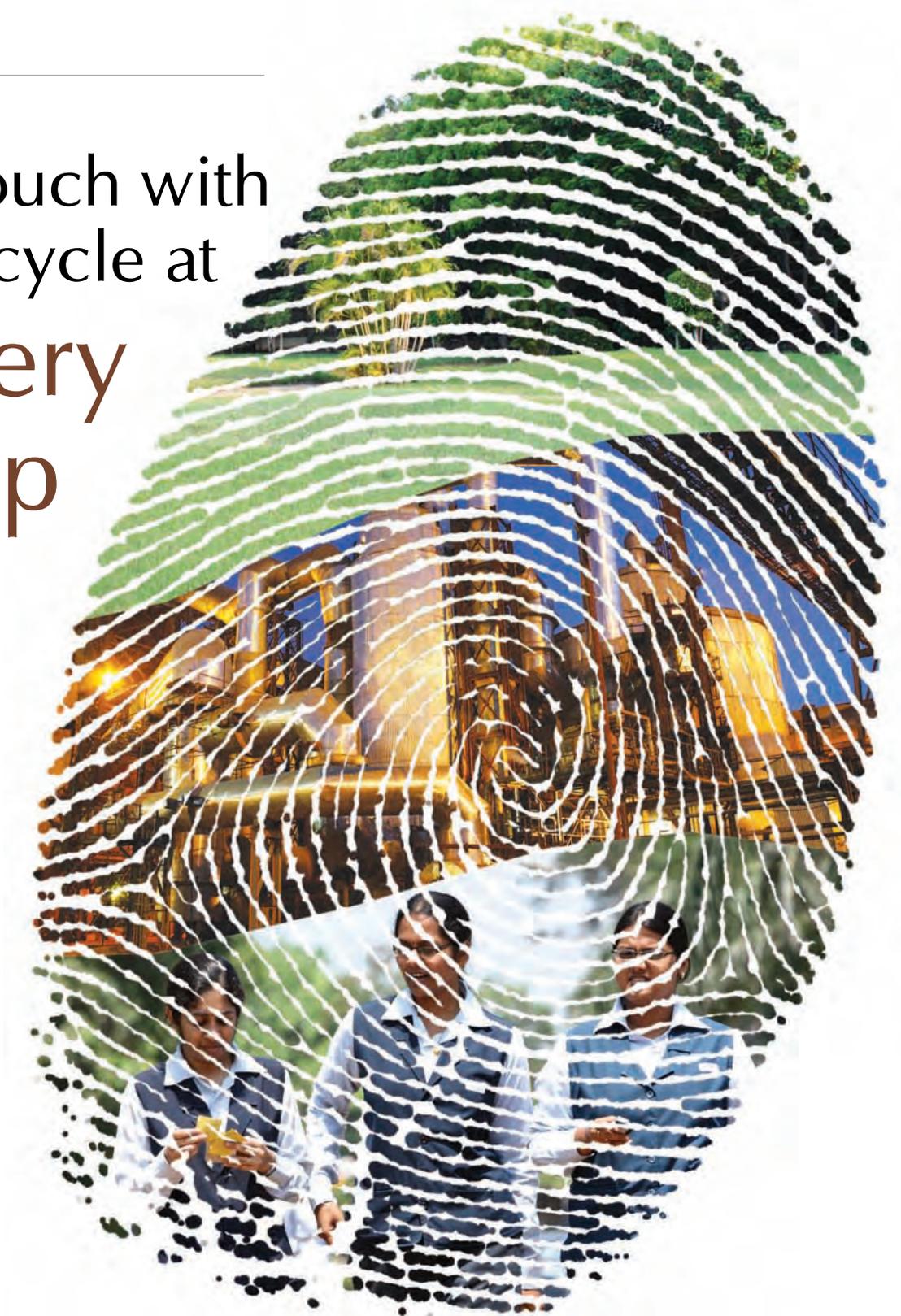


● In touch with  
the cycle at  
**every**  
**step**







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## The vision, mission and values that sustain us

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Sterlite Industries India Limited (SIIL) is the principal subsidiary of Vedanta Resources plc, a diversified and integrated FTSE 100 metals and mining company, with principal operations in India, Zambia and Australia.

To us at Sterlite, the definition of a progressive organisation is complete only when it covers long-term progress for all stakeholders. The values that we have imbibed from our parent group serve to strengthen our commitment to sustainable growth - to our business, community and the environment.

### Our Vision

To be the world's 'best-in-class' copper producer and build a progressive organisation that all stakeholders are proud to be associated with.

### Our Mission

To harness technology to its full potential in a safe and clean environment in the entire business cycle and integrate quality with continuous improvements.

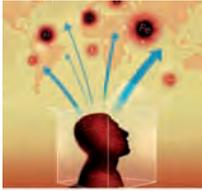
- To harness the profitable and growing CCR market from 125 KMT to 400 KMT per annum
- To achieve and sustain cost leadership in the global market
- To become a vibrant, learning organisation by building skills and competencies of employees for growth
- To be the best and most respectable corporate citizen



A thumbprint is a universally recognised symbol for the signature of an entity, as it is unchanging and unique. While Sterlite's print is unique, the Company combines technology with an innovative spirit and a deep-rooted concern for the environment to help its signature evolve and grow.

With constant innovation and a passion to excel, Sterlite's thumbprint reinvents itself, to create a positive impact on stakeholders, the environment and the future.

## Our Values



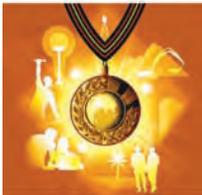
### ENTREPRENEURSHIP

We foster an entrepreneurial spirit throughout our businesses and value the ability to foresee business opportunities early in the cycle and act on them swiftly. Whether it be developing organic growth projects, making strategic acquisitions or creating entrepreneurs from within, we ensure an entrepreneurial spirit at the heart of our workplace.



### GROWTH

We continue to deliver growth and generate significant value for our shareholders. Moreover, our organic growth pipeline is strong as we seek to continue to deliver significant growth for shareholders in the future. We have pursued growth across all our businesses and into new areas, always on the basis that value must be delivered.



### EXCELLENCE

Achieving excellence in all that we do is our way of life. We strive to consistently deliver projects ahead of time at industry-leading costs of construction and within budget. We are constantly focused on achieving a top decile cost of production in each of our businesses. To achieve this, we follow a culture of best practice benchmarking.



### TRUST

The trust that our stakeholders place in us is key to our success. We recognise that we must responsibly deliver on the promises we make to earn that trust. We constantly strive to meet stakeholder expectations of us and deliver ahead of expectations.



### SUSTAINABILITY

We practice sustainability within the framework of well-defined governance structures and policies and with the demonstrated commitment of our management and employees. We aim not only to minimise damage to the environment from our projects but to make a net positive impact on the environment wherever we work.

## ● CEO's Message

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R. Kishore Kumar  
Chief Executive Officer



“As a leading private player in the copper sector, we at Sterlite Industries India Limited (SIL) practice the holistic principles and processes of sustainable growth.”

Dear Stakeholder,

As the world is recovering from the extremely adverse effects of melt down, Asia is witnessing a smart resurgence of growth that is remarkable and exposes the merits of a conservative approach to financial markets. This has been a blessing, especially for India. The resilience is credited to a holistic approach to growth that characterises the leaders of Asian industry, especially those in India.

The rapidly developing Asian market is expected to drive copper consumption growth, with Asia already accounting for 50% of the world's copper consumption. For us, this translates into opportunities for sustainable growth closer home.

The scenario in the Indian context is even more compelling with a renewed political intent to progress a development agenda as never before. We expect substantial opportunities in expanding the per capita consumption in all sectors - notably infrastructure, manufacturing and agriculture.

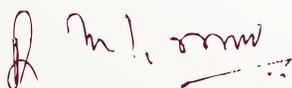
As a leading private player in the copper sector, we at Sterlite Industries India Limited (SIIL) practice the holistic principles and processes of sustainable growth. Our belief in developing India and investing in all the non-ferrous opportunities is in tune with our vision and values.

As part of a sector with a huge potential for raising living standards and development of society, we stand committed to deliver a growth which meets or exceeds the expectations of our stakeholders and society at large. Our way of thinking has rewarded us with returns that go beyond balance sheets. It has expanded our definition of stakeholders to include business partners such as suppliers & transporters, the communities around us, Governmental agencies, our employees and their families. It has taught us to measure growth not just in the value we deliver to our customers, but also in terms of the growth of our employees, the safety of our workplace, the development of the community around us and the conservation of the environment.

Most importantly, it has confirmed our conviction that sustainability is not just about intentions but actions. In all our actions, whether in the area of business, community or environment we have been fortunate enough to be associated with entities and individuals who resonate with our approach to sustainability. Government bodies, educational institutions, NGOs, and indeed, our employees have partnered us with our efforts to create holistic growth and change lives, every step of the way. This report, with its adherence to the GRI framework and alignment to United Nations Global Compact principles is a tribute to these people and organisations.

Whilst we are proud of our accomplishments of the last year, we believe that sustainability must be a journey on which we keep progressing. Our future plan is to continue to partner our stakeholders to deliver results which are inclusive in nature and in line with our Company's vision and mission.

As I present you our second Sustainable Development Report, I would like to thank you for the encouragement you have demonstrated in our initiatives by being associated with us.



R. Kishore Kumar  
Chief Executive Officer



“In fact, we believe that it is our approach to sustainable growth that has made SILL one of the fastest growing non-ferrous metal companies in India for the past one decade.”

The future looks bright. The demand for copper is growing across the world. India's strong economic growth and focus on the infrastructure promises to support greater demand and prices in the near future for our sector.

We at Sterlite believe in being at the forefront of adding value to the community in which we exist through a sustainable long term strategy and in the process be the world's 'best in class' copper producer using modern technologies, efficient processes and committed workforce.

In fact, we believe that it is our approach to sustainable growth that has made SILL one of the fastest growing non-ferrous metal companies in India for the past one decade. A principal operating Company of Vedanta Resources plc, Sterlite recorded a net annual turnover of Rs.11,566 crores in the year 2008-09.

Our sustainability approach has also helped us gain recognition from several external agencies. Sterlite bagged the Corporate Super Platinum award at 'The India Manufacturing Excellence Awards 2008' for its facilities at Tuticorin and Silvassa from M/s. Frost & Sullivan. We were also awarded 'Excellent Water Efficient Unit' during the 5th National Award for Excellence in Water Management 2008 at CII-Sohrabji Godrej Green Business Centre, Hyderabad.

We have constantly been reviewing our systems and procedures to achieve the highest level of corporate governance in the overall interest of all our stakeholders.

Highlights of the year:

- Sterlite showed good performance, touching revenue figures of over Rs. 11,566 crores in the year 2008-09
- The ISA Waste Heat Recovery Boiler based power generation almost doubled during the reporting period from the previous year and lead to savings of 1,30,395 GJ of energy

- Our innovative project of bagasse usage in our Silvassa unit boiler, helped reduce impact on climate change and also generated additional employment
- The resource conservation initiative resulted in energy savings of 4 MT/hr of steam along with monetary benefits. This initiative was selected for the INSSAN award
- Sterlite Paediatric Block was constructed in the Government Hospital, Tuticorin at the budgeted cost of Rs. 80 lakhs. This facility can treat up to 200 needy children per day
- We introduced 'Save-A-Child Heart' Programme and signed a MoU with Apollo Hospitals, Chennai to perform heart surgeries on needy, economically poor children.
- Adult literacy programme undertaken in Pandarampatty village, Tuticorin resulted in 100% literacy rate
- 799 Self-Help Groups (SHGs) covering 11,200 rural women from marginalised sections of society have been formed under Sterlite Women Empowerment Project (SWEP)
- Red Ribbon Club was formed with employees' participation, to spread awareness on HIV / AIDS

Despite our achievements, the year 2008-09 was disappointing in terms of our safety performance. We suffered irreplaceable loss of 3 lives at work. Evaluation of these unfortunate events along with other accidents and incidents indicated that we need to focus on basics & requirements of existing systems and emphasise on improving our operating discipline, by ensuring that the systems are followed and understood by all and that we learn from our experiences and share them across the organisation. Further, hardcore ground actions were taken, which included development of e-platform of Dupont training material on safety, health & environment; Cardinal Rules on safety; shop floor training for all staff; job specific safety training for all contract staff and incentivising the system of near-miss reporting amongst employees and contract manpower. We have also implemented a mandatory 3 days intensive training on safety for all joiners before they are put on the job. We sincerely hope that our commitment and the above actions will provide a workplace that consistently delivers Zero Incident and we will not rest till we achieve this objective.

This year's Sustainable Development Report aims to share our various sustainability initiatives and our plans for the future. For the ease of reading, we have segregated initiatives under the headings of Economic Performance, CSR, HR, HSE and Supply Chain Management. Together, they funnel into a long-term commitment to the vision - "To be the world's best-in-class copper producer and build a progressive organisation that all stakeholders are proud to be associated with." The report is based on GRI Reporting Framework (G3) covering social, economic and environmental aspects of our business. This year, we are reporting on 42 core and 27 additional GRI indicators.

We hope you will find this report informative and that you will share our enthusiasm for the initiatives taken to improve the lives of people around us. We also welcome your feedback on our actions and on this report.

Thank you all for your interest in our Company and our sustainability efforts.



Ramesh Nair

Chief Operating Officer



● A legacy of commitment  
to sustainability

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While Vedanta operates across a diverse range of businesses, what remains common across all the group companies is a quest to manage our businesses in a responsible manner. At Sterlite, the Company operations are integrated under certified systems of ISO 9001:2000, ISO 14001 and OHSAS 18001. We recognise that our commitment and responsibility to protect the environment and social resources enhances value of all our stakeholders. Consequently, we consider the management of environment, employees, health & safety and community issues central to the success of our business.



# Organisational profile

## Sterlite Industries India Limited - Snapshot

- The first Company in India to set up a Copper Smelter and Refinery in the private sector
- The first to operate the largest capacity continuous Cast Copper Rod plant
- Fully stabilised and operating at a rated capacity of 1,200 TPD of Copper
- Principal business of smelting and refining, producing finished copper in the form of cathode, and copper rods
- Refineries and copper rod plants established at Tuticorin and Silvassa, with the smelting process carried out in Tuticorin
- Ownership of two copper mines in Australia, catering to nearly 7.7% of the Company's copper concentrate requirements
- With business excellence processes like TQM, the Company has a strong track record of increasing production, reducing unit costs and maximising employee productivity
- The Company's performance graph depicts a strong year-on-year growth and today, it is amongst the fastest growing non-ferrous metal companies in India
- During the past 10 years, the Company witnessed an increase in turnover from Rs. 50 crores in 1997 to Rs. 11,566 crores in 2008-09

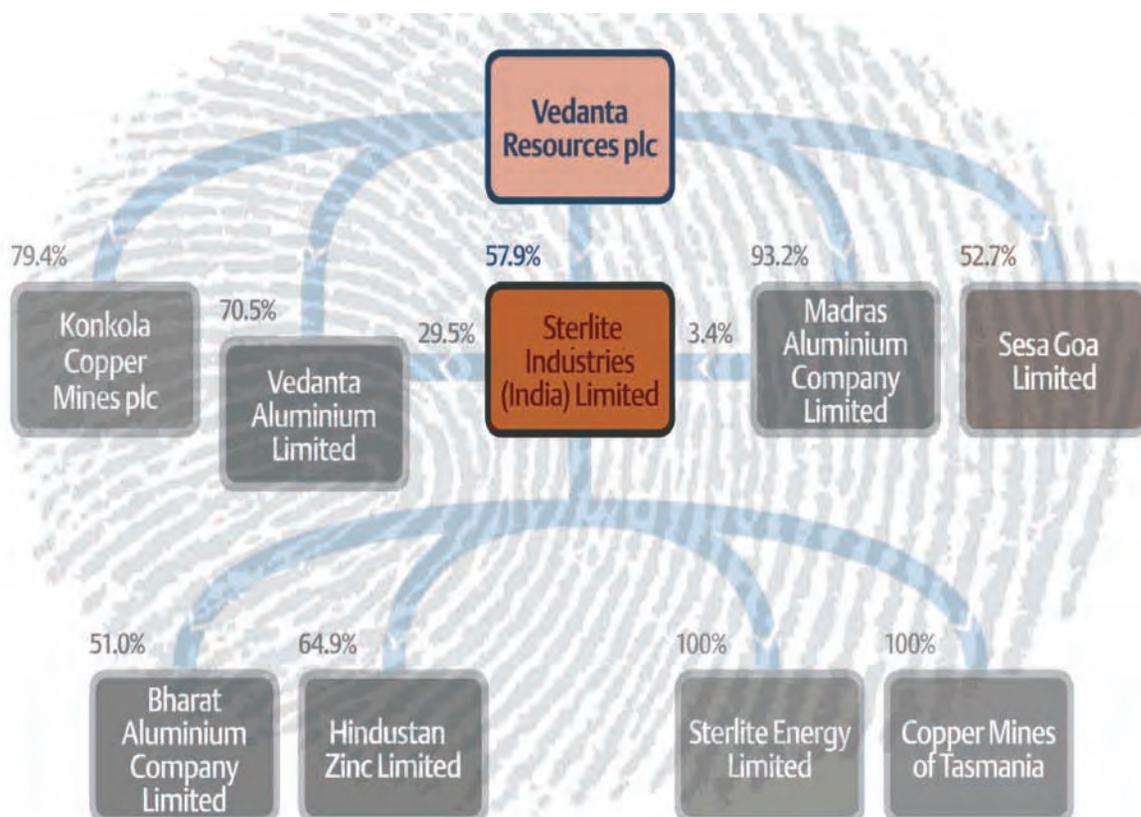
## History of Sterlite Industries (India) Limited

