



Hindustan Zinc Limited



Well positioned
through the cycle

Hindustan Zinc Limited
Sustainable development
report 2008-09



Sustainable Development

We are determined to pursue value-creating projects for all our stakeholders effectively addressing opportunities and risks pertaining to environment, social, health and safety and continue to ensure that our business creates sustainable benefits for all our stakeholders. We continue to impact the lives of over 500,000 people in the vicinity of our operations.

Sustainability is one of our core values, and absolutely integral to our overall vision to 'transform tomorrow'. We know we operate in a sector that can have a significant impact on the environment, which means we have an even greater responsibility to make sure we use resources wisely, and manage our waste and emissions effectively. Complying with environmental regulations is just the start: in our performance we aspire to excellence. The challenge is that we have to do this in the context of an ongoing, and indeed growing, demand for the metals we produce.

Our focus in this area reflects our determination to pursue value-creating projects for our stakeholders that also effectively address our environmental, social, health and safety opportunities and risks.

Health, Safety and Environment

We consider Health, Safety and Environment to be the key element for our business and philosophy. We stay committed to continuous improvement in health, safety and environment in line with the HSE policy. Not just because it is right to safeguard the health of the planet for future generations, but because it also makes sound

and sustainable business sense. Our efforts are built around three pillars:

- **Safety:** Provide a safe workplace.
- **Environment:** Minimum harm to environment by conserving natural resources through efficient use.
- **Health:** Eliminate occupational illness.

Our focus in this area is evident by some of the key initiatives that we undertake by engaging reputed national and international consultants for assessing our performance, identifying gaps and closing them.

Our efforts in this direction have been recognized by way of several prestigious awards including, 'Occupational Health & Safety Award – 2008' by The Royal Society for the prevention of Accidents (RoSPA)-UK, 'Golden Peacock award for Occupational Health & Safety – 2008' by UN-Human Rights Commission, 'Environment, Social awareness and Excellence Award – 2008' by Federation of Indian Mineral Industries.

All our operations have the certifications as per below table 2.

■ Safety

We aim to provide a safe workplace that is an injury-free working environment for all our employees and contractor personnel. Improving our safety performance which requires a consistent and holistic approach.

In an operating business like ours where there are operational hazards we actively work to continuously improve our safety performance. Ultimately, it is our aim to have no employees or contract workmen injured while at work.

We believe that working safely is the responsibility of every individual who works at our sites. We ensure that there is effective involvement and open communication of all safety matters at all levels in our organisation.

Safety Performance

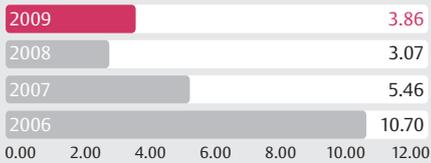
For evaluating the safety performance of the company 'Lost Time Injuries Frequency Rate (LTIFR)' an index system is followed across the Company. It is the number of injuries involving the loss of work time per million working hours.

The safety improvements over the past few years have been achieved

Table 2

| | ISO 9001 – 2008 | ISO 14001 – 2004 | OHSAS 18001 – 2007 | SA 8000 – 2008 | 5S |
|-----------------------------|-----------------|------------------|--------------------|----------------|----------------|
| Mines | | | | | |
| Rampura Agucha Mine | Certified | Certified | Certified | Certified | Certified |
| Sindesar Khurd Mine | Not Certified | Not Certified | Not Certified | Not Certified | Not Certified |
| Rajpura Dariba Mine | Certified | Certified | Certified | Certified | Certified |
| Zawar Mines | Certified | Certified | Certified | Certified | Under Progress |
| Smelters | | | | | |
| Chanderiya Smelting Complex | Certified | Certified | Certified | Not Certified | Certified |
| Zinc Smelter Debari | Certified | Certified | Certified | Certified | Certified |
| Zinc Smelter Vizag | Certified | Certified | Certified | Certified | Certified |

Chart 1. LTIFR



by concentrating on improving our safety systems and continuing to build and strengthen our 'safety culture'. Culture based program, participation of employees and contract workmen in safety meetings, safety interaction and encouraging workers to intervene if they see an unsafe act/conditions are part of our day to day business.

There was a significant reduction of 64% in LTIFR over the last four years from 10.70 in FY 2006 to 3.86 in FY 2009 as shown in the chart 1.

