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinctions risk	47	■
	ASPECT: Emission, Effluents and Waste		
EN16	Total direct and indirect greenhouse gas emissions by weight	44	●
EN17	Other relevant indirect greenhouse gas emissions by weight	44	●
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	44-45	●
EN19	Emissions of ozone-depleting substances by weight	45	●
EN20	NO _x , SO _x and other significant air emissions by type and weight	36	●
EN21	Total water discharge by quality and destination	38	■
EN22	Total weight of waste by type and disposal method	38-39	●
EN23	Total number and volume of significant spills	38	●
EN24	Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III and VIII, and percentage of transported waste shipped internationally	40-41	●
EN25	Identity, size, protected status and bio-diversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	38	●
	ASPECT: Product and Services		
EN26	Initiatives to mitigate environmental impacts or products and services and extent of impacts mitigation	46	●
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	-	●
	ASPECT: Compliance		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	33-34	●
	ASPECT: Transport		
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organizations's operations, and transporting members of the workforce	46	■
	ASPECT: Overall		
EN30	Total environmental protection expenditures and investments by type	47	●

7.0	LABOUR PRACTICES AND DECENT WORK PERFORMANCE INDICATORS		
	ASPECT: Employment		
LA1	Total workforce by employment type, employment contract, and region	52-53	
LA2	Total number and rate of employee turnover by age group, gender and region	52-53	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	55	
	ASPECT: Labor / Management Relations		
LA4	Percentage of employees covered by collective bargaining agreements	54	
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	54	
	ASPECT: Occupation Health and Safety		
LA6	Percentage of total workforce represented in formal joint management worker health and safety committees that help monitor and advise on occupational health and safety programs	55-56	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism and number of work related fatalities by region	58	
LA8		56-57	
LA9	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	55-56	
LA10	Health and safety topics covered in formal agreements with trade unions		
	ASPECT: Training and Education		
LA11	Average hours of training per year per employee by employee category	59	
LA12	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	60	
LA13	Percentage of employees receiving regular performance and career development reviews	59	
	ASPECT: Diversity and Equal Opportunity		
LA14	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity Ratio of basic salary of men to women by employee category	52-53	
8.0	HUMAN RIGHTS PERFORMANCE INDICATORS		
	ASPECT: Investment and Procurement Practices		
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	52	
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	61-62	
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	62	
	ASPECT: Non - Discrimination		
HR4	Total number of incidents of discrimination and actions taken	59, 62	
	ASPECT: Freedom of Association and Collective Bargaining		
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk and actions taken to support these rights	62	
	ASPECT: Child Labor		
HR6	Operations identified as having significant risk for incidents of child labor and measures taken to contribute to the elimination of child labor	61	
	ASPECT: Forced and Compulsory Labor		
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor and measures to contribute to the elimination of forced or compulsory labor	61-62	
	ASPECT: Security Practices		
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	61	
	ASPECT: Indigenous Rights		
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	62	

9.0	SOCIAL PERFORMANCE INDICATORS - SOCIETY		
	ASPECT: Community		
SO1	Nature, scope and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting	63-67	●
	ASPECT: Corruption		
SO2	Percentage and total number of business units analysed for risks related to corruption	68	●
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	68	●
SO4	Actions taken in response to incidents of corruption	68	●
	ASPECT: Public Policy		
SO5	Public policy positions and participation in public policy development and lobbying.	68	●
SO6	Total value of financial and in-kind contributions to political parties, politicians and related institutions by country	68	●
	ASPECT: Anti-Competitive Behavior		
SO7	Total number of legal actions for anti-competitive behavior, anti-trust and monopoly practices and their outcomes	69	●
	ASPECT: Compliance		
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	68	●
10.0	PRODUCT RESPONSIBILITY PERFORMANCE INDICATORS		
	ASPECT: Customer Health and Safety		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement and percentage of significant products and services categories subject to such procedures	68	●
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle by type of outcomes	68	●
	ASPECT: Product and Service Labeling		
PR3	Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements	68	●
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling by type of outcomes	68	●
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	69	●
	ASPECT: Marketing Communications		
PR6	Programs for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	70	●
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion and sponsorship by type of outcomes	70	●
	ASPECT: Customer Privacy		
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	70	●
	ASPECT: Compliance		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	70	●