Year	Activity
1975	The Company is incorporated as Rainbow Industries under the laws of India
1979	Acquired by Mr. Anil Agarwal and family to become one of India's leading non-ferrous metals and mining companies.
1986	Company's name changed to Sterlite Industries
1988	Sterlite Industries makes an initial public offering of its shares on the Indian stock exchange
1991	Sterlite Industries establishes its first continuous copper rod plant.
1997	Commissions first privately developed copper smelter in India at Tuticorin in Tamil Nadu.
2000	Acquires CMT, which owns the Mt. Lyell copper mine in Australia
2001	The group enters into the aluminium business by acquiring a 51% interest in BALCO from the Government of India.
2003	Acquires majority interest in Hindustan Zinc Limited from the Government of India
2005	Expansion of Tuticorin Smelter to 3,00,000 TPA and successful ramp up of ISA furnace achieved in a record period of 45 days
2006	Expansion of Tuticorin Smelter to 4,00,000 TPA through innovative debottlenecking
2006	Sterlite Energy as a subsidiary of SIIL
2007	Sterlite Industries' primary listing on NYSE

## Vedanta Resources plc - Snapshot

- A London-listed FTSE 100 diversified metals and mining major
- The Group produces Aluminium, Copper, Zinc, Lead, Iron Ore and Commercial Energy
- Vedanta has operations in India, Zambia & Australia and a strong organic growth pipeline of projects
- Over 30,000 full-time employees

## Vedanta Group Structure

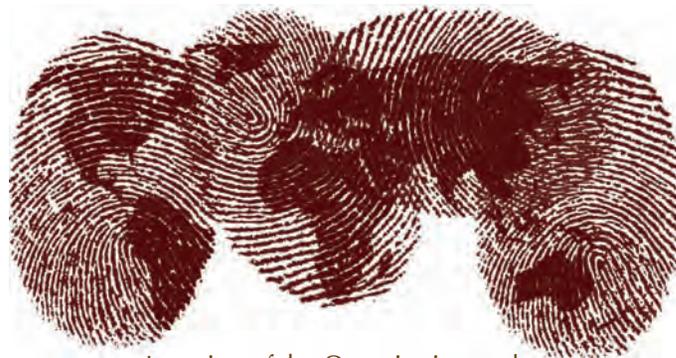
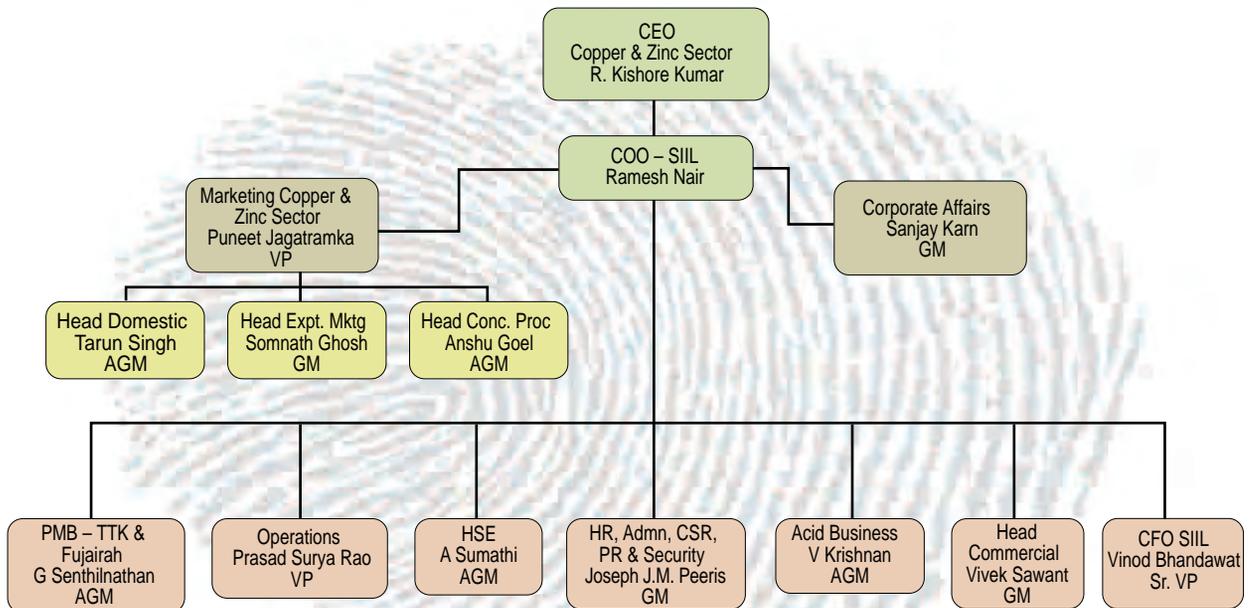


# Sterlite Organisational Structure

Sterlite's copper business is headed by R. Kishore Kumar, Chief Executive Officer, and assisted by Ramesh Nair, Chief Operating Officer, who has a group of Senior Management (M2 and Above), Middle Management (M3 and

M4) and Frontline Management (M5, M6 and M7) personnel at Tuticorin and Silvassa to help him conduct the business in a transparent and sustainable manner.

## The Management Structure



### Location of the Organisation and Organisation Headquarters

Name of the Organisation: Sterlite Industries (India) Ltd.  
 Address 1: SIPCOT Industrial Complex  
 Madurai Bye Pass Road, T.V.Puram P.O.,  
 Tuticorin - 628 002, Tamil Nadu  
 Address 2: 1/1/2 Chinchpada Village  
 Chinchpada, Silvassa -396 230, DNH (UT)  
 Website: [www.sterlite-industries.com](http://www.sterlite-industries.com)

Name of the Parent Organisation: Vedanta Resources plc.  
 Address: Vedanta Resources plc  
 16 Berkeley Street, London W1J 8DZ  
 Telephone: +44 (0) 20 7499 5900  
 Fax: +44 (0) 20 7491 8440  
 Website: [www.vedantaresources.com](http://www.vedantaresources.com)



# The business of fuelling sustainability

## Sterlite Industries (India) Ltd - SIIIL

- First private sector company in India to set up a Copper Smelter and Refinery
- First to operate the largest capacity continuous Cast Copper Rod plant
- Two operational plants in Tuticorin and Silvassa

Main Products (Copper Business)	By-Products (Acid Business)
<ul style="list-style-type: none"> <li>● Copper Anode of purity &gt; 99.5%</li> <li>● 'A' class Continuous Cast Rod supplied by continuous Properzi, Italy</li> </ul>	<ul style="list-style-type: none"> <li>● Sulphuric Acid (concentration &gt; 98%)</li> <li>● Phosphoric Acid 43% and 54% (on P<sub>2</sub>O<sub>5</sub> basis)</li> </ul>
Value-added Products <ul style="list-style-type: none"> <li>● Bismuth Bisulphate (99.5%)</li> <li>● Selenium Powder (99.5%)</li> </ul>	



## Our operational efficiency

Our Products - Meeting global quality standards ASTM & IS

To fulfill the Vision of becoming the best-in-class producer, we constantly strive to innovate, improve operational efficiencies and reduce the unit costs.



### Operations at Tuticorin

The Tuticorin copper complex comprises the following facilities:

- Copper Smelter of 1,200 TPD
- Refinery of 875 TPD
- Rod Plant of 410 TPD
- Sulphuric Acid Plant of 4,200 TPD
- Phosphoric Acid Plant of 800 TPD

Tuticorin, a major harbour in the southern state of Tamil Nadu, is strategically located with respect to our business, which involves importing ore through the sea route and also exporting our products to various locations.



### Operational efficiency for sustainable development

- Operational capacities quadrupled (1 LTPA in 1997 to 4 LTPA in 2008), through capacity addition, a mix of innovative de-bottlenecking and optimal utilisation of the land & fixed assets
- Reduced power costs by running a captive power and waste heat recovery plant at Tuticorin
- Tuticorin smelter was in the lowest cost quartile compared to all copper smelting operations worldwide
- Tuticorin and Silvassa refineries had the seventh and eighth lowest costs of production, respectively, of all copper refining operations worldwide, according to Brook Hunt

## Operations at Silvassa

The Silvassa unit comprises - i)Refinery: 2,00,000 TPA ii)Rod Mill: 178,000 TPA



Silvassa, is the capital of the Union Territory of Dadra and Nagar Haveli, strategically located between Maharashtra and Gujarat. Silvassa has a large number of factories and industries providing significant government revenue with special economic benefits by way of reduced taxation model.



### Operational efficiency for sustainable development:

- Refinery and CCR capacity of 2,00,000 TPA of Copper Cathode and 1,78,000 TPA of Copper Rod at the two plants in Chinchpada and Piparia respectively
- Eighth lowest costs of production of all copper refining operations worldwide, according to Brook Hunt

## Our Products and Sustainability Market Segmentation

### a. Domestic Market Segmentation

Sterlite segments the Domestic Copper market based on:

- Region ●Usage of Copper ●Type of application industry our customer is further catering to ●Growth of the industry
- Value potential and ability to realise ● Volume

### b. Overseas Market Segmentation

Overseas customers are evaluated on two key parameters of potential and long-term partnerability in order to initiate or increase business. The evaluation process gauges overall business potential of the customer including future expansions, whilst partnerability assessment determines the ease of doing business, financial potency and customer's attitude reflected in similar corporate values and the customer's relationships with group companies of Sterlite. Through this process, the initial market which was in the Middle East has now developed an enviable customer base in SAARC, South East Asia and the Far East.

### Copper Business - Domestic Market

Sterlite has stiff competition with immediate competitors in Cathodes and Copper Rods sales. Augmented capacity and

consistent product quality standards have facilitated Sterlite to remain highly competitive in the domestic market. In the CCR market, Domestic Sales during 2008-09 increased as highly as 1,98,453 MT from 1,57,037 MT (refer Fig. 1) in 2007-08.

### Export Market

Part of the Copper Cathodes are exported to markets in China, Korea and other South-East Asian countries

- Part of the Copper Cathodes converted into Rods, is supplied to both the domestic and export markets
- Sterlite is recognised as a supplier of global repute across Asia and Middle-East markets

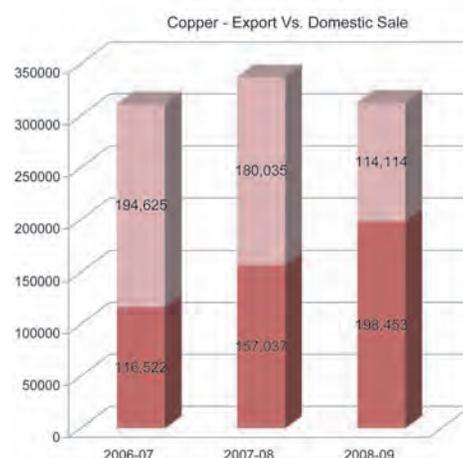


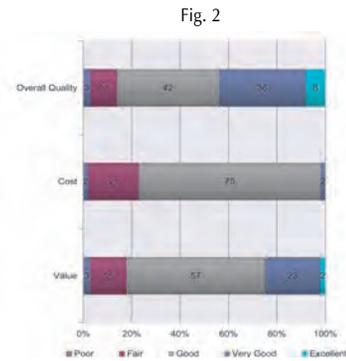
Fig. 1



## Customer Satisfaction Survey - Copper:

We periodically conduct Customer Satisfaction Surveys once in two years for evaluating our overall performance and to get feedback from our customers for enabling us to offer improved services.

The results of the last survey conducted (as per Fig. 2), shows that atleast 77% of our customers think we are competitively priced.



## Our Acid Market

Our Acids Business division is strategically based at Tuticorin to capitalise on our advantages such as scale of production and location. We are well-placed in the market in the vicinity of major fertiliser producers such as Fertilisers and Chemicals Travancore (FACT), Coromandel Fertiliser Limited (CFL), Mangalore Chemicals and Fertilisers (MCF) & Indian Farmers Fertiliser Cooperative Limited (IFFCO) and cement companies like India Cements, Madura Cements, Dalmia Cements etc.

Sulphuric Acid: 2008-2009 saw significant turbulence in the

market with first half of the year breaking all price ceilings and a tremendous correction in the second half. Despite these uncertainties, we managed to tap maximum realisation opportunities by strategic allocation of resources in the most profitable areas. Fig. 3 shows sales breakup of Sulphuric Acid in 2008-09. Our sales model, supported by an efficient supply chain, is well evolved to eliminate most of the market uncertainties by leveraging on cost competitiveness.

Phosphoric Acid: Sterlite continues to be a dominant player of Phosphoric Acid in Indian market with an impressive reputation as the only domestic seller in India (refer Fig. 4).

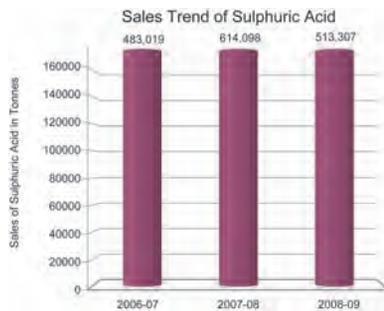


Fig. 3

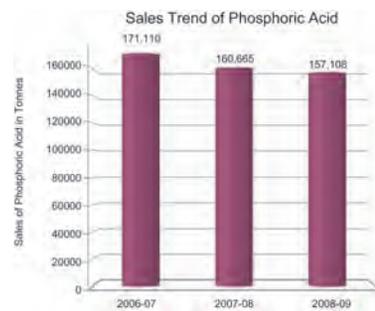


Fig. 4



## Customer Satisfaction Survey - Acids Business

Being a leader in the by-products market, we like to set new benchmarks for exceeding customer expectations. To understand the customer requirements better, we undertook a Customer Satisfaction Survey amongst 50 key customers. The Fig 5 represents the customer satisfaction scores across the different by-products. With an overall Customer Satisfaction Index (CSI) of 83.93%, we feel our performance is just satisfactory and believe that there is still some room for significant improvement. Therefore we have undertaken the following activities, which we believe will help in anticipating and fulfilling customer needs.