Some of the key initiatives in safety during the year include:

- We engaged the British Safety Council, United Kingdom to audit and assess our safety standards and performance which resulted in a number of good practices that we follow and some areas where we needed to do a good amount

of improvements against which a time-bound action plan was prepared and those areas were strengthened.

- More than 20 safety program covering 295 employees and 29 contract workmen at Chanderiya Smelting Complex and 46 employees at Zinc Smelter Debari, have been conducted through the National Safety Council. 13 behavioural safety based Suraksha Jyoti program since August 2008 covering 348 contract workmen, supervisors and workers at Chanderiya Smelting Complex have been conducted through Sum Amicus Consultants Private Limited.
- Health, Safety and Environment (HSE) training has been given for more than 23,000 man-days covering a wide spectrum of topics including, fire and safety, environment monitoring and analysis, behavioural safety training 'Suraksha Jyoti', etc.
- For strengthening our safety management of our contract workers, all major contractors are having their respective dedicated safety officers and for small contractors, our own safety officers are supervising. Concurrently guidelines for 'Safety Management of Contractor' have been prepared and implemented.
- Updated Safety Score Card system was introduced across all the smelters and mines to assess their relative

performance and benchmarking their safety performance on all parameters.

- Group level interactions of Health, Safety and Environment (HSE) professionals was organised, to facilitate sharing of best practices of each company to enhance safety management.

Despite our sincere efforts and continuous focus on improving the safety performance of the organization, there were five fatalities during the year, which were all of our contract workmen. Three fatalities at Zawar mines were due to very old structural failure and two fatalities at Chanderiya Smelting Complex were due to sudden fire in the tank. Disciplinary actions were also taken against the responsible employee to bring the accountability towards safety.

In order to avoid the recurrence of accidents, a structural audit was conducted at all of our sites through reputed agencies and also through in-house competence. The action plans were drawn to complete the audit observations and monitoring is done at the highest level.

■ Environment

We are committed to continual improvement in environmental performance and we apply similar standards to all our smelters and mines with the aim of minimizing any harm to our people, our local communities and to the environment around us.

We minimize the impacts on environment at every possible stage through adoption of best available technology, resources, recycle and reuse practices. And we also focus on conserving bio-diversity in and around our operating locations.

We identify, monitor and manage environmental risks arising from our operations and have formal site environmental management systems externally certified to ISO 14001 and also ensure appropriate focus and integration of environmental issues in our business.



Sustainable Development continued

Chart 2: Specific energy consumption, mines

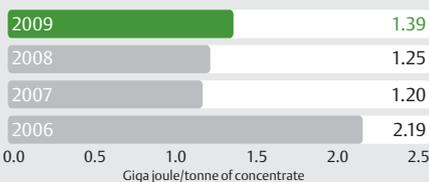


Chart 3: Specific energy consumption, smelters



Chart 4: Specific water consumption, mines

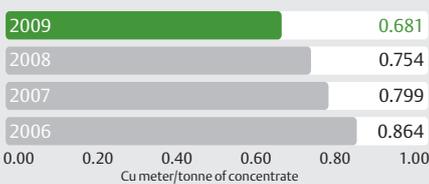
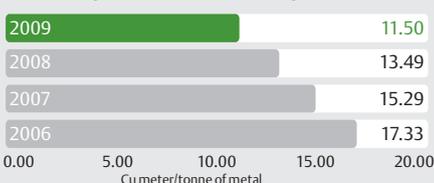


Chart 5: Specific water consumption, smelters



Metallurgical industries are energy and water intensive industry, so energy and water efficiency is of paramount importance to us and we have processes in place to assess ways in which we can reduce our carbon footprints. Some of the improvement initiatives relating to the energy and water efficiencies are

Energy Conservation Initiatives

- During the year, we have installed Variable frequency drives (VFDs) which will reduce the power consumption by approximately 164,000 kwh per annum.
- We have introduced carbon footprint reporting as a part of our Management Information System, to monitor our greenhouse gas emissions.

- We have received the United Nations Framework Convention on Climate Change (UNFCCC) registration for our wind power plants at Gujarat and Karnataka. Apart from that we already have a 9.4 MW capacity waste heat recovery boiler at Chanderiya which is UNFCCC registered.
- During the year, we sold 16,000 Certified Emission Reduction (CER's) and 22,700 Voluntary Emission Reduction (VER's).