List of Abbreviations

AAQ	Ambient Air Quality	DMR	Defence Metallurgical Research Lab
AGM	Asst. General Manager	DRO	Direct Reporting Officer
AIDS	Acquired Immune Deficiency Syndrome	EBIT	Earnings Before Interest & Tax
AMR	Addition, Modification, Replacement	ED	Executive Director
APP	Annual Production Plan	ED (P&A)	Executive Director (Personal & Admin.)
ASTM	American Society for Testing And Materials	ED (W)	Executive Director (Works)
ATM	Automated Teller Machine	EHS	Environment, Health & Safety
BBM	Blooming & Billet Mill	EMS	Environment Management System
BF	Blast Furnace	ENV	Environment
BHEL	Bharat Heavy Electricals Limited	EPMS	Executive Performance Management System
BMDC	Bhilai Management Development Centre	ERM	Enterprise Risk Management
BOD	Biochemical Oxygen Demand	ERP	Enterprise resource Planning
BOF	Basic Oxygen Furnace	ESP	Electrostatic Precipitator
BPL	Below Poverty Line	ETP	Effluent Treatment Plant
BSP	Bhilai Steel Plant	EXIM	Export Import
CA	Chartered Accountant	F&A	Finance & Account
CAS	Compressed Air Station	FICCI	Federation of Indian Chambers of Commerce and Industry
CCTV	Closed circuit television	FII	Foreign Institutional Investors
CDI	Coal Dust Injection	FR	Frequency Rate
CDM	Clean Development Mechanism	GCal	Giga Calories
CDQ	Coke Dry Quenching	GCP	Gas Cleaning Plant
CEO	Chief Executive Officer	GDP	Gross Domestic Product
CER	Carbon Emission Reduction	GHG	Green House Gases
CET	Centre for Engineering & Technology	GJ	Giga Joules
CFC	Choloro Fluoro Carbon	GM	General Manager
CII	Cofederation of Indian Industry	GRI	Global Reporting Initiatives
CISF	Central Industrial Security Force	HOD	Head of the Department
CMO	Central Marketing Organisation	HR	Human Resources
COB	Committee of the Board	HRD	Human Resources Development
COB	Coke Oven Battery	HRDC	Human Resources Development Centre
COCCD	Coke Oven & Coal Chemical Department	IC	Installed Capacity
COMEX	Communication for Executives	IIP	Index for Industrial production
CPCB	Central Pollution Control Board	IISI	International Iron & Steel Institute
CPTI	Central Power Training Institute	ILO	International Labor Organisation
CREP	Corporate Responsibility on Environment Protection	IMS	Integrated Management System
CSR	Corporate Social Responsibility	INTUC	Indian National Trade Union Congress
CTC	Carbon Tetra Chloride	IOC	Iron Ore Complex
CVC	Central Vigilance Committee	IPT	Inter Plant Transfer
DA	Daily Allowance	IR	Injury Rate
dB	Decibel	ISO	International Organisation for Standarisation
DCDA	Double Contact Double Absorption	ITI	Industrial Training Institutes
Deptt	Department	JLN	Jawaharlal Nehru
Dir. (M&HS)	Director (Medical & Health Services)	JPC	Joint Parliamentary Committee
DGM	Deputy General Manager	JSPL	Jindal Steel & Power Ltd.