Initiatives to enhance customer engagement

1. E-Salesmate - an interactive website offering customised sales information such as daily dispatch details, ledger information, etc. has been introduced

2. Arranging Training programmes for our frontline executives to improve customer interaction
3. Focus on increasing customer visits
4. Introduction of sales-force automation

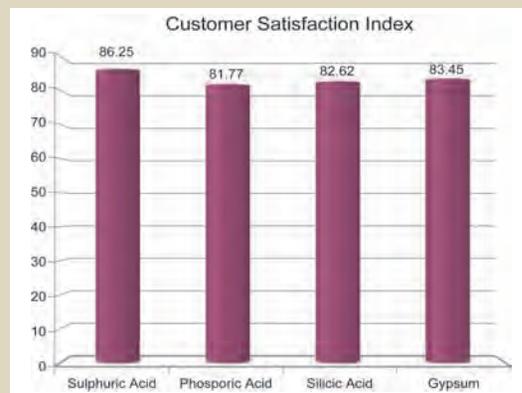


Fig 5

Sterlite Copper is associated through memberships to the following prestigious organisations

- All India Chamber of Commerce
- Confederation of Indian Industry
- Export Promotion Council for Export Oriented Units
- Indian Chamber of Commerce and Industry
- Indian Institute of Metals
- International Copper Association
- Tuticorin Chamber of Commerce and Industry
- International Copper Promotion Council of India (ICPCI)
- Indian Copper Development Centre (ICDC)
- Federation of Indian Chambers of Commerce and Industry (FICCI)



# Performance at a Glance - 2008

Performance parameter	Units	Target for 2008-09	Performance for 2008-09	Target for 2009-10
<b>HEALTH</b>				
Number of findings on occupational illness	Number	0	0	0
<b>SAFETY*</b>				
Fatalities	Number	0	3	0
LTIFR		0.1	0.5**	0.2
Severity rate		0.1	1,805.66	0.1
* Includes data for both Tuticorin and Silvassa units. ** LTIFR in Operating Site = 0.4 & Project Site = 0.12				
<b>ENVIRONMENT</b>				
<b>CONSUMPTION OF WATER</b>				
Primary consumption	(million) M <sup>3</sup>	3.4	2.70	3.11
Primary consumption (Specific)	M <sup>3</sup> /MT of cathode	7.9	8.58	7.9*
* Same as last year's target				
<b>CONSUMPTION OF ENERGY</b>				
Primary energy consumption (incl.Fuel)	(million) GJ	4.6	3.65	3.39
Primary energy consumption (Specific)	GJ/MT of cathode	8.72	9.6	8.72*
* Same as last year's target				
<b>SOLID WASTE GENERATION</b>				
Hazardous waste generation	TPA	NA	76,464	71,876
<b>FERRO SAND</b>				
Sale of Slag	TPA	1,36,800	2,20,517	24,44,000
<b>GYPSUM</b>				
Sale of gypsum	TPA	14,40,000	9,40,435	14,40,000
<b>EMISSIONS*</b>				
SO <sub>2</sub> Emission from process plants	Kg of SO <sub>2</sub> /T of H <sub>2</sub> SO <sub>4</sub>	<1	0.6	<1
Total SPM (From process plants & CPP)	TPA	289.06	147.38	289.06
Fluoride emissions from PAP	TPA	17.11	8.03	17.11
*All targets are as per regulatory standards				
<b>COMMUNITY</b>				
Contributions to the local community	Rs. in Crores	1.89	1.83	1.66
<b>HUMAN CAPITAL</b>				
Total number of employees	Number	1,203	1,285	1,167 <sup>#</sup>
Female employees	%	20	12.1	20
# Rationalisation of manpower				
<b>PRODUCTION QUANTITIES</b>				
<b>Main products</b>				
Cathode	TPA	3,96,674	3,12,833	3,79,417
Continuous cathode rod	TPA	2,56,312	2,19,879	2,50,401
<b>By-Products</b>				
Sulphuric Acid	TPA	11,96,523	9,87,512	12,57,521
Phosphoric Acid	TPA	1,50,312	1,63,607	2,24,302.5
<b>Value-Added Products</b>				
Anode Slime	TPA	494	459	590
Selenium	TPA	95	65	97
Bismuth	TPA	43	2.08	17

# A commitment to sustainable development



## Leaving sustainable impressions

We integrate our sustainability approach not just into major undertakings, but into daily operations and innovations. This has brought us recognition in the form of various awards and has strengthened the faith of the stakeholders in the Company. In this Sustainable Development Report 2008-09, we will share the initiatives and activities visualised and realised during the reporting period with all our stakeholders.



Being a leading player in the non-ferrous metal sector, we recognise that our business practices have the potential to directly or indirectly impact our stakeholders. With this in mind, we have based our ideology on Vedanta's sustainability strategy which is built around the following elements:

- Environmental Stewardship
- Empowering Communities
- Nurturing People
- Health and Safety

Respect for nature, enhanced resource conservation and use of environment-friendly technology are embodied in our working

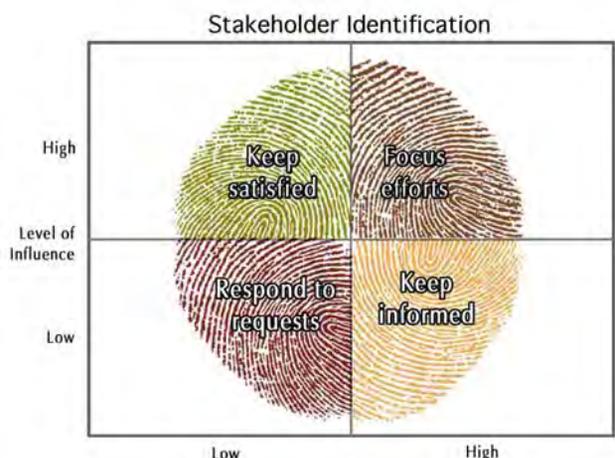
People are our key assets. We are committed to building a flexible, flat and learning organisation with an engaged and high performing workforce. We believe in nurturing and mentoring leaders from within and providing opportunities for growth based on meritocracy, performance and integrity

We are committed to providing a safe, secure and healthy workplace for all employees by using the best technology and practices

Communities are integral to our business. We are committed to enhancing the quality of life of the communities near our operations and creating self-sustaining communities. We work to gain and nurture our social licence to operate in the host communities

### Stakeholder Identification

As an enterprise we have several stakeholders. So we attempted a structured approach to identify stakeholder segments for engagement. Priority is given to those stakeholders who are directly impacted by the Company's operations and to those who can impact business itself. As shown, stakeholders were broadly categorised, depending upon the nature of impact a development intervention has on them and the degree of influence they effect on the development decision.



## Stakeholder Engagement Mechanism

Sterlite consistently strives to anticipate emerging stakeholder expectations with stakeholder engagement, in order to be able to identify and respond to issues that have the potential to affect communities and our operating environment. The purpose of this engagement exercise was to identify and document significant opportunities, challenges, priorities and reasons. It is also in line with our commitment to the timely disclosure of relevant and reliable information on financial performance, the entire

gamut of activities relating to Environment, (Occupational) Health and Safety (EHS), and social initiatives. Sterlite believes that the disclosure of all appropriate and useful information with regards to Company activities that can have an impact on stakeholders is at the heart of good governance.

Following is a summary of Sterlite's key stakeholders, our mode of engagement with them and initiatives undertaken whether statutory or otherwise, to positively affect them:

Stakeholders	Engagement Mechanism	Few Initiatives by the Company
 Communities & NGOs	<ul style="list-style-type: none"> <li>• Written Communication/ Need based discussions /meeting with community representatives</li> <li>• Open dialogue</li> <li>• Survey &amp; PRA's</li> </ul>	<ul style="list-style-type: none"> <li>• Giving educational support by organising a study centre and giving scholastic excellence awards and scholarships</li> <li>• Arranging monthly rural health camps and rural health unit</li> <li>• Women empowerment: Sterlite SHG and income generation projects</li> <li>• Developing rural infrastructure: Total sanitation, renovation works for schools, model village development</li> <li>• Employment generation through coastal livelihood project</li> <li>• HIV - AIDS awareness</li> <li>• Construction of Sterlite Pediatric Block in Government Headquarter Hospital</li> </ul>
 Government & Regulators	<ul style="list-style-type: none"> <li>• Monthly reports</li> <li>• Monthly inspections</li> </ul>	<ul style="list-style-type: none"> <li>• Regular compliance with rules, regulations &amp; stipulations</li> <li>• Submission of monthly reports</li> <li>• Immediate response by the way of corrective action on issues raised by the Government authorities</li> </ul>
 Employees	<ul style="list-style-type: none"> <li>• Intranet facilities</li> <li>• Monthly and quarterly Newsletters</li> <li>• Training programmes</li> <li>• Employee suggestion scheme</li> <li>• Communication meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Employee suggestion scheme</li> <li>• Spot recognition scheme</li> <li>• Employee retention bonus</li> <li>• Event management team</li> <li>• CEO kitty</li> <li>• Team of the month</li> <li>• Mentor-Mentee</li> </ul>
 Customers	<ul style="list-style-type: none"> <li>• Discussions / personal interactions on a daily basis</li> <li>• Plant Visit</li> </ul>	<ul style="list-style-type: none"> <li>• Customer satisfaction survey</li> <li>• Online access through E-Salesmate</li> <li>• Faster response for customer complaints</li> <li>• Arranging for plant visit</li> </ul>
 Suppliers / Transporters	<ul style="list-style-type: none"> <li>• Discussions / personal interactions on a daily basis</li> <li>• Plant Visit</li> </ul>	<ul style="list-style-type: none"> <li>• Vendor meets</li> <li>• Drivers' training programme for safety</li> </ul>
 Contract Labourers	<ul style="list-style-type: none"> <li>• Induction programme</li> <li>• Training programme</li> </ul>	<ul style="list-style-type: none"> <li>• Rewards &amp; Recognition</li> <li>• Welfare facilities for Contractors as a part of HR initiatives</li> <li>• Contractor Safety Management Cell</li> </ul>
 Educational Institutions	<ul style="list-style-type: none"> <li>• Management Development programmes</li> <li>• Academic interactions</li> </ul>	<ul style="list-style-type: none"> <li>• Employees are guest faculties at leading institutions</li> <li>• Employees are sent for Management Development programmes</li> </ul>



## Approach to Reporting

Sterlite's Sustainable Development Report has conformed to the GRI Reporting Framework, a credible & trusted reporting system acceptable to all stakeholders and is aligned to the United Nations Global Compact principles. Our Sustainable Development Report 2008-09 includes 69 GRI indicators getting reported and it covers 42 core indicators and 27 additional indicators. Sterlite has prepared its report based on GRI Guidelines to give an account of its economic, environmental and social performance for the year 2008-09. Indicators have been broadly classified under the following approaches:

- Economic and financial performance
- Corporate social responsibility
- Nurturing and developing our most valuable resources - Human assets
- Supplier & vendor management - our business partnership
- Health, safety and environmental management - a first person responsibility



## Reporting Boundary

The units covered in this report include:

1. Sterlite Copper, Tuticorin
2. Sterlite Copper, Silvassa

## Materiality Determination

At Sterlite, we have identified material topics which affect our economic, environmental & social status and impact or influence the decision of our stakeholders, in order to help us prioritise the same in our business strategies. A cross-functional team representing the key stakeholders – Employees, Suppliers & Transporters, Customers, Communities, Media, Environment and Regulatory Authorities went through a 3-step process to identify key material issues.

### Step 1: Identification of issues

The groups identified issues specific to the stakeholders, which they represented based on the following:

- Relevance to direct short-term financial performance
- Ability to deliver on Company's strategy and policies
- Best practice norms exhibited by peers
- Societal norms

### Step 2: Identification of material issues

Issues identified were put through objective assessment using materiality matrix where points were assigned scores depending on their bearing on factors such as Reputation, Operational Efficiency, Talent Attraction, Access to market, Environmental footprint, License to Operate, Innovation Trigger, Access to capital, etc. A threshold score was established to classify points into material and non-material issues. A threshold score indicates, whether an issue is considered significant enough to require corporate action (and at what level) and whether it is significant enough to provoke stakeholder action (and at what level).

### Step 3: Identification of Material GRI indicators

A total of 67 material issues were identified through the materiality exercise. Following which, GRI (G3) indicators and Global Compact principals covering these 67 material issues were identified and the data collected and reported here. These material issues are addressed under various stakeholder categories as dedicated sections such as Economic performance, HR, Corporate social responsibility, Health, safety & environment and Supplier management.



# Appreciation and Awards



Mr. Prasad Suryarao, VP - Operations, receiving the Tuticorin Port Trust's award for Excellence in Traffic Performance 2007-08



Mr. Ramesh Nair, COO - SILL receiving the 'Outstanding Export Performance EOU Unit' award



Mr. Prasad Suryarao, VP - Operations, Mr. Sumit Bajpai - Associate Manager, and Mr. G S Govindraj, Head - Business Excellence, receiving the Corporate Super Platinum Award



Mr. Sanjay Karn - General Manager, Corporate Affairs receiving the Commendation Certificate at the CII-ITC Sustainability Awards '08



Mr. Govindraj, Head - Business Excellence receiving the IMC RBNQA Performance Excellence Award



## Tuticorin Port Trust

- Excellence in traffic performance 2007-08
- Consignee of Highest Imports (excluding thermal coal)
- Appreciation for implementing 'Safety Practices' at the port
- Sterlite bags award in traffic performance

## Indian National Suggestion Schemes' Association (INSSAN)

- 1<sup>st</sup> prize at the 10<sup>th</sup> National Suggestion Summit
- 1<sup>st</sup> prize in the manufacturing category

## CII-Exim Business Excellence Awards '08

- Commendation Certificate at the Quality Summit '08 for Tuticorin operations

## World Environment Foundation

- Golden Peacock Environment Award '08

## CII-ITC Sustainability Awards '08

- Certificate of Commendation for Strong Commitment to excel

## Frost and Sullivan's India Manufacturing Excellence Awards '08

- Corporate Super Platinum Award

## CII's Excellence in Water Management

- Water Efficient Unit Award 2008

## Indian Institute of Metals, Non-Ferrous division

- Best performing organisation

## EOU unit

- National level award for Export performance as EOU

## Indian Merchants' Chamber

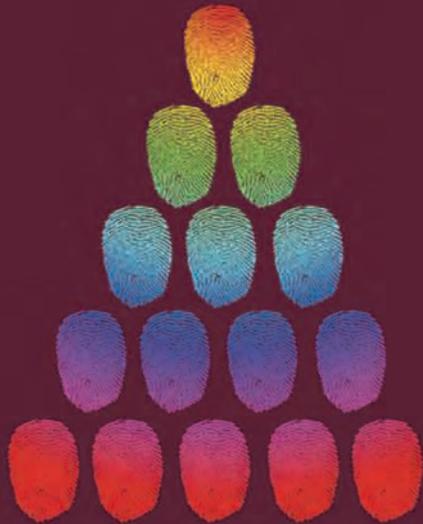
- The prestigious IMC Ramakrishna Bajaj National Quality Award (IMC RBNQA) for Performance Excellence '08 under manufacturing category

## And many more:

- CII Award for Excellence in Human Resources
- CII Gems of South Tamil Nadu Award
- Star Tax Payer Award
- CII Energy Efficient Award
- The Institution of Engineers' Safety Innovation Award '08
- Srishti-G3 (Gold Green Governance) Runners-up award for manufacturing category
- Certified for global framework of ISO 27000 on Information Security



# Corporate Governance



## Governance for Sustainability

We believe that true responsibility to our people can only be exhibited through an unshakeable commitment to transparency and ethics across all levels. The Company philosophy on Corporate Governance is to adopt good practices voluntarily rather than driven by the law. In a nut shell, governance should go beyond what is statutorily required.

We have a well-defined sustainability framework as part of the Vedanta group for governance structure and policies that pivot on the key focus areas of Health, Safety and Environment (HSE). To facilitate this, the COO of each member Company of the Vedanta Group represents his Company at the sustainability governance council of the group. While this ensures that the concerns and issues of each Company are addressed during the establishment of group policies and practices, it also enables COOs to percolate policies, procedures and systems downwards in his or her Company.

A committee appointed by the Vedanta Board guides our endeavours towards sustainable development. It also sets annual targets and monitors progress against the benchmark of our HSE and social policies, with the objective of integrating health, safety and environment in every aspect of decision making. The sustainability processes of the Group are overseen by the HSE Committee during the quarterly meetings which is chaired by Mr. Naresh Chandra, an Independent Director of Vedanta Resources plc. To add objectivity to its proceedings, the Committee has its own well-defined terms of reference and reports directly to the Board. Sterlite being part of Vedanta, adopts the Group HSE policy and framework.

Subsequently, agendas created are implemented by HSE professionals and regular internal audits conducted to assess performance. Findings of audits are discussed in HSE meetings every month at all the sites.

### Corporate Governance and Accountability

We believe that high standards of corporate governance and observance of its principles are critical for the sustenance and growth of any organisation. The primary objective of good governance is to create and adhere to a corporate culture of conscience and consciousness, transparency and sincerity and to develop capabilities and identify opportunities that best serve the goal of value creation.

SIL has always conducted its business in a transparent and just manner and also maintains the highest level of ethics in its dealings with all stakeholders. The Company has adopted Corporate Governance practices and ensures that they are implemented in letter and spirit. The Company's mission is to constantly appraise its systems and procedures to achieve the highest level of corporate governance in the overall interest of all stakeholders. The Board of Directors of the Company, comprises of six Directors, with a Non-Executive Chairman and the Executive Vice-Chairman as the two promoter directors and one Whole-time Director and balance three directors are all Independent Non-Executive Directors.

### Code of Business Ethics & Conduct

The Board of Sterlite Industries (India) Limited, in its meeting held on 12th January 2007 adopted the revised Code of Business Ethics which is applicable to all Board members, Senior Management and all employees of the Company. The code of business ethics and conduct is available on the website of the Company, [www.sterlite-industries.com](http://www.sterlite-industries.com). All Board members and Senior Management personnel have affirmed compliance with the code of business ethics and conduct. The Whole-Time Director, the Chief Executive Officer, the Chief Operating Officer have also confirmed and certified the same.