Through our continuous efforts for energy conservation we have been able to reduce our specific energy consumption (i.e. energy consumed per tonne of metal produced) by 37% and 31% at mines and smelters respectively over the last four years as shown in chart 2 and chart 3. Our efforts have been recognised through the 'National Energy Conservation Award - 2008' by National Energy Council.

In FY 2009, the specific energy consumption at our mines is slightly higher compared to last year due to an increase in the working depth of our open cast mine at Rampura Agucha.

Water Conservation Initiatives

- Reverse osmosis plants have been installed at all our smelters, resulting in a decrease of fresh water consumption.
- We maintain zero-discharge at all our locations.
- Specific water consumption (i.e. water consumed per tonne of metal produced) has decreased by 21% in mines and 34% in smelters over the span of four years as shown in chart 4 and chart 5 respectively. It is recognized by 'Water Excellent Award - 2008' by Confederation of Indian Industry (CII) - ITC.

By recycling waste water and installing reverse osmosis plants, we have made a potential saving of approximately 360,000 cubic meters per annum of water. Optimization of beneficiation process has helped to save around 28,800 cubic meters per annum of water.

Health

We aim to eliminate occupational illness through providing a workplace that is free from occupational health risk and hygiene hazard and proactively work with employees and contract workmen to contribute towards healthier lifestyles. This enables us to increase our productivity and reduce absenteeism.

Full time occupational health experts are available across all mines and smelters for regular health examination of employees, contract workmen's at workplaces. Specific examinations like blood lead level, audiometry, spirometry, ECG, and chest X-rays are carried out on a regular basis.

The health of our employees is monitored by our internal system that ensures that periodical medical examinations take place. During the year, more than 8,100 employees have undertaken initial/periodical medical examinations. There was no case of occupational disease reported during the year.

Managing Climate Change

We always endeavour to reduce our operational impacts on the environment. Climate change being a global cause of concern these days for social, economic and environmental development, we recognize its importance and look forward to mitigating the effect as a part of our social responsibility.

We have two wind energy farms whose combined capacity being 123.2 MW located in the state of Gujarat and Karnataka and has combined potential of 225,000 CER per annum. In FY 2009, our wind power plants have been registered as Clean Development Mechanism (CDM) projects under United Nations Framework Convention on Climate Change (UNFCCC). Apart from that we also have a 9.4 MW capacity waste heat recovery boiler generating power by utilizing waste heat at Chanderiya Smelter which is also a UNFCCC registered CDM project.

Biodiversity

None of our smelters and mines are situated near endangered ecosystem or wetland area or world heritage sites. All our operating sites are surrounded with dense plantation and every year plantation is done to further improve its density and increase the greenbelt coverage. Few of our sites have engaged horticulture experts to restore the wasteland by plantations. During the year, we have planted around 25,000 trees across all operating sites including Jatropha plants covering about 9.5 hectare of land. The total population of our plantation are more than 900,000 plants across all our operating locations.

We will keep on showing our endeavor to conserve the biodiversity and recognize the importance of conserving and responsibly managing biological diversity, both as an issue for the business and for the society.

Waste Management

Ours being a non-ferrous metal industry, the hazardous as well as non-hazardous waste are being generated at the mines and smelters. We hold clear focus on waste minimization and strive to utilize the generated waste in alternative gainful use.

During the year around 162,000 tonnes of Fly ash generated from our captive power plants and about 252,000 tonnes of ISF Slag have been utilized by the cement manufacturers. This has helped us in reducing our waste inventories and conserving natural resources by replacing the virgin material at the other end where it is gainfully utilised.



Rejuvination of old Tailing Dam through bio-technological approach at Zawar Mines

OVERVIEW
OPERATIONAL PERFORMANCE
FINANCIAL REVIEW
SUSTAINABILITY
BOARD OF DIRECTORS
FINANCIAL STATEMENTS

Corporate Social Responsibility

We continue to impact over 500,000 lives through our relentless Corporate Social Responsibility (CSR) initiatives. We are committed to raise the quality of life and social well-being of communities where we operate. We believe engaging with our stakeholders in two-way, open dialogue, is the key to the development of sustainable communities.

Our approach to community engagement is based on the Public Private Partnership (PPP) model. We use intensive intervention in select villages identified through an indicator driven process designated as the 'Integrated Village Development Program'. In all other villages we have an extensive approach. Internal reviews and social audits are periodically conducted to facilitate transfer of autonomy to the villages and expand our reach.