JV	Joint Venture	PMC	Project Management Consultancy
KAM	Key Account Management	PP-1	Power Plant -1
KL	Kilolitre	PRO	Public Relation Office
KWH	Kilo Watt Hour	PSU	Public Sector Undertaking
L & T	Larsen & Tubro	PV	Production Volume
LCA	Life Cycle Assessment	QC	Quality Circle
LD	Linz Donawitz	QIC	Quality Improvement Committee
Li-Br	Lithium - Bromide	QCFI	Quality Circle Federation of India
M & HS	Medical & Health Services	R & D	Research and Development
MARS	Machining Assembling & Reengineering shop	RCL	Research control Laboratory
MBA	Master of Business Administration	RDCIS	Research and Development Centre for Iron & Steel
MD	Managing Director	RINL	Rashtriya Ispat Nigam Ltd.
MECON	Metallurgical Engineering Consultancy Ltd.	RMP	Refractory Material Plant
MES	Manufacturing Execution System	Rs	Rupees
mg	Milligram	RSM	Rail & Structural Mill
MLD	Million Litres per Day	RSP	Rourkela Steel Plant
m ³	Cubic Meter	RTS	Roll Turning Shop
MM	Material Management	SA	Social Accountability
MM	Merchant Mill	SAIL	Steel Authority of India Limited
Mm ³	Million Cubic meter	SEBI	Securities and Exchange Board of India
MOEF	Ministry of Environment & Forest	SEFI	Steel Executives Federation of India
MOU	Memorandum of Understanding	SMS	Steel Melting Shop
MSDS	Main Step down substation	SO ₂	Sulphur Dioxide
MSV	Model Steel Village	SP	Sinter Plant
MTI	Management Training Institute	SPCB	State Pollution Control Board
mtpa	Metric Tonnes Per Annum	SPU	Steel Processing Units
MW	Mega Watt	SSI	Small Scale Industries
MWH	Mega Watt Hour	SWOT	Strengths, Weaknesses, Opportunities, and Threats
NACO	National AIDS Control Organisation	T&D	Transport & Diesel
NEERI	National Environment Engineering Research Institute	TCS	Tonnes of Crude Steel
NGC	National Green Corps	TDP	Tar Distillation Plant
NGO	Non Governmental Organisation	THF	Twin Hearth Furnace
Nm ³	Normal Cubic Meter	THM	Tonne of Hot Metal
NML	National Metallurgical Laboratory	TMT	Thermo Mechanical Treatment
NMR	Non Management Representative	TOTO	Training of Training Officers
NOx	Nitrogen Oxides	TRT	Top Recovery Turbine
NSPCL	NTPC SAIL Power Company Ltd.	TSS	Tonnes of Saleable Steel
OA	Officers Association	µg	Microgram
OCT	Occasional Trainer	UN	United Nations
ODP	Ozone Depleting Potential	UNDP	United Nations development Programme
ODS	Ozone Depleting Substances	VAD	Vacuum Arc Degasing
OHP	Ore handling Plant	VER	Voluntry Emission Reduction
OHS	Occupational Health Services	VFD	Variable Frequency Drive
OP	Oxygen Plant	VWF	Variable Voltage Variable Frequency
OHSAS	Occupational Health & Safety Assurance Standard	WMD	Water Management Department
P&A	Personal & Administration	WSA	World Steel association
		WRM	Wire Rod Mill

Plant Level Other Policies



QUALITY POLICY

To make Quality as the hallmark of every process and activity and enhance customer satisfaction through Innovation, Product Differentiation and Effective Quality Management System.

ENVIRONMENTAL POLICY

Bhilai Steel Plant (BSP), Steel Authority of India Limited, is an integrated steel plant with an annual production capacity of 4.0 million tones of steel and progressing towards 7MT, specializing in production of rails, heavy structural, merchant products, wire rods and plates. Bhilai Steel Plant collective re-affirms its commitment to protect environment and shall strive to:

- ✦ Introduce sound environmental management practices for minimizing pollution and its impact on air, water, land, flora, fauna and human beings.
- ✦ Conduct operations in an environmentally responsible manner for complying with legislation and regulations related to its environmental aspects.
- ✦ Conserve and optimally utilize raw materials, energy, water and other resources.
- ✦ Minimize waste generation and promote its recovery, recycling and reuse.
- ✦ Achieve continual improvement in environmental performance by setting and reviewing the objectives and targets periodically.
- ✦ Enhance environmental awareness amongst employees and interested parties.
- ✦ Communicate Environmental Policy to the persons working for or on behalf of the organization and make it available to public.

OCCUPATIONAL HEALTH & SAFETY POLICY

BSP is committed to :

- ✦ Create work site free from Occupational Health & Safety hazards for its employees.
- ✦ The Safety of the people associated with it, those living in the neighborhood of its plants, mines & units,
- ✦ Pursue the safety efforts by adhering to Occupational Health & Safety Management system based on the requirements of internationally recognized OHSAS:18001 Standard and its periodic review at Works.
- ✦ Demand accountability for safety performance & provide the resource to make safety programme work,
- ✦ Involve all employees for continual improvement in OH&S,
- ✦ Comply with the applicable legislation & other requirements of OH&S.

HR POLICY

- ✦ To enhance employee productivity attuned to business goals of Bhilai Steel Plant.
- ✦ To promote a work culture which encourages the employees to contribute their best.
- ✦ To strive for making a meaningful difference in the quality of life of employees
- ✦ To develop proactive and customer focused HR team engaged in continual innovation and change management.

ENERGY MANAGEMENT POLICY

- ✦ Introduce sound Energy Management practices.
- ✦ Operate in an energy efficient manner for complying with legislation and regulation. Conserve and optimally utilise raw materials, petroleum fuels, steam, power, compressed air, water and other resources.
- ✦ Minimise Energy losses, promote usages of by-product fuels and waste energy recovery.
- ✦ Achieve continual improvement in energy performance by settling and reviewing the objectives and targets periodically.
- ✦ Energy conscious employees.



*making meaningful difference
in people's lives*



स्टील अथॉरिटी ऑफ इंडिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED
भिलाई इस्पात संयंत्र
BHILAI STEEL PLANT