The Company has a very strong internal control mechanism with a dedicated team called 'Management Assurance Team' (MAS) who run a well-defined framework to review all the compliances of Companies policies, laws applicable to the Company. At the unit level the Company has a compliance review mechanism which reports monthly compliance to Senior Management. The compliance status is quarterly updated to the Board of Directors.

### Shareholders'/Investors' Grievances Committee

The Shareholders' Grievances Redressal Committee is empowered to perform all functions of the Board in relation to handling of Shareholders' Grievances, primarily focusing on review of investor complaints and their redressal, queries received from investors i.e. transfer of shares, issue of share certificates, non-receipt of Annual Report, non-receipt of declared dividends, etc. and work done by Share Transfer Agent. The Committee comprises of two members who met thrice during the year on April 26, 2008; July 28, 2008 and January 24, 2009.

### Remuneration Committee

Sterlite's Remuneration Committee is responsible for recommending the fixation and periodic revision of remunerations (including commissions and/or incentives, etc.) of the Managing Director and Executive Directors. This is done after reviewing their performance based on pre-determined





evaluation parameters and the Company policy of rewarding achievements and performance.

The compensation for members of the highest governance body, senior management team is based on the variable pay scheme over and above their monthly fixed components. The compensation is decided on basis of the individual performance and measurement of business deliverables. This variable pay policy addresses the enterprise score card mechanism which measures all the business deliverables.

### Share / Debenture Transfer Committee

The Board of Directors have delegated the power to approve share/debenture transfers, transmission and consider split / consolidation requests to the Share / Debenture Transfer Committee. The Share/Debenture Transfer Committee met thirty two times during the year.

### Banking and Authorisation Committee

The Banking and Authorisation Committee consisted of three Directors of the Company. The Committee approves on behalf of the Company, any changes in authorised signatories for banking operations, delegation of powers for day-to-day excise and sales tax matters, authorisation to specific employees for certain contractual obligations and such other delegation as may be required. The Committee met twice during the year.

### Audit Committee and its role

The Management is responsible for the Company's internal controls and the financial reporting process which is done internally by the MAS Team. The Company on rotation basis appoints internal auditors who review the compliance of Group policies, internal control and laws and regulations. The Statutory audit is undertaken by the Statutory Auditors who are responsible for performing statutory audit under the Companies Act, 1956 of the Company's financial statements in accordance with generally accepted auditing practices and for issuing reports based on such audits.

The Board of Directors have constituted an Audit Committee in accordance with the requirements of Section 292A of the Companies Act, 1956 and Clause 49 of the Listing Agreement entered into with the stock exchanges and has entrusted it to supervise these processes and thus ensure accurate and timely disclosures that maintain the transparency, integrity and quality of financial control and reporting.

The functions of the Audit Committee of the Company include the following:

1. Supervision of the Company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible
2. Recommending to the Board, the appointment, re-appointment and, if required, the replacement or removal of the statutory auditor and the fixation of audit fees
3. Approval of payment to statutory auditors for any other services rendered by the statutory auditors
4. Reviewing, with the management, the annual financial statements before submission to the Board for approval
5. Reviewing, with the management, the quarterly financial statements before submission to the Board for approval
6. Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems
7. Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit
8. Discussion with internal auditor any significant findings and follow-up thereon
9. Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board
10. Discussion with statutory auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern
11. Reviewing the Company's risk management policies
12. To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of non payment of declared dividends) and creditors
13. Reviewing any changes in the accounting policies or practices as compared to the last completed financial year and commenting on any deviation from the Accounting Standards

14. Carrying out any other function as is mentioned in the terms of reference of the Audit Committee
15. Review the financial statements, in particular, the investments made by the unlisted subsidiary companies (if any), in view of the requirements under Clause 49.

### Disclosures by Management to the Board

All disclosures relating to financial and commercial transactions where Directors may have a potential interest are provided to the Board, and the interested Directors do not participate in the discussion nor do they vote on such matters.

### Disclosure of Accounting Treatment in Preparation of Financial Statements

Sterlite has followed the guidelines of accounting standards laid down by the Institute of Chartered Accountants of India (ICAI) in preparation of its financial statements.

### Code for Prevention of Insider-Trading Practices

In compliance with the SEBI regulation on prevention of insider trading, the Company has instituted a comprehensive code of conduct for its Directors, management and officers. The code lays down guidelines, which advises them on procedures to be followed and disclosures to be made, while dealing with shares of Company, and cautioning them of the consequences of violations. The code clearly specifies, among other matters, that Directors and specified employees

of the Company can trade in the shares of the Company only during 'Trading Window Open Period'. The trading window is closed during the time of declaration of results, dividend and material events, etc. as per the Code. The Company Secretary is the Compliance Officer.

### Communication to Shareholders

Sterlite Industries (India) Ltd. puts forth key information about the Company and its performance, including quarterly results, official news releases, and presentations to analysts, on its website [www.sterlite-industries.com](http://www.sterlite-industries.com) regularly for the benefit / information of the public at large.

During the year, the quarterly results of the Company's performance have been published in leading newspapers such as 'The Economic Times' in English and 'Dinamalar' (Tamil Nadu edition) in the vernacular. Hence, they are not separately sent to individual shareholders. Sterlite, however, furnishes the quarterly and half-yearly results on receipt of a request from any shareholder.

### Whistle-blower Policy

Sterlite has a whistle-blower policy, where any instance of non-adherence to the Policy or any observed unethical behaviour is to be brought to the attention of the Head of Management Assurance System.



# Risks and opportunities



The current global economic scenario has also partly affected the copper industry. As commodity sentiments remain depressed, the industry in general has seen several global players re-align their strategies to survive in these turbulent times. At Sterlite, the Company is well acquainted to handle the business challenges posed by the current global economic conditions apart from the inherent risks to which the industry at large is exposed to.

The significant business risks in case of Sterlite are as follows:

- Availability of good copper grade concentrates at the desired Treatment Charges/Refining Charges (Tc/Rc) levels
- Securing long term contracts for copper concentrate to reduce dependency on the vagaries of the spot market
- High fluctuation in the realisation from acid by-products, i.e., Sulphuric and Phosphoric Acids
- Currency and commodity risks due to fluctuating prices
- Operational flexibility required to take care of varying copper concentrates
- Increase in working capital due to escalating commodity prices
- Increased cost of production in line with the fluctuation in commodity prices, mainly for petroleum products
- Ensuring optimum plant availability and reliability
- Disposal of by-products like gypsum and slag in a safe and hygienic manner
- Handling stakeholder expectations of growth and profitability along with enduring commitment to social responsibility
- Government policies and notifications
- Health and safety of employees & contractual labourers

However, barring a few, most of the above risks have been mitigated through a series of steps taken by the organisation. We are constantly monitoring ourselves against these existing risks as well as new risks posed by the business environment in which we are operating and ensuring that we have a mitigating and handling framework in place to ensure that the same are taken care of.

The Company also sees significant opportunities for itself in ensuring that it continues to be a globally benchmarked metal producer. These are as follows:

- Rapidly growing infrastructure development projects in the country, leading to a significant increase in the domestic demand for copper
- Robust cost control programmes in place to ensure that we are always globally competitive
- Programmes like TPM, TQM and 5S in place to ensure optimum plant availability and reliability
- Certification in global quality and energy efficiency systems
- Excellent talent pool of specialised and young work force
- Strong governance systems and practices in place
- Effective corporate social responsibility framework in place for stakeholder engagement
- Robust health and safety management systems benchmarked with international best practices



# Economic & Financial Performance

## Speaking with actions

At Sterlite, we strongly believe that a strong business performance leaves a positive foot print in the society. And a testimony to this is our sustainable business model, which adds significant contribution to the national and local economic development.

Over the years Sterlite has delivered a superior performance thereby ensuring positive economic returns to shareholders. Our performance for the year 2008-09 stands testimony to our Vision of being the 'Best in class copper producer' in the world. Key figures from our financial statements are given later in the section and the details are furnished in our Annual Report which is available at: [www.sterlite-industries.com](http://www.sterlite-industries.com)

Our economic impact can be categorised according to the affected groups (see Economic Value Summary). Immediate economic impacts are through the salaries and benefits paid to employees and the money paid to our suppliers and contractors. Communities benefit directly from our social investment made through our Corporate Social Responsibility (CSR) activities, through voluntary donations and indirectly through spending by our employees and our suppliers. We also contribute to the National Exchequer, discharging responsibilities by paying all applicable taxes and levies.

### Contribution to Exchequer

Particular	2006-07 (in Rs. Cr)	2007-08 (in Rs. Cr)	2008-09 (in Rs. Cr)
Total Payment	1739	1488	1885

## Employees

In 2008-09, we employed over 1285 employees directly and 54 employees through contract mode, thereby contributing a remuneration of Rs. 82.28 crores for the Sterlite Operations. At Sterlite, the Human Resources department supports the business operations to achieve key targets by implementing Key Result Areas (KRAs) and prescribing performance parameters for each employee. It motivates employees to innovate and improve their performance through various reward and recognition schemes like employee/team of the month, CEO kitty, etc. Employees are also part of cross functional and cross cultural teams.

Employees are encouraged to contribute to the various community initiatives through volunteerism. Employees who volunteered were recognised in the 'Employee Communication Meet' to promote 'Corporate Volunteerism' among employees.

A Structured Employee Satisfaction Survey conducted at periodical intervals reveals the level of satisfaction and enables necessary follow-up actions. Quality of need based training, HR transparency and sensitivity to people issues, employee of the month, Ideas@Sterlite effectiveness etc are some indicative parameters that are measured through the employee satisfaction survey.

### Employees

Particular	2006-07	2007-08	2008-09
Total No. of Employees	1082	1232	1285
	(in Rs. Cr)	(in Rs. Cr)	(in Rs. Cr)
Salaries, Wages, Bonus & Allowances	43.70	50.07	61.60
Contribution of PF & Other Funds	2.72	3.22	3.76
Contribution to Gratuity & Annuity Fund	0.15	0.95	1.37
Participants in employees stock purchase plan	4.56	5.01	8.09
Staff Welfare Expenses	5.54	5.69	6.52
Total employees training spend	0.77	1.24	0.94



## Vendors

Vendors and suppliers are considered as business partners of the organisation and are treated accordingly. Sterlite's key suppliers & partners are informed of our vision & mission and the key deliverables expected from them through supplier / vendor meets and our website. Suppliers are evaluated based on their deliverable performance. The vendor meet conducted in Chennai in April 2008 was a grand success, with over 150 of our business partners attending the same. Periodic vendor review and feedback is also carried out to align them with our overall business requirements.

Vendors/Suppliers			
Particular	2006-07 (in Rs. Cr)	2007-08 (in Rs. Cr)	2008-09 (in Rs. Cr)
Cost of Material, Goods & Services	10,752.92	11,684.29	10,092.18

## Community

CSR activities are a critical component in the overall vision of the Company to be a respectable corporate citizen. These are imbibed and implemented as part of the Company's DNA rather than as an ad hoc measure. Consequently, spend on CSR is taken up as part of the overall Business Plan exercise and aims to bring focus to the activities which will help in achieving the overall corporate objectives. SILL plays the role of a catalyst in bridging the community needs and the resources for sustainable development. Health, Education, Women Empowerment and Rural Infrastructure Development are the thrust areas under which SILL has made significant contribution. Please refer to the dedicated section on CSR in this report (refer page no. 28).

Contribution to Community			
Particular	2006-07 (in Rs. Cr)	2007-08 (in Rs. Cr)	2008-09 (in Rs. Cr)
Community Development Initiatives	0.61	0.83	1.83

## Investors and shareholders

Shareholders receive dividends and may benefit from growth in the value of their shares. In 2008-09, Sterlite's dividends were worth Rs. 247.97 crores.

Sterlite Industries (India) Ltd. puts forth key information about the Company and its performance, including quarterly results, official news releases, and presentations to analysts, on its website [www.sterlite-industries.com](http://www.sterlite-industries.com) regularly for the benefit / information of the public at large.

Investors			
Particular	2006-07 (in Rs. Cr)	2007-08 (in Rs. Cr)	2008-09 (in Rs. Cr)
Dividends	223.4	283.4	247.97

## Economic Value Summary

Copper cathode production was 312,833 tonnes in 2008-09, a decrease of 8% compared to 2007-08, primarily due to a planned maintenance shutdown for 26 days in May and June 2008 and an unplanned shut-down due to damage in cooling tower in November 2008 at our Tuticorin unit. The cooling tower is now repaired and restored to its normal operations from January 2009 onwards. Our production has been steadily ramping-up, and we shall achieve the rated capacity in 2009-10.

Unit conversion costs, which consist of costs of smelting and refining, have increased to 3.1 cents/lb in 2008-09, compared to 1.8 cents/lb in 2007-08. The increase in cost of production was mainly on account of steep fall in by-products realisation and higher fuel costs during the first

Our Economic Performance 2008-09			
Particular	2006-07 (in Rs. Cr)	2007-08 (in Rs. Cr)	2008-09 (in Rs. Cr)
Net Turnover (Net of duties)	11,821.85	12,671.98	11,565.99
Personnel expenses	57.44	66.18	82.28
Retained earnings	1,426.93	1,944.10	2,683.41
Capital expenditure	149.27	99.04	106.31

half of 2008-09. Our focus on cost of production is relentless and with the help of various operational improvement activities like TPM, TQM, 5S Practices etc., there will be substantial improvements in the process and technical efficiency, which would drive down the costs.

The year 2008-09 witnessed a tightening in the global concentrate market, mainly due to cutback in production of the second largest mine in the world combined with increased refining capacities and aggressive buying of concentrates in China. Spot markets were extremely firm at

Copper - Export vs Domestic Market			
Particular	2006-07 (in tonnes)	2007-08 (in tonnes)	2008-09 (in tonnes)
Export	1,94,625	1,80,035	1,14,114
Domestic	1,16,523	1,57,037	1,98,453
Total	3,11,148	3,37,072	3,12,567

around US\$ 60/tonne of concentrate on account of Treatment Costs (TC), and US cent 6/lb of copper for Refining Charge (RC) during fourth quarter of 2008-09. Contracts for concentrates have been completed and the benchmark TC/RC has been conclusively established at 75/7.5 (i.e. US\$ 75/tonne of concentrate for TC and US cent 7.5/lb of copper for RC) with various improvements in the side terms such as quotation period, payment terms and gold/silver refining charges. Sterlite has concluded all its annual negotiations around similar levels with substantial improvements on side terms. Even so, the concentrate market is expected to be in a state of deficit for next couple of years. This may result in further hardening of the TC/RC terms for the Company in the near term.

The Company's efforts towards market development in India have paid dividend in terms of accelerating growth. Our domestic sale has increased by 26% to 1,98,455 tonnes in 2008-09 compared to previous year, and we accounted for 29% of the market in India. We also exported 1,14,114 tonnes of copper cathodes and copper rods, to our key overseas markets – the Middle East, China, Japan, Philippines and Thailand. We continue to develop a sizeable customer base for the export of copper rods.

Acid – Sales					
Phosphoric Acid (in tonnes)			Sulphuric Acid (in tonnes)		
2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1,71,110	1,60,665	1,57,108	4,83,019	6,14,098	5,13,307

# Corporate Social Responsibility (2008-09)



## Signing up for corporate social responsibility

When sustainability forms the core value of your existence, Corporate Social Responsibility (CSR) is the opportunity to give wings to your mission. This is what we have experienced first-hand ever since we started our CSR activities in December 1997.

To us at Sterlite, CSR initiatives are those that have the potential of 'Changing lives'; hence our efforts attempt to bridge gaps that in turn transform the lives of people for the better.



Our CSR initiatives are aligned with the goals of United Nation's Millennium Development Goals and the principles of the Global Compact. True to our conviction that social responsibility begins at home, we pay maximum attention to the communities and villages around our workplaces. Currently, most of our activities are concentrated at around 25 villages in the rural and coastal areas of Tuticorin and Silvassa, which impact the lives of about 1 lakh people.

Key CSR focus areas as guided by our CSR policy at a corporate level and at the group of companies' level are:

- Education
- Health and Hygiene
- Women Empowerment
- Sustainable Livelihood
- Rural Infrastructure Development





## Sterlite's approach to community development projects

Projects are implemented directly under the supervision of Chief Operating Officer through a dedicated CSR department headed by General Manager-HR. The CSR department has a team of qualified professionals conversant with local culture and language. In 2008-09, spends for CSR activities were approximately Rs. 1.83 crores, a substantial amount of which was used to begin two major activities:

- Sterlite Paediatric Block - Constructed in Government Head Quarter Hospital at a cost of Rs. 39.26 lakhs
- 'Save A Child Heart' Programme - Created for treating economically poor children ailing with heart diseases, at the cost of Rs. 37.5 lakhs.