We have a dedicated team of 107 functionaries including qualified professionals and subject matter specialists who are part of the corporate social responsibility team.

In pursuit of our mission, we either take up projects independently or work with partners who have similar objectives like government bodies and volunteer organizations. We also network with the national bodies including the Federation of Indian Chambers of Commerce and Industry (FICCI), Confederation of Indian Industry (CII), Federation of Indian Mineral Industries (FIMI), The Energy and Resources Institute (TERI), Institute of Directors (IOD) for cross functional learning to impact social change.

Our social policy is to:

- Be a significant contributor in addressing social needs within the communities in which we operate.
- Create sustainable partnerships, strive to actively enter into dialogue and engagement with our stakeholders.
- Strive to achieve and drive forward industry best practice in our social stewardship.

- comply with all applicable legislative and statutory requirements.
- Be a responsible and good local neighbour.

Our community development initiatives are prioritized based on the local needs. Broad areas of focus are:

- Social Investment – Health, Education, Livelihood and Infrastructural Development
- Bio Investment – Water harvesting, agriculture, animal husbandry and social forestry

Accomplishments During FY 2009:

Our work has been recognized by national and international awards including the Asian Corporate Social Responsibility Excellence Award 2008 and the Pegasus Gold Corporate Social Responsibility Award 2008.

'Integrated Village Development Program (IVDM)' is an initiative taken up to improve the social and economic well being of the people in the identified poverty stricken villages during the period of three years. During the year 27 villages have been undertaken in Phase – III and undertaken various need based initiatives for transforming them into model villages in three years.

We have imparted job oriented vocational training to 1,113 rural youth (male and female) in various vocations like Hospitality, Marketing, Computer, Home Appliances, Fitter, etc. Through this initiative over 85% of rural youth have been placed with ensured monthly earning of Rs 4,000 to Rs 8,000.

Empowerment of women through Self-Help-Groups (SHGs) forms part of our socio-economic empowerment drive. In this direction, 40 SHGs have been formed and linked with micro enterprises after providing quality training in handicraft, embroidery, tailoring, animal husbandry, carpet making, vegetable growing,

etc., thereby raising their additional average monthly income to Rs 2,500.

Our health and nutrition programs like the Sterlite Bal Chetna Anganwadi Project and the Mid Day Meal Programme, have improved the nutritional status, health and average school attendance. Midday meals are provided to more than 180,000 students through six hi-tech centralised kitchens.

Through various health and family welfare initiatives 55,330 needy people have been benefited by organising rural medical camps, surgery camps, eye camps, family planning camps, RCH camps, Pulse polio camps etc. We also issued health cards to 7,500 poor government school students, under 'Bal Ganesh Chiranjeev Government Health Scheme', for providing them free treatment.

We have set up veterinary camps where 91,285 cattle have been treated and have ensured 87% immunization in joint collaboration with the District Veterinary Department. We have organised farmers training programs benefiting 850 farmers in joint collaboration with the district agricultural Department. High-yield seeds were distributed to 200 farmers. 150 Vermi compost units were established. We also sponsored the 'Mewar Kisan Mela' and exhibition in Rajsamand District benefiting 20,000 farmers in the nearby areas.

Case study



Hatiahoda Anganwadi Centre (Awc)

We are committed to improve the quality of life and social wellbeing of communities where we operate. Our social investment particularly focuses on uplifting and empowering the youth, women and children.

We have launched 'Sterlite Bal Chetna Anganwadi Project', with the objective of holistic development of over 2 Lac underprivileged children (zero to six year's age group) in 3,500 Anganwadi Centres, in phases, for improvement in health, pre-school education and linkage with formal education.

The project has been implemented 400 Centres catering to 13,000 children and capacity building of 1,350 government and project staff in Phase-I. There has been significant improvement in nutritional and health status; and the average attendance has increased by a substantial 36%. We aim to scale up to 600 additional Anganwadi Centres in FY 2010 which will cater to 39,000 children.

AWC Hatiahoda before Intervention

Anganwadi Center (AWC) – Hatiahoda, is situated in the tribal village of Tidi, which is 35 kilometres from Udaipur. It is the only source of pre-school education for the tribal children (three to six years age group) in the village. At the time of adoption of AWC, its condition was deplorable in terms of regularity and timely opening of the center, attendance of the children, distribution of supplementary nutrition, immunization, health and hygiene.