### Sterlite's CSR beliefs

#### We believe

- In a tripartite approach to community development projects. We strive for the convergence of governmental resources, field expertise of NGOs, and our vision of transforming local communities, in order to sustain growth and development in nearby communities.
- People know their problems and solutions the best; what they lack are the means.
- Community ownership is a critical factor for success. We follow a bottom up approach, and involve people right from the beginning i.e. project planning stage. Thereafter, we encourage community participation and contribution at all stages of implementation. Techniques like Participatory Rural Appraisals (PRAs) and Focus Group Discussions are used for charting out community needs and necessary resources required, resulting in increased community ownership with higher probability of positive outcomes from the project.
- The right partnerships can change lives beyond all expectations. Since most of our projects are demand driven or an outcome of community need assessment, they are planned and executed systematically in partnership with NGOs and the government together with strong employee engagement.
- Self-sustaining villages can be a reality in the future. We can catalyse the process through our efforts and by partnering with NGOs, government departments, academic institutions, nationalised banks and hospitals, to create a model that addresses community issues in a consistent manner.

“Sterlite's role in Sustainable Livelihood possesses an immense value in the community”

Dr. Tagore Derosé,  
Director - Chevalier Roche Society

# Track Record of Community Initiatives 2008-09



## Education

Our initiatives in education stem from the conviction that it is the responsibility of private companies to join hands with government and other institutions to contribute to the development of educational infrastructure.

We focus on bringing formal education to underprivileged children such as those in slums or villages, who would otherwise be dependant on inadequately funded government schools or worse, be deprived of even a basic education.

Sterlite has joined the mission of education, with the following activities.

### 1. At Tuticorin

#### 1.1 Evening study centres



We run 22 evening study centres for 1714 economically and socially disadvantaged students, in and around Tuticorin district. The centres focus on improving the quality of education of the rural poor. Teachers are appointed from the same village, for cultural resonance, and trained in educational methodologies and approaches. Parent teachers meeting are periodically conducted and feedback is collected. The overall pass percentage of the students has increased from 80% to 82.2% in the reporting year.

#### 1.2 Free notebooks

Free notebooks are distributed to the students at the evening study centres. So far, over 2500 students have benefited.

#### 1.3 Scholarships for higher studies

Sterlite extends scholarships to economically and socially disadvantaged students who would like to pursue higher studies.

Some of the highlights of this initiative have been:

- 14 students got financial aid on merit basis
- Scholastic excellence awards were awarded to 34 students,

who were district toppers in their SSLC or HSC examinations

- Cash incentives and certificates were awarded to all students who secured over 80% in their public exams
- 5 scholarships were initiated at V.O.C College Tuticorin, for economically backward and meritorious students



- Several economically challenged students gained the confidence to seek and get admission in engineering and medical courses

#### 1.4 Adult literacy programme

We run adult education centres in 12 villages, in partnership with Government of Tamil Nadu's 'Valarkalvi thittam' project. The effort has included conducting a baseline survey, identifying people with no formal/informal education and convincing them to attend classes. Thereafter, periodic review meetings were conducted jointly with the government to enhance the performance and reach of the centres. The response of local communities has been highly encouraging, and there has been equal participation from women. Today, about 302 women regularly attend classes. Two of the villages where our education centres are functioning (Pandarampatty and Thoothukudi, have been declared 81% and 82.5% literate respectively, according to a recent review carried out by governmental agencies.

77 Students, 2 Staffs and 4 Project trainees learnt the manufacturing process, with the help of a small film, and first hand exposure to the process flow at the plant. Children were exposed to the new industrial environment and grasped the basics of biscuit manufacturing.

## 2. At Silvassa

### 2.1 Educational Tour

The vision for all our CSR initiatives entails an overall development of children by means of education. One of the ways of achieving this is to provide students with a window to the real world. With this in mind, we organised an industrial site visit to Parle Factory, Luhari Garden, for the students of Chinchpada Primary School.

This visit was initiated on January 19, 2009 with a Green flag, by the Sameer Gupta (Head Operation), Anil Tripathi (Head Production), Paresh Gajjar (Administration), the departmental heads of Sterlite Industries and the heads of Chinchpada Village.

77 Students, 2 Staffs and 4 Project trainees learnt the manufacturing process, with the help of a small film, and first hand exposure to the process flow at the plant. Children were exposed to the new industrial environment and grasped the basics of biscuit manufacturing. The visit also enabled learning beyond school premises in a stress-free manner.

### 2.2 'Shala Pravesh Mohostav 2008' at Vasona Prathmik Shala

This is the 6th year of 'shala chalo abhiyan' of Vasona School, a Sterlite initiative created to encourage young children to go to school for primary education, and in turn, to improve their standard of living. Last year, school bags were given to all 180 new entrants registered in class 1. Further, cash rewards were given to the top performers of class 7 in the last academic year.

On 26th June 2008 we supported a similar drive at Chinchpada School wherein 60 students took admission in class 1. Sterlite distributed school bags to all the new entrants (60 nos.) in class 1 at Chinchpada.

### 2.3 Construction of a boundary wall at Chinchpada Government Primary School

We believe that no CSR initiative is too small if it consistently reflects our mission to be a responsible corporate citizen. As part of our developmental activities, we completed the construction of a boundary wall for Chinchpada Primary School at Navi Vasahat. For the 250 tribal and Adivasi students of the school, a new wall offers:

- Greater safety, and security against anti-social elements and animals
- A better facility for games, sports events and cultural celebrations
- A cleaner, more hygienic environment
- Less distraction while studying



# Health and Hygiene

Our commitment to the communities around us naturally extends to healthcare, which is an integral component of development. Several of our initiatives, such as Employee Volunteering Programmes, created to improve access to better healthcare, have been encouragingly successful. Last year, Sterlite signed a MoU with Apollo Hospitals in Chennai to carry out heart surgeries for children from lower socio-economic strata. Nine successful general health camps were conducted in villages. Shown here are some of the highlights of our initiatives in 2008-09.

## 1. At Tuticorin

**1.1 Healthcare for 25,200 people and still counting:** To address the absence of local primary healthcare, rural health clinics were started in 6 villages for a population of 12,000. Patients get access to free medicine and qualified doctors who visit weekly. Around 80 patients are treated everyday. The cost of running the clinics is borne entirely by Sterlite.



**1.2 General health camps benefit over 4782 villagers:** Monthly general health camps are conducted in remote and coastal villages near Tuticorin. Last year, nine camps were conducted, with the active involvement of local communities in activities like site selection and printing of pamphlets.

**1.3 Exclusive paediatric block almost ready for handover:**

A paediatric block, being constructed by Sterlite in partnership with the Government General Hospital at Tuticorin, is almost 80% complete, with the capacity to treat 200 children a day.

**1.4 Pulse polio programme:** Sterlite sponsored transport for



the pulse polio programme in partnership with 6 Government primary health centres, to benefit 25,587 children under the age of five.

**1.5 Varumun Kappom Thittam:** Sterlite sponsored free multi speciality health camps in coordination with primary health centres at Puthiyamputhur, Mapilaiyurani and S.Kailasapuram, to benefit around 5112 underprivileged people.

**1.7 Blood donation camp organised at the primary health centre at Mapilaiyurani in November 2008:** As part



**1.6 HIV AIDS Intervention:** Red Ribbon Club has been formed at the Sterlite campus to create awareness about HIV AIDS. Around 20 employees from different departments who had enrolled as members were trained in partnership with Tamil Nadu state AIDS control society. The Club has carried out several awareness-cum-screening camps and initiated self help groups for 223 women members. 167 students of the coastal livelihood project (another project under Livelihood enhancement) have been given an orientation on the disease. World AIDS Day was observed on 1st December 2008 by wearing Red Ribbon badges and organising an awareness programme for truck drivers. A total of around 3,000 people have benefited out of this programme so far.



of the annual blood donation drive, 48 employees donated blood at Tamira Niketan Auditorium, and were awarded certificates by the district blood bank.

- 1.8 Save a Child Heart Programme: Sterlite has signed a MoU with Apollo Hospitals, Chennai for performing heart surgeries for poor children aged up to 16. To this



end, a heart screening camp was organised to identify children with heart diseases and heart surgeries were performed successfully at Apollo Hospitals. The total cost of this initiative was Rs. 37.5 lakhs.

- 1.9 Veterinary camps benefit 5 villages: Sterlite in partnership with Tamil Nadu animal husbandry department organised animal health camps to cover 3,100 cattle. This benefited poor villagers who rely largely on animal management but have little access to healthcare facilities.

## 2. At Silvassa

As part of Sterlite's CSR mission to bring to basic healthcare to areas around its operation, several initiatives like immunisation and medical health camps have been undertaken at Silvassa. Some of them are:

- 2.1 Pulse Polio Immunisation Programme - Phase I  
Sharing the mission of a polio free world with the Health Department of Dadra & Nagar Haveli, we conducted a Pulse Polio Immunisation Programme for over 350 children on 21st December 2008. Conducted at Chinchpada and Dapada Patelad in Chinchpada village, it drew the participation of employees and village leaders.

- 2.2 Pulse Polio Immunisation Programme - Phase II  
This programme too was held in partnership with the Health Department of Dadra & Nagar Haveli at Chinchpada and Vasona in Chinchpada village. Held on 1st February 2009, 300 children were given vaccinations, sweets and biscuits. Village heads and Company employees actively participated.

- 2.3 Medical Camp: Initiated in September 2008 with the help of Public Health Department - Union Territory of Dadra & Nagar Haveli and the coordination of Dapada Gram Panchayat in September 2008, this camp was held as part of National Vector Borne Disease Control Programme (NVBDCP) at the Government Primary School at Chinchpada.

S. Hari, an employee at Sterlite volunteered to become a member of the Sterlite Red Ribbon Club. He says that "I'm interested to serve the illiterate and society creating more awareness. CSR provides bon visage of the future and achieve a goal of AIDS-free India, to stop innocents being punished. Generousness and vast mindedness can be achieved through helping others which will automatically improve our inter-personal skills."





## Women Empowerment

Our CSR policy firmly believes that woman empowerment is fundamental to human development. We also believe that the empowerment of women involves helping improve their economic and social status through definite social and economic policies, which in turn leads to greater confidence and ultimately development.

With this in mind, The Sterlite Women Empowerment Project (SWEPE) was initiated to empower rural and coastal women on 5th March 2005. The objectives of this project are to:

- Empower women socially and economically
- Generate supplementary income for women self help groups
- Provide training to upgrade skills and create opportunities for viable economic activities
- Create market linkages for economic activities of women SHGs
- Catalyse the linkage of SHGs with resources from Government, NGOs, Banks and corporate for the success of SHGs

As a result of the project, 799 Self-Help Groups (SHG) have been formed, covering 11,200 rural women from marginalised sections of society. Over 110 groups are involved in profitable income generating activities. The strategic use of microfinance to approach and involve rural women has helped them get access to working capital and plug their training needs. We hope that this will mobilise their productivity and maximise economic output.



## Case Studies / Success Stories

### 1 Readymade Garment Unit



Ms. Dhanalakshmi, aged 33 yrs. comes from a poor background and has been educated up to Standard VIII. She had completed a diploma in tailoring at the age of 14 years. She got married at a very early age but lost her husband after a few years of happy married life. Having no psychological and economical support for herself and her child's education, she sought guidance from the leader of a self-help group to start a readymade garment unit.

As a first step towards her vision, she pledged her jewels for

Rs.30,000 towards the purchase of 9 sewing machines and material. With the linkage loan she subsequently received on behalf of the SHG and with the profits generated by the unit, Ms. Dhanalakshmi paid back her debt. The unit is engaged in exporting stitched pants, shirts, salwars and skirts to Puthiamputhur and to local vendors. The entire unit comprises Self-Help Group members.

As the Sterlite Women Empowerment Project aims at empowering women economically and socially, this particular enterprise shows an enormous opportunity for self employment. The initiative run by SHG members benefits 14 individual households channelising its way towards success with 75% increase in profit.

With an investment of only Rs. 40,000, the entrepreneurship continues to give profits of Rs. 6,000 per month.

Readymade Garment Units, a common initiative of most of the SHG members, has extended its profitability wide over the area around. It is also considered to have caused an increase in the percentage of employed youths and women SHGs.

## 2 Manufacturing of cotton yarn waste

Ms. Jesslin hails from a standard family and was ambitious about starting an enterprise that would upgrade her economically. She found out that cotton yarn waste generated from undergarment manufacture finds wide use in industries like automobiles, aircrafts and paints.

The idea for an enterprise came to her from reading the Quarterly issue of 'AVAL VIGADAN', where she discovered that the activity took place at Chennai at a nominal profit. She visited a manufacturing unit where cotton yarn waste was generated and collected information at the raw material unit.

She started manufacturing with two members to produce 100 Kgs a month which got her a profit of Rs. 2,800. After a few days she moved to the next level of her establishment and started producing 3 to 5 Kgs per day.

To reduce the strain involved, she applied for a PMRY loan of Rs.1, 00,000 and purchased a machine worth Rs. 25,000, which made her work easier and smoother.

The concept of 'Waste to Wealth', initiated through the enterprise, benefited 14 self help group members families and other members of the local area. The initiative also resulted in the consumption of waste materials from Tirupur and conversion of the same into a profitable enterprise.

The total investment of the project was Rs. 1,00,000 giving a monthly profit of Rs. 6,000 pm.

## 4 Mushroom Cultivation

Ms. Vijila and Ms. Shanthi, were greatly interested in starting a unit. After evaluating various viable options, they finally selected mushroom cultivation, based on its feasibility in the market.

Mushroom cultivation requires no land and therefore gained a significant amount of impact among the Womens' self help group members as an income generation activity.

Ms. Vijila and Ms. Shanti started their unit with an investment of Rs. 65,000 for the set up, labour and the procurement of spawn across the various stages of mushroom cultivation. Their current unit is based at Ms. Vijila's residence and gets progressive marketing support from Ms. Shanthi. Since this activity does not require full time labour, family members look after different operations, thereby helping the smooth running of the unit.

With an initial investment of Rs.65, 000, the cultivation yields high profitable returns at an average rate of Rs. 2800 per month, as demonstrated in the table below.

Month	Yield (Rs)	Expenses (Rs)	Profit (Rs)
July 2007 - Dec 2007	32,600	4,700	27,900
Jan 2008 - Oct 2008	36,500	14,100	22,400

## 3 Banana Cultivation

Bananas and plantains constitute a major staple food crop for millions of people in developing countries. With this large requirement for bananas, four Women Self-help Groups of Periyarayapuram are involved in banana cultivation at different investment levels. Most of the rural women involved were earlier restricted to household tasks, and unable to augment their economic status.

Land was leased for Rs. 48,000, and 79 SHG members were engaged in the initiative, creating short term ownership of women farmers. In spite of the fact that plantain cultivation is seasonal, the enterprise benefits 14 individual households, generating a profit of Rs. 100 per day. Not only does this boost the income of the women, it also empowers them enormously.

The short term ownership is expected to result in accessibility of land assets towards the second level.

S.No	Name of the SHG	No. of members	Land utilised (acres)	Investment (Rs)	Profit (Rs)
1.	Senthura Malargal	20	2	2,47,200	3000 - 6000
2.	Santhana Malargal	20	2	2,48,200	
3.	Malligai Malargal	19	1	1,33,090	
4.	Vetri Malargal	20	2	2,48,800	

## 5 Fancy Store

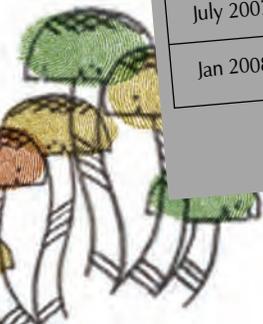
After the formation of the SHG, members were given economic development training to help them start an income generation project, which would support their supplementary income. To hone their entrepreneurial skills, the members of Annai Theresa Tamira Sangamam initiated this micro enterprise with an investment of Rs. 67,500. In spite of other personal work commitments, members were able to spend time on the project. Regular SHG meeting and record keeping enhanced their commitment, and they generated a profit of Rs. 2000 per month. The micro enterprise has now taken a qualitative position in the local area.

In spite of the hurdles faced by the team members, they pursued their dream of running the store. It is noteworthy that the viability of the project in the area depends on the profit of the unit. Competency and smooth running has been achieved due to transparency, mutual understanding and accountability among the five members with delegation of profit.

The initiatives taken across by the women group significantly works towards the economic upgradation of their households.

The project has strengthened the management capacity of the members and ultimately enlarged the credit pool. With its desirability in urban areas, a fancy store is one of the most opted income generation projects.

At an investment of Rs. 67,500, the project generates profit of Rs. 2000 every month.





## Coastal Livelihood Project



Sterlite in partnership with Tuticorin Port Trust is implementing the coastal livelihood project with the objective of providing alternate employment opportunities for coastal youths. First, training institutes were identified by a transparent process. This involved advertisements in leading newspapers, followed by one on one interaction with shortlisted candidates and finally verification of the infrastructure. Once selected institutes were issued contract letters, around 390 youths were trained in 13 identified trades, free of cost.

Results have been encouraging. Five girls trained in computer applications are working as part time data entry operators in the HR department of Sterlite. Ten girls were placed in the sales tax department as part time data entry operators. 15 women who underwent tailoring training started a production unit in a community common building, which they got free of cost from panchayat.



## Infrastructure Development

### 1. School renovation projects

Smoothing the path to education: The condition of the floor at the Government aided primary school R.C. Middle School in Vadakkusilukanpatti village was causing students discomfort and



difficulty. When the school management approached Sterlite for help, work was taken up with the concurrence of local community members. Budgets were fixed by the community and a contractor finalised. The work was completed well in time, thus offering students comfort and a dust-free environment.

Protecting boundaries: Sterlite constructed the boundary wall of Chinchpada Primary School, which was inaugurated along with the opening of gates on 26th June 2008 during 'Shala Pravesh Mohostav 2008'. It was inaugurated by Mr. Tarundeep Arora (Head-Operations Sterlite Industries), Village Sarpanch Mr. Chaganbhai Mahala & Education Officer Mr. Vasantbhai in the presence of the education department officer, panchayat members & the CSR Team.

### 2. Anganwadi

The Anganwadi Centre in Vadakusilukkanpatti village take cares of around 32 children between 1 and 5 years. To create a positive environment for the children, the building was whitewashed and the walls painted with attractive colourful pictures, which was fully funded by Sterlite.



### 3. Total sanitation

Sterlite took up sanitation as a focus area in 2008 - a year declared as the International Year of Sanitation. Awareness programmes were held on health and sanitation in three nearby villages, which drew a positive response from villagers. A grant of Rs. 1000 per household was given by Sterlite to supplement a Government grant for the construction of household toilets. The grants were given to households below the poverty line at a simple ceremony at the factory campus, which was graced by the presence of the sub collector of Tuticorin Village members were also made aware how to use the toilet and the advantages of doing so. This initiative encouraged 31 families across two villages to construct toilets.

### 4. Drainage network construction

The absence of a public drainage system in Nainarpuram village had caused water stagnation on streets and vulnerability to water borne diseases like malaria. When the village community approached Sterlite for help in constructing a community drainage canal, the management assessed the need and decided to support the project.



To encourage a sense of ownership, the community was asked to contribute to the project, while Sterlite bore the remaining cost. The project was completed in 3 months, and the community expressed its appreciation through a thanks giving ceremony attended by panchayat leaders and block development officials, besides Company representatives. The success of the project has encouraged other villages to also seek better sanitation by approaching us.

## 5. A model village

A major initiative undertaken by Sterlite last year was the development of a Model Village, based on the concept of a Child Friendly village. The key objective of the village is to ensure,

- All school age children are in school
- No child labour in the village
- All children are immunised
- All children possess their valid birth certificates
- Nutritional security of the households



The first child friendly village was launched in Vadakusilukanpatti village in Tuticorin. We developed a ritual of celebrating the first birthday of every baby in the project villages and used that event as a platform for increasing awareness on the concept of child friendly villages. This has led to increase child welfare in the village, with no single school dropout in the project village as a profound indicator of success of the concept. In addition, we have initiated other projects like education, health and women empowerment as well.

## Employee volunteerism at Sterlite



Sterlite has always encouraged volunteer work from employees for most CSR activities. Since 1998, we have identified ways to position employees in CSR initiatives such that they complement their areas of interest. Feedback collected from employees was evaluated with the volunteers' interest and overall experience while volunteering, and change in attitude or skill sets.

## Other Initiatives

### Old age widow support programme

The Old Age Widow Support Programme aims to give basic necessities to socially and economically backward widows. This year, 15 basic requirement kits were distributed by Mr. Tarundeep Arora (Head Operation), village representatives and the CSR Team, on the Chinchpada Primary School Premises. They comprised foodgrains - containing rice, dal, masala, oil and gud, utensil kits (with a complete stainless steel kitchen utensil set) and sleeping kit - sleeping mat, chaddars, and blanket.

### Tree Plantation

We have initiated a 2 phase tree plantation drive in Chinchpada School. During phase 1, 100 flowering & fruit bearing trees were planted by children, teachers and employees at Chinchpada Primary School. Mr. Kalpesh Patel, the school head master explained the importance of trees and requested students to look after the saplings.



### Benchmarking with other companies

The CSR team of Sterlite visited other companies to understand different CSR models. Notable among them were the visit to Tata Steel Plant in Jamshedpur and Orchid Chemicals in Chennai, which resulted in informal training to the staff and boosting their performance and involvement in departmental activities.

### Feedback on our activities

Feedback is regularly collected from the community and partner NGOs through review meetings with necessary actions taken. For example a section of the population in the model village reported that the location of the health clinic in a private building limited their access to it. Basis on this feedback, we shifted the clinic to a community common building.



Dr. M. Krishnaratnam on how volunteering at the medical camp at Sipikulam helped improve his interpersonal skills.

“This activity gave me an opportunity to interact / mingle with lot of juniors, especially the newly joined GETs. As a senior employee I am able to motivate them. It also gave me an opportunity to understand the life style of coastal village people.”

Mr. Xavier Attkumar. J on his experience as a volunteer at the medical camp at Nainarpuram.



“I am very proud of our CSR department. As a volunteer at Nainarpuram, I mingled with people and served them. I experienced something different for the first time in my life at Sterlite and felt very happy. In the future too, I want to join in all social activities and serve the people.”

### Future plans

In partnership with AC Nielsen, our Company is planning to conduct image perception study. The questionnaires are prepared and questions on CSR section include the people's awareness on the CSR initiatives, their feedback and suggestions for improvement, etc. This study will help us to understand the community perception on the CSR initiatives and the projects to be undertaken in the future.



# Nurturing and developing our most valuable resources - Human Assets

Our approach to human assets has an underlying philosophy as once stated by Field Marshal Ferdinand Foe — ‘The greatest weapon on earth is the human soul on fire’. We believe that the unrivaled growth that Sterlite Industries has seen over the years is due to the sheer commitment and passion of our human capital. It is our dynamic and talented workforce that is propelling us towards achieving our vision of being the world’s best in class copper producer. At Sterlite, we seek to create an environment of fairness, transparency and mutual respect wherein the aspirations of employees and the goals of the enterprise are aligned to achieve mutual benefit on a long term continual basis, and thereby enabling us to be the preferred employer of choice.



## 1. Recruitment Strategy

‘Get, Nurture and Grow’ is the mantra for Human Resource practices at Sterlite. We have always been considered as a mother unit and custodian of group philosophies and a source of high quality talent. We believe in equal opportunity and do not discriminate on the basis of colour, caste, region and sex.

The Company’s guiding principle for sourcing people is to look for freshers from colleges rather than lateral recruitment, as Sterlite strongly believes that they can be easily moulded into our culture and that results into long term fruitful association. For recruitment to lateral and senior level positions, we try to get suitable candidates from amongst group companies through internal advertisements as we give priority to our employees and emphasise growth from within. Only when case positions are not filled through internal recruitment options, do we recruit senior level positions from amongst short-listed candidates referred by empanelled

consultancy firms. (Refer to Fig. 1 for our employee details for 2008-09).

## Educational Institution Association

As the major source for talent is from campuses, brand building initiatives are conducted across 100 Engineering Colleges, 20 MBA Institutes across the country and the Institute of Chartered Accountants in India. This helps Sterlite maintain and develop relationships with potential employees. Senior management visits campuses to deliver insights on technical and business related subjects. Sterlite also sponsors various events in major engineering and management campuses to increase our brand visibility to the student community. Sterlite has participated in surveys like ‘Best Place to Work’ conducted by BT Mercer and Hewitt Consulting Groups, to benchmark our HR processes with best practices and to bridge gaps.

Employee Break-up 2008-09

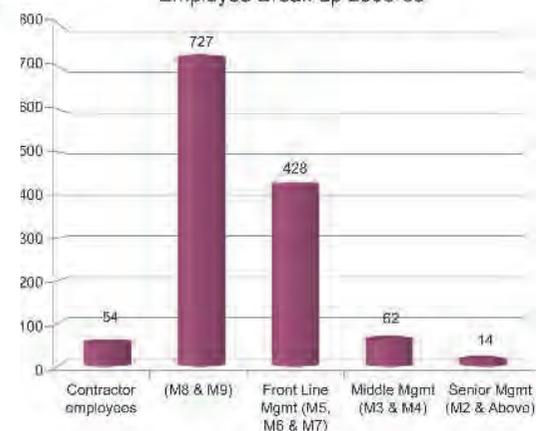


Fig. 1



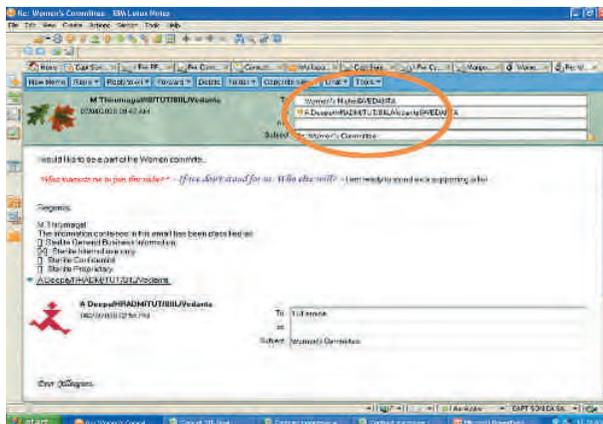


## Womenforce

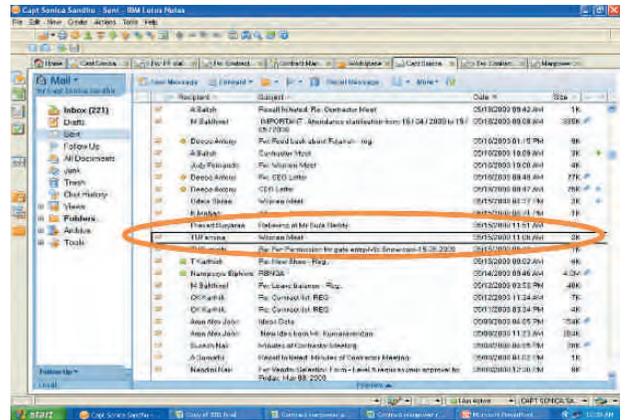
At Sterlite, women employees are given equal roles and responsibilities in all areas. There is a women's committee which strives to foster the advancement, development and empowerment of women through continuous monitoring and effective working. Women employees have an exclusive blog of their own called "Women's Niche", which deals with women related issues.

Problems faced by any woman employee can be addressed on this blog which can be accessed only by committee members. Queries or grievances are redressed immediately while maintaining utmost confidentiality.

TUFemina is a women's group at Sterlite, through which women employees can interact with each other and share their experiences. (Refer to Fig. 2 for details of women employees at Sterlite and Fig. 3 for overall gender distribution.)



Blog Niche



TUFemina

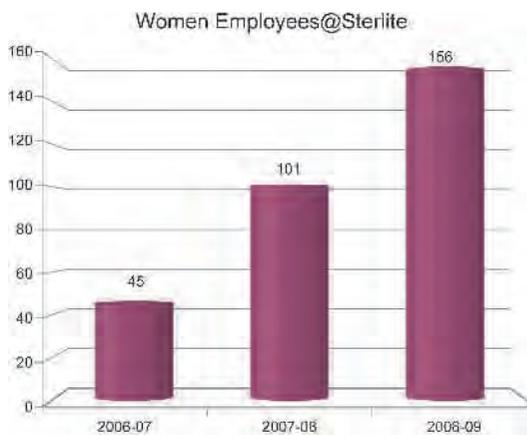


Fig. 2

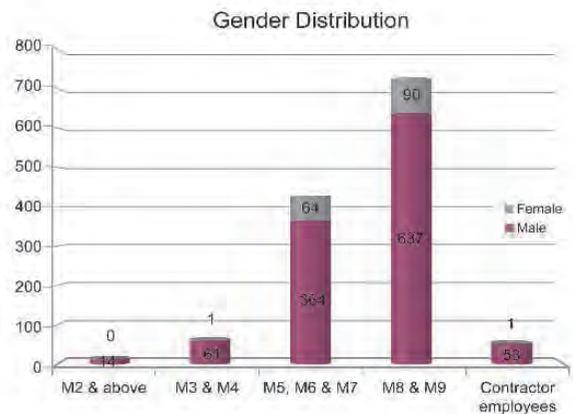


Fig. 3

“In the span of 13 years of working at Sterlite, I’ve had an opportunity to hone my skills and competencies working with various departments including smelter production, engineering services, Sr VP’s office and my current department of business excellence. I feel happy & proud to be a part of this young and energetic team.”

N. Geethanjali,  
Business Excellence Dept.



## 2. Learning & Development

Employee Development is a continuous and rigorous activity at Sterlite. There is an extensive focus on capability building across the Company through various Learning & Development Initiatives. The employees are given technical as well as behavioural training. For each business, detailed learning & developmental plans are drawn for all management cadre employees basis which, training calendars are scheduled after discussions with HR Heads, Business Heads and the CEO. Training needs of non-executive employees are also given due consideration.

1. Safety, Health and Environment
2. Quality Development Initiatives
  - 5S Practices
  - TPM Awareness
  - Quality, Environment, Safety Management System (QESMS)
  - Structured Problem Solving Techniques
3. Functional/Technical Programmes
  - Technology based
  - Multi Skilling
  - On the job training
4. Attitudinal/Behavioural Programmes
5. Management Development Programmes (MDP)
6. Senior Management Programmes (SMP)
7. Corporate Leadership Programmes
8. Special training programmes for STARS and BLGs
9. Programmes on Policies and code of conduct

We have also tied up with various high calibre institutions to provide Management Development Programmes.

- Business orientation through the IITs, NIRMA and XLRI to young Engineers who have completed 1 to 5 years with the group
- Special programme for our managers who are in SBU head positions through IIM Ahmedabad.

To empower our young engineer trainees with multiskilling, they were exposed to a seven week structured technical programme which enabled them to have live demonstration on handling various machines at the SPIC Training Institute, Tuticorin.

Awareness Programmes regarding Company policies and code of conduct is conducted regularly. The code of conduct is read and signed off by all the executives of the Company. Training on bribery and corruption is being carried on a regular basis through communication meets. Corruption can be a significant risk to an organisation's reputation and business. We registered one incident of corruption for this financial year and necessary actions were taken.

The employees working at our sites are not covered under collective bargaining agreements as there are no trade union representations. However, we have several engagement processes, where grievances are captured.

The Company's remuneration policy and practices do not differentiate on the basis of gender. The contract labourers were paid wages as per the Minimum Wages Act.

## 3. Equal Opportunity Employer

Being an equal opportunity employer, we do not discriminate on grounds of gender, age, religion, origin or political affiliation. We do not employ forced, bonded or child labour. Wherever possible, we favour the utilisation of local manpower resources and preference is given to the local community while hiring fresh graduates (refer to Fig. 4)

As per the contractual obligations with any work order, it is mandatory that the contractor shall comply in all respects with the provisions of all Statutes, Rules and Regulations applicable to the contractor and/or to the contractor's employees, including but not limited to Minimum Wages Act, ESI Act, PF Act and Bonus Act and in particular the Contract Labour (Regulation & Abolition) Act, 1970 and the Rules made thereunder, Factories Act, Tamil Nadu Factories Rules, Workmen's Compensation Act, Payment of Wages Act, Contract Labour (Regulation) Act, etc. As

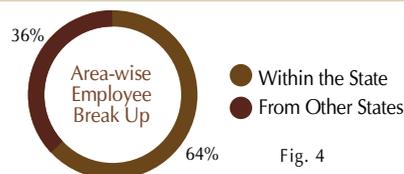


Fig. 4

per the Labour Welfare Legislations, the contractor/tenderer should have a separate code number under the schemes of Provident Fund and ESI scheme and such number should be furnished within 7 days from the date of awarding the contract. The contractor should comply with Contract Labour (R&A) Act and must be eligible to obtain a license from the authority. The contractor should not employ any child labour. To avoid incidences of child and forced labour, the HR Department, in association with the Commercial Department, conducts surprise audit at the sites. During the reporting period, no cases of child or forced labour at the sites at Tuticorin and Silvassa were reported.