As per base line survey conducted in the month of April 2008, the average attendance was only 19%, cleanliness of AWC and children was extremely poor and even health check ups and immunizations were highly irregular. There was no community/parents' involvement.

AWC Hatiahoda after Intervention of Sterlite Bal Chetna Anganwadi Project

Our team decided to intervene and set things in order. After 10 months of a successful journey of the Sterlite Bal Chetna Anganwadi (SBCA) Project, witnessed the following improvements:

- AWC started opening regularly in time, for four hours every day on all working days and all the AWC functionaries started attending the center with punctuality.
- Continuous facilitation by SBCA project functionaries resulted in tremendous improvement in health, hygiene, attendance, enrolment, pre-school education, nutrition and community empowerment.
- Average attendance of the children increased from 19% to 71%.
- Regularity in maintenance of proper records.
- Significant improvement in cleanliness of AWC and children.
- Regular interactions with the parents and improved community involvement

Corporate Social Responsibility continued

Key Projects:

| Project | Objective | Partners | Impact | Going forward |
|--|---|---|---|---|
| <p>'Integrated Village Development Program'</p> <p>All the data is for last year</p> | Transformation of 59 poverty stricken villages into model village, in phased manner, based on socio-economic indicators. | Zila Parishad, Gram Panchayat, Krishi Vigyan Kendra, National Bank for Agriculture and Rural Development (NABARD), District Water & Sanitation Committee and Non-governmental organizations (NGOs). | 32 model villages of Phase I & II have been completed and audited by Operations Research Group (ORG), New Delhi Improved quality of life of 72% targeted families of 32 Model Villages. | The last 27 villages to be undertaken in Phase III & IV. |
| Sterlite Bal Chetna Anganwadi Project | Holistic development of over 2 Lakhs children (0–6 years age group) in 3,500 Anganwadi Centres, in phases, for improvement in health, pre-school education and linkage with formal education. | Government of Rajasthan, Sterlite Foundation, Integrated Child Development Service (ICDS). | Implemented the project in 400 Centres catering to 12,611 children and capacity building of 1,350 government and project staff in Phase-I. Improvement in nutritional status, health and increase in average attendance by 36%. | Scaling up to 600 additional Anganwadi Centres in FY 2010 which will cater to 39,000 children. |
| Mid Day Meal Programme | To improve the enrolment, attendance, retention and nutritional status among Primary and Secondary School underprivileged students. | Nandi Foundation, District Administration & Government of Rajasthan. | Catering more than 180,000 students through six hi-tech centralised kitchens. Overall school attendance has improved to 90% and girls attendance by 70% as per World Bank Study report. | Establishment of 2 hi-tech centralized kitchens in FY 2010 which will cater 40,000 additional students. |
| Computer Education Project | The Project aiming to achieve Benchmarking computer education as an integral part of Government education system in rural Government schools to make the students literate with basic computer knowledge. | Government of Rajasthan, Vedanta Foundation, District Education Department. | 20,000 students in 200 rural Government schools in four districts, of which 68% of the students are equipped with basic computer knowledge in Word, Excel & Power Point. | Scaling up to 200 more rural schools in FY 2010 catering the 20,000 students with 100% coverage of girl's school. |
| Vocational Training for Rural Youths | Creating employability among 25,000 unemployed rural youth in phases through vocation based training. | Rajasthan Mission on Livelihoods, SANKALP and Aid at Action. | 1,113 rural youth imparted training in phase-I and linked with employment in service industry and micro enterprise. 85% trained rural youth placed in various organisations, Rs 4,000 to 8,000 per month. | Scaling up training of 2,500 rural youth in FY 2010 with 90% employability. |
| Women Empowerment – Self Help Groups (SHGs) | Socio-Economic Empowerment of Rural Women by formation and strengthening of Self Help Groups. | District Rural Development Agency, Women & Child Development Department, Non-governmental organizations (NGOs). | 40 SHG's comprising of 600 rural women, have been strengthened with regular monthly saving, inter-loaning and linked with micro enterprise having average monthly additional income upto Rs 2,500. | Formation of New 150 women Self Help Groups in FY 2010. |

Hindustan Zinc Limited

Yashad Bhawan, Udaipur – 313 004, Rajasthan
Tel: +91 294-2420813-15 www.hzlindia.com