Pranjal Tiwari, Engineer IT with Sterlite since July 2008 narrates his experience;

“Having spent a year here, I have realised this is a Company which provides youth with numerous opportunities to work with. And Sterlite has proven to be an ethical company as even at the time of recession; there has been no lay offs.”



## 4. Leadership & Talent Development

Sterlite has strong processes and systems in place ensuring the Company a perennial funnel of good leadership and other talent to deliver value to the organisation and society. Critical positions are mapped and second line for all these positions are identified and trained ensuring successful and smooth transition in cases of change. In line with the Company's philosophy of generating leaders from within, all senior leaders have usually come up the ranks.

Accelerated Competency Mapping & Upgradation Programme - 'ACT UP' a fast track leadership development programme is based on Sterlite's unique Leadership Competency Framework. Employees who qualify through this process are christened 'Stars of the Business' and are immediately earmarked for key roles, fast growth and increase in compensation. The mapping is done through an assessment centre comprising of Case study presentation, Group activities, Psychometric testing and one-on-one interaction. The linkage to the Sterlite Leadership Model mentioned above ensures that the future leaders will have the required competency.

Each STAR has a development sheet spanning a 5-year horizon which captures the growth path and training needs. Specialised behavioural and need based programmes are conducted to enable the 'Stars' to take on accelerated responsibilities.



Last 2 years - over 61 employees identified as 'Stars of the Business'.

### Standard Practices Implementation, Development, Evaluation and Rating (SPIDER)



The SPIDER approach was developed to enable continual assessment of our employees' knowledge, with specific focus on their understanding of Standard Operating Procedures and enabling skills through specific need based training. In the first phase of this, all employees were assessed for the basic knowledge about our quality, environment and occupational health & safety management system along with their basic functional knowledge.

Knowledge gaps were identified after the first phase assessment in Feb '09 basis which Heads of Departments were to provide area specific training to the individuals. Common modules such as Intensive Safety Training were also initiated. With the learning from the first phase and subsequent training, the following areas were selected as focus areas for the second phase of SPIDER.

- In depth understanding of relevant area specific SOPs
- Learning from past failures, incidents, breakdowns the respective areas
- Area specific safety requirements
- General awareness on continual improvement activities like TQM - problem solving methodology, 5S, TPM and Management Systems (QESMS/ LMS)

We have planned to conduct SPIDER rating once in six months. The second phase of the rating is scheduled for July. With this approach, we believe that employee knowledge levels at work will improve and thereby increase plant availability and reliability. This in turn should lead to high quality product delivery beyond the expectations of customers.

### Clock to Compass projects (C2C)

The main idea behind this C2C was to develop / assess the 'Leadership capabilities' of employees and to create a cohesive-interdependent culture among teams. This was conceived by our CEO. During each review, deliverables and revised targets have been set depending upon changing business scenario. Senior leaders personally reviewed all these projects. The top performing C2C teams have been recognised suitably for their contribution.

C2C - Comprehensive Review was held on 12th Feb '08 where all 10 Projects for the year 2007-08 were reviewed by the panel of judges. The parameters on which projects were reviewed are: -

1. Project Deliverables, Initiatives
2. Clarity of thoughts
3. Business Plan (07-08) impact
4. Team work, Way forward (08-09)





## 4.1 Induction programmes

In order to maintain effective communications with new employees from the outset, we have comprehensive Induction programmes customised for different levels of employees. The generic issues policies, benefits, and Company culture are articulated to provide a broad perspective and understanding of the business and systems that keep the Company running. This assists the employee to integrate into the organisation and become productive as soon as possible.

## 4.2 Mentorship

We also have a mentorship programme for fresh graduates. Most of the mentors are employees who have started their professional career with the organisation. The mentors act like buddies to the new joinees and provide their mentees with sound advice and guidance on matters of professional nature. This not only helps the new joinees settle down in their work life but also through the transition from campus to the work place.



96 Mentors and 123 Mentees were allotted last year. There were two formal get togethers which were attended by all mentees and mentors. A policy known as rendezvous allowance was introduced, wherein a sum of Rs. 500 was allocated to each mentor to take his/her mentees out for dinner.

## 4.3 Job rotation

Job rotation and cross functional exposure is an ingrained HR philosophy and followed religiously. This ensures that employees get adequate exposure and opportunity to work in various functions thereby providing a well rounded holistic exposure to business and leadership development.

## 4.4 Spouse programmes

We have just initiated the Nav Jyoti programme for employee spouses. The objective is to orient participants to the dynamics & demands of industrial life and to strike a work life balance through experiential learning. This will be achieved by imparting enabling skills for creative parenting and acting as an anchor supporting their spouse. And also help them in managing their own careers through latest time management techniques.

## 4.5 Ideas@Sterlite

At Sterlite Copper, employees are not just recognised as business assets, but also knowledge wealth assets. We encourage each employee to utilise this potential and contribute in the business success of the Company. An intranet based e-forum Ideas@Sterlite has been created, wherein employees share their ideas for the betterment and growth of the Company. The ideas are reviewed for effectiveness periodically, and the employees coming up with best ideas are rewarded. These ideas are then reviewed for potential of project plans that the Company can take up. 2924 ideas were posted on the Ideas@Sterlite platform for 2008-09, with 990 ideas implemented so far. Further, the effectiveness of Ideas@Sterlite is measured through an employee satisfaction survey.



## 4.6 Global Leadership

The Global Leadership Programme is an initiative which provides key and talented employees an opportunity to work in an overseas environment for a period of 6-12 months with the objective of creating an elite pool of managers ready to take leadership positions in the globalised environment.

In 2008-09, 7 employees from India and Zambia participated in the programme.

## 4.7 Rewarding Performance

Sterlite believes in a culture of meritocracy and high performance where growth is directly related to performance. A globally common, robust Performance Management System is a key tool which helps us to measure, reward and correct performance. All of our workforce are reviewed for performance once a year. We follow a five point scale for measuring performance which follows the normal distribution curve. Feedback and identification areas of improvement are an integral part of the performance appraisal process.

Performance linked variable pay is an important component for all our employees holding key positions across group companies. In the first quarter, Key Result Areas (KRAs) are assigned to individual employees in line with our business plan and customer focus. Targets are revised as per business needs through mid-term performance reviews. About 30 % weightage in the KRAs is given to enabling indicators such as Training, HSE and CSR. (Refer to Fig. 5 for employees covered under appraisal).

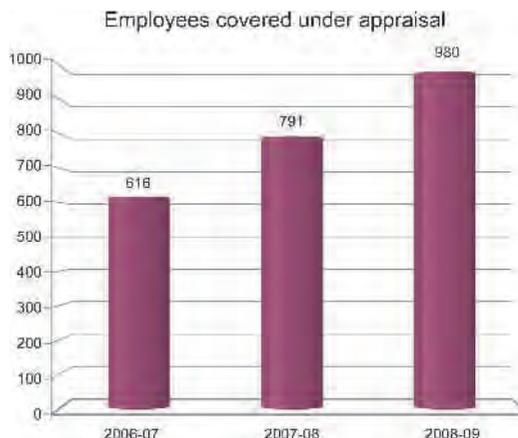


Fig. 5



## 360° Feedback — First Pilot Project

A pilot project was initiated with the objective of developing holistic leaders. The programme covered all AGM and above totalling to 28 in number. Candidates were assessed by self, boss, subordinates, colleagues, internal customers and external customers. The feedback workshop was held at Tuticorin on the 5<sup>th</sup> and 6<sup>th</sup> of February, 2009. One-to-one sessions were held with employees, consultants and individuals and development plans framed for all the participants to bridge the gaps.

### 4.8 Employee Training

A total of 7.23 Man days/employee were achieved last year (refer Fig. 6).

Man days break-up:

- Behavioural training -0.34
- Technical training -3.39
- Induction - 1.70
- HSE 1.80

Last year, an international specialist was called in to train our personnel in World Class Maintenance and Reliability Centered Maintenance. The programme spanned 5 days and was attended by 30 selected participants.

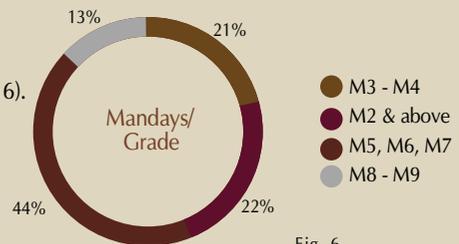
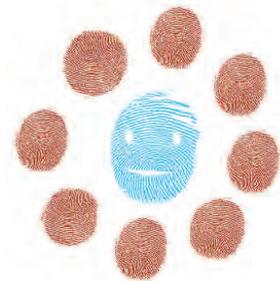


Fig. 6



## 5. Employee Retention

At Sterlite, we have always been proactive in taking necessary actions to tackle the most challenging factor of attrition (refer Fig. 7 & 8). In this era of extreme competition, we are determined to attract quality talent and become the preferred employer of choice.

### Key issues identified for attrition

- Higher education
- Location
- Work conditions
- Remoteness of plant and location

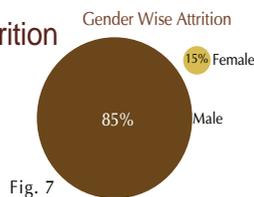


Fig. 7

### Initiatives to lower attrition

- Awarding of employee stock options
- Salary corrections based on market scenario

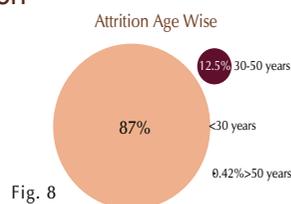


Fig. 8

- Opportunities to work at group companies
- Retention bonus for trainees
- Accelerated competency tracking exercises
- Multi-skill training at reputed training institutes for some employees
- Tie-ups with educational institutions to facilitate educational aspirations
- Buddy system to instill positive energy

### New initiatives

- Paternal leave
- Rendezvous allowance
- Marriage anniversary dinner scheme

Post analysis of the gaps identified from surveys like Hewitt, BT, etc., cross functional teams have been formed to come out with various action points to help achieve best employer status. Thus a multi-pronged strategy deployed to control attrition, has contributed to a positive effect on retaining employees.

## 6. Employee Benefits

Employment benefits provided to full-time employees include:

- Personal Accident Insurance
- Medi-claim Insurance
- Paternity/Maternity Leave
- Conveyance
- Food Allowance
- Uniforms



## 7. Communication

We have a various formal and transparent communication channels through which employees interact on business performance at unit and group levels such as

- Everyday departmental meetings
- Management committee meeting
- Open House Communication meet
- In house magazine - Copper Tones
- Intranet
- Monthly review meetings
- Operations/cost reviews

Employee Contact Programme is conducted monthly wherein HR department interacts with employees at their work spots and obtain suggestions, feedback and grievances if any. These are then highlighted to the senior management during monthly review meetings. The CEO / COO addresses employees every month on performance and HSE parameters. During such occasions, employees are recognised and new initiatives highlighted. Employees voice their views and queries to the CEO / COO and get his response on the same.

## 8. Process for employee

Under the Employee Contact Programme (ECP), HR executives

visit various work spots and interact with employees. Grievances are noted and circulated to respective process owners. Action points are then projected at monthly review meetings where all Heads of Departments and the COO are present.



## 9. Human Rights

We strive to create safe working conditions are ensured in all our operations. Relevant personal protective equipment is provided to all employees who work on the shop floor. Also healthcare facilities are provided in terms of Company run OHC as well as through tie-ups with other hospitals. We ensure that communication tools like house magazines of respective group companies are bilingual so that all our employees can comfortably read the same and feel involved.

Sterlite does not employ child labour of any form either directly or indirectly. Company employees do not use, or allow any of their subordinates to use, forced or coerced labour. They must respect all legal norms, national as well as international, that regulate these issues. Vedanta adheres to the principles established in the Convention on the Rights of the Child of the United Nations, and in the Convention 138 of the ILO. Health checks up are done every year for all employees.

## 10. Contract Employees

Contract employees are trained in health, safety and operation practices. Contract labour also forms a part of 5S and housekeeping improvement teams. The core idea here is to think beyond legal compliances and strive to be a preferred Company to work with. It is against the Company's philosophy to have any exploitative practices for manpower.



### Life @ Sterlite



Badminton Court



Gymnasium



Canteen



Swimming Pool



Greenery



Playground

# Supplier and Vendor Management - Our Business Partners

## Sealing long-term relationships with business partners

We believe that world-class organisations are not built in isolation, but that they grow on the strength of relationships built with business partners. At Sterlite, we make regular investments in forging long-term associations with our vendors. These partnerships are based on transparency, communication and trust and serve to fuel holistic sustainable growth.



## Nurturing every link of the supply chain

We have a centrally led commercial team dedicated to the vision — 'To build a world-class commercial organisation by leveraging volumes, increasing synergies and employing seamless supply chain'. This team looks after procurement, logistics, purchase, stores, development and streamlining, with the larger objective of creating a collaborative supply chain based on fair and transparent practices.

### Long term initiatives for long-term partnerships with vendors

Our efforts at building enduring relationships with vendors begin even before our association does. We have created systems that facilitate transparency, trust and efficiency that prove to be mutually beneficial to both parties. Given below are some of the initiatives we have taken.

#### Robust vendor registration process

In the interest of long-term associations, we strive to find vendors who can easily fit in with the values we consider important. To that end, a 3 step process is used to ensure objectivity.

**Initial check:** At this stage, information given by a vendor is evaluated by the buyer.

**Reference check:** In addition to visiting the vendor, we get feedback from existing customers.

**Main vendor registration form:** Short-listed vendors are asked for transaction related details before registration.

#### Facilitating 2 way communication

A dedicated vendor helpdesk not only addresses issues of vendors, but creates a forum for vendors to make suggestions and requests. Created online, this virtual helpdesk helps improve business processes for mutual benefit.

#### Investing in Supplier Relationship Management (SRM)

SRM is a module that automates transactions by way of online RFQs/ POs/ ASNs. And has been restricted thus far to global

giants and Indian companies like Tata Motors, Hero Honda & M&M. As the first Company in a non-auto sector to invest in this platform, we now use SRM to streamline transactions with our business partners. The implementation cost and initial license fee for vendors is borne entirely by us, and we plan to increase the number of business partners from the current hundred to many more.

#### Streamlining efficiency with vendor consolidation

As a mutually beneficial strategic step, we have adopted material category-wise consolidation. This process helps us to:

- Improve service levels
- Increase business volumes for qualified business partners
- Create technological innovations and improvement
- Reduce suppliers' administrative/marketing expenditure
- Reduce overall supply chain costs
- Mitigate the risk of stock outs
- Optimise inventory in the supply chain



VP (O) greeting vendors





## Gaining insights with 360 degree feedback

A robust 360 degree feedback system gives us insights into ratings and satisfaction levels, which in turn helps us find solutions and action points for improved systems.

### Vendor Rating

This system helps us to consistently measure supplier performance, and subsequently achieve improved efficiency, relationships and a healthy competitive spirit. In this process, quantitative data is collected from functional areas like procurement, inspection, etc. to capture parameters like quality and delivery aspects. Sharing vendor ratings with suppliers helps achieve improved relationships and transparency.

### Making course corrections with Vendor Satisfaction Surveys

A Vendor Satisfaction Survey is conducted every six months to determine the satisfaction levels of suppliers, and to provide

a roadmap for improvement activities. Fig. 1 below shows the highlights of the last Vendor Satisfaction Survey held in 2008-09. 300 vendors, including top suppliers from the projects, imports, services, traders, dealers & manufacturers groups were surveyed.

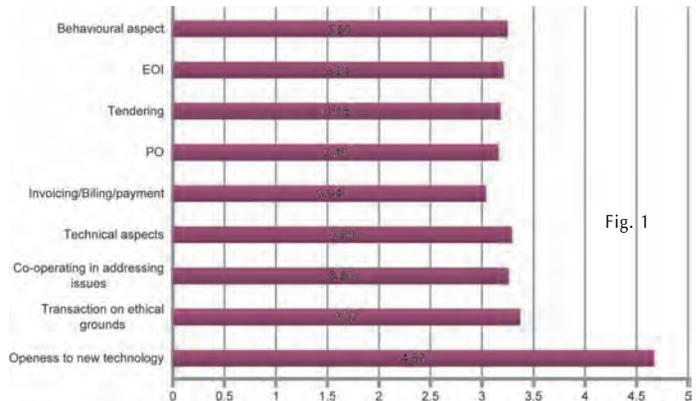


Fig. 1

### V- Meet

Regular vendor meets are conducted to enable greater interaction, and ultimately business excellence. As a key initiative in encouraging dialogue with our business partners, these forums are attended by senior management, including our CEO, COO and CFO. Besides forming a platform for interaction, V-meets help to:

- Build rapport with stakeholders
- Showcase the Company's futuristic requirements
- Receive feedback
- Encourage entrepreneurial ventures in upstream and downstream projects
- Nurture idea generation from vendors
- Align vendors with our overall business requirements with reviews and feedback sessions

The last V-meet, conducted in Chennai in April 2008, was a great success. Over 150 of our business partners attended the meet, and 12 vendors were given awards for their achievements in the areas of delivery, SRM usage, logistics operations and timely project completion.



Mr. Kishore Kumar, CEO - SILL, addressing the V-meet, Chennai



## Ensuring the safety of transporters' employees

To improve the safety of transporters' employees, the following safety measures have been taken.

- It has been made mandatory for all acid tanker drivers to carry a TREM Card i.e. Transport Emergency Card, which gives information and outlines measures to be taken by drivers and cleaners in the case of accidents/incidents. The TREM Card has instructions in the local language i.e. Tamil as well as in English.
- Instruction sheets are handed out, to make users familiar with Do's and Don'ts within the plant and while driving. For instance, the wearing of a 'Lungi' is banned inside the plant to avoid any accident/incident caused by the same.
- Safety instructions are displayed at different locations of the plant along with images to reinforce the importance of safety.

### Transport Emergency Card (TREM)



Safety instructions in vernacular language

## Sustainable Logistics

While working to make the supply chain effective and efficient, the logistics department takes care to ensure that quality and safety are not compromised. Following the mantra of 3P (pace, precision and proficiency) takes innovative thinking and solutions. The following instances demonstrate this.

### Award winning safety for workers and the environment at Tuticorin Port Trust



Our initiatives towards greater safety have won us several accolades in the past, such as:

- A letter of appreciation from the Port Trust for 'Safe Handling of Copper Concentrate at Port' in the month of November 2007
- The award for 'Excellence in Traffic Performance' from Tuticorin Port Trust, for the years 2004-05, 2006-07, 2007-08 and 2008-09

### Safety begins in the driving seat

As a major user of Tuticorin Port both for imports and exports, we at Sterlite feel responsible for the safety of not just our workers but that of the fragile marine environment.

As a result, we have implemented best safety practices and provided personal protective equipment to all our contract employees working at the port. We have also installed 4 mobile hoppers to unload copper concentrate. The maximum discharge is now carried out through these mobile hoppers, avoiding spillage and damage to the marine environment.

As an innovative measure to conserve fuel, around 68 drivers were taken through a training programme. The programme helped build awareness about road safety and improved driving habits to achieve the twin goals of greater safety and fuel conservation.



The programme was conducted by Mr. Ramasamy, an experienced instructor from Petroleum Conservation Research Association (PCRA), Chennai.

### Other initiatives across operations

Innovative measures in partnership with business partners has helped increase efficiency and savings. Listed below are some key initiatives:

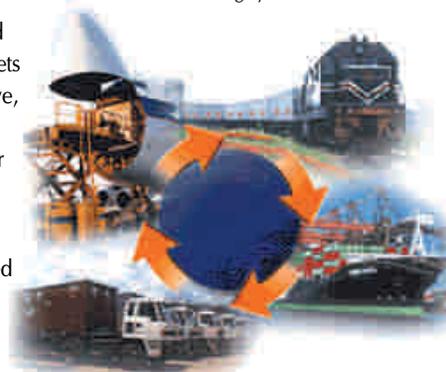
1. The latest tracking systems (such as GPS for transit vehicles to various destinations and RFID Truck Tracking Application Software for vehicles within plant or from port to plant) ensure safety, security of cargo and smoother operations

2. Cost leadership has been achieved in the global market through consideration and analysis of factors that increase costs across operations.

Krishnapatnam via oceanic mode to cater to customers in the Andhra Pradesh belt.

3. The problems of truck scarcity and high road freight rates in local markets have been tackled with competitive, multi-modal transportation (eg: oceanic and rail transportation) for copper anode and finished goods.

Latest tracking systems



4. Significant earnings were generated by: carrying out coastal bulk out-bound movement, transporting gypsum from Tuticorin to





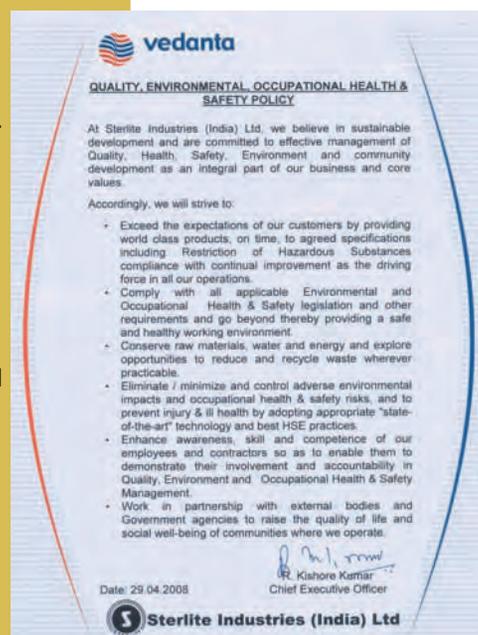
# Health, Safety and Environmental Management - a first person responsibility

At Sterlite, we have a well-formalised integrated management system that continuously improves our environmental, quality and OH&S performance, in line with ISO 14001 and OHSAS 18001 laid standards.

## Quality, environmental, occupational health & safety

At Sterlite Industries (India) Ltd, we believe in sustainable development and are committed to effective management of Quality, Health, Safety, Environment and Community Development as an integral part of our business and core values. Accordingly, we strive to:

- Exceed the expectation of our customers by providing world-class products, on time, to agreed specifications including Restriction of Hazardous Substances compliance with continual improvement as the driving force in all our operations.
- Comply with all applicable Environmental and Occupational Health & Safety legislation and other requirements and go beyond thereby providing a safe and healthy working environment.
- Conserve raw materials, water and energy and explore opportunities to reduce and recycle waste whenever practicable.
- Eliminate/minimise and control adverse environmental impacts and occupational health & safety risks, and to prevent injury & ill health by adopting appropriate 'state-of-the-art' technology and best HSE practices.
- Enhance awareness, skill and competence of our employees and contractors, so as to enable them to demonstrate their involvement and accountability in Quality, Environment and Occupational Health & Safety Management.
- Work in partnership with external bodies and Government agencies to raise the quality of life and social well-being of communities where we operate.



## Management Approach

The HSE policies of all the group companies are in lieu with the corporate policy. To oversee HSE matters, a Committee was established in June 2004 at the corporate level of Vedanta, currently comprising of Mr. M.S. Mehta, the Chief Executive Officer - Vedanta Group and the Chief Executive Officers (CEOs) of Zinc, Copper and Aluminium businesses with Mr. Naresh Chandra, as an Independent Director, overseeing the activities of the Committee. The Committee monitors the

HSE performance of the group's businesses providing advice and guidance to the board and management in enforcing amendments and achieving the goals of the corporate HSE policy. At Sterlite, we have the General Manager-HSE, who directly reports to Chief Operating Officer (COO) on HSE performance. The General Manager is supported by a team of qualified Health, Safety and Environment specialists who ensure the implementation of the goals of the HSE policy, dissemination of best practices across all levels and operations of the Company.

“Safety begins with no compromise, no excuses and nil tolerance for lapses”

Ramesh Nair  
COO, SIIL



# Health and Safety Management at Sterlite

The occupational health and safety of our employees & contract labourers have always remained first priority for us. Our vision towards safety is to achieve and sustain, an incident and injury-free Sterlite. In order to achieve this vision the management has shown keen interest in identifying, eliminating and controlling potential hazards present in the plants and process activities which can lead to an incident or injury. Specialised training was given to a selected team by BSC, UK in Hazard Identification and Risk Assessment to make employees full-fledged in achieving our vision. In 2008-09, all our employees underwent a thorough periodic medical examination to fix baseline health status with over 1200 employees covered under this initiative. Subsequently, the health status data was updated in the newly implemented Work Safety Online (WSO) software for the first time. Contract employees also underwent medical examination under the aegis of contract management cell.

Our management is completely dedicated in reviewing HSE performance to improve OHS conditions in the plants. The HSE performance is reviewed by our management in the presence of all plant section heads once a month, to identify strengths & weaknesses and continuously improve OHS standards. Further we have safety committees in place both at Tuticorin and Silvassa with representation from both management and non-management personnel.

## OH&S Training and Development

We believe that occupational safety and health culture can be developed among employees through systematic and quality training. Hence, our key focus area is to ensure that all employees undergo at least one occupational health and safety refreshment training a year in addition to their job specific training. In 2008-09, Sterlite Tuticorin fixed a target of 10 man-hours per employee per year and we were able to achieve a figure of 16.48 man-hours per employee per year.

### i) Occupational Health and Safety Training Methodology at Sterlite

Occupational Health and Safety Training schedules were formulated and executed by our training team at HSE department, with the motto of imparting complete knowledge on safety aspects to all our employees for effective supervision at site. They also formulate monthly schedules for SILL and contractor employees and ensure adherence. We address effectiveness of each training done, through internal feedback forms, helping us to assess the understanding of the topic as well as the faculty quality, so as to further improve the training standards. SILL employees training details are maintained in Work Safety Online (WSO) and attached to individual training history.

We give external training to SILL employees in addition to internal routine training. In 2008-09, 448 employees got external training for specialised topics like HIRA, safety for line managers, disaster management and maintenance of PPEs.

Some major topics covered in internal training are safety in gas cutting and welding, safety in work at heights, fire safety, occupation health and industrial hygiene, environment awareness, etc.

In addition to classroom training, we are also giving onsite training to contractors and Sterlite employees. Onsite training includes fire fighting techniques, first aid, near-miss reporting, etc.



### ii) Training Programmes at Sterlite

We achieved 16.48 man-hours per employee per year for SILL employees and 9.98 man-hours/employee/year for contract labourers. At our Silvassa unit, we have achieved training statistics of 7.96 and 11.92 man-hours/employee/year for SILL and contractors respectively.

Training statistics for Sterlite's Tuticorin unit



Fig 1

Training statistics for Sterlite's Silvassa unit



Fig 2





### Contract Safety Management Cell (CSMC)

A new initiative by the HSE department in 2008-09 is to have a dedicated Contract Safety Management Cell (CSMC). The objective of this cell was to bring in all contractors under one roof and administer a common safety system with all of them.

#### Activities of CSMC

In order to focus on safety right at the contract engagement stage, the safety clause was updated and made more stringent. A PEP talk handbook was printed and circulated to all contract safety officers

& supervisors, covering PEP talk on 36 safety topics. PEP talk is given to employees on a daily basis by these safety officers and supervisors. This is cross checked by SILL safety officers and a record of the same is kept.



For all contractors working in a particular department, a RADAR Safety score card system has been introduced, wherein the scores are finalised with the help of the respective area SILL safety officers. The performance is reviewed by the COO regularly. The scores are discussed with the contractors and shortfalls explained on regular basis. Top scorers are rewarded suitably on an annual basis.

### Road Safety

Road safety, being one of the important agenda due to high heavy vehicle movement inside premises, we carried out a road safety-gap analysis study on the premises. The study was conducted by M/s. Road Safety Resource Centre, Coimbatore and recommendations given are now being implemented. Regular training is imparted to all drivers and cleaners. Apart from this, we have introduced and circulated "Do's & Don'ts safety pamphlets" to all heavy vehicle drivers/cleaners in Sterlite.

### Safety Improvement Initiatives

In the year 2008-09, several initiatives were taken to improve safety at the plant. A few of them are listed below.



#### i) Aluminised Suits for Heat Protection

Employees working in secondary smelter are exposed to high heat radiation, especially those doing lancing for the anode furnace. Since heat radiation can impact the health of employees, a project was started to assess the heat exposure levels of employees and evaluate their current personal protective equipment. Preliminary assessment showed that the flame retardant cloth protects employees

from minor metal sparks but not from heat radiation. A study was then conducted among other metal industries and PPE market to find out the best possible solution, and aluminised coats were introduced on a trial basis. When they were found to offer adequate protection, all the fire retardant cloth was replaced with aluminised heat resistant cloth at critical work places.

#### ii) Tarpaulin tying platform

The plant premises experience a heavy movement of trucks carrying products like anode, cathode, coil, Gypsum slag, etc. Some of these need to be tied or covered with tarpaulin. Earlier the job of fastening tarpaulin was done by directly getting up on the truck without safety measures. As this was a highly unsafe act, we have introduced tarpaulin tying platforms and safety belts. This has dramatically reduced the risk of fall from heights.



#### iii) Incident reporting through WSO

We have successfully launched online incident reporting through WSO online, to help employees report on any incident from their workplace in matter of minutes. The system is user friendly and notification hierarchy with quick resolution of incidents. It prevents time delays in reporting incidents and keeps a record on the server which can be accessed by any employee to have statistics of incidents reported from their department.



## OH&S Statistics

In spite of our continuous efforts to improve safety practices, it was really unfortunate that in 2008-09, we lost 3 irreplaceable lives at work. As a result of this, Sterlite unit LTIFR is 0.5 and severity rate is 1,805.66 (refer to Fig. 3 & 4).

This incident has made us take active measures to further improve the safety culture amongst employees. Currently, we are concentrating on behavioural change among employees and contract labourers as an initiative to eliminate any such occurrence in future. In our Silvassa unit, our safety team has succeeded in achieving zero lost time injury cases for the last two consecutive years.

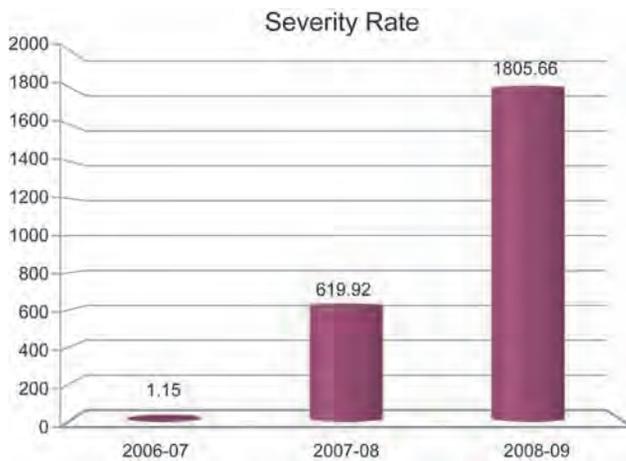


Fig 3

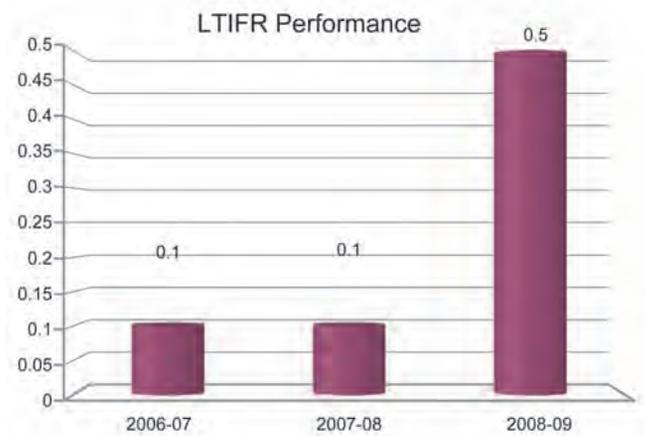


Fig 4



## Occupational Health and Industrial Hygiene (OHC)

We have a full-fledged Occupational Health Centre (OHC) with an experienced doctor on SIIL rolls and medical support



staff from M/s Apollo Hospital.

## Occupational Health and Industrial Hygiene Initiatives

### i) Plant Noise mapping

A noise mapping study was carried out throughout the plant to

identify critical noise pollution zones and study the feasibility of controlling noise, both at the source and at the receiver's end. Critical noise polluting zones were identified in the plant and an action plan to reduce noise at source was also recommended.

### ii) Carbon soot collection system

In the Continuous Cathode Rod (CCR) plant of Silvassa unit, we faced an industrial hygiene problem as the result of carbon soot formation, making the work environment untidy and unhealthy. In order to tackle this, we made provisions for a soot collection system and as a result, achieved a hygienic work environment.





## Fire Safety

Sterlite has a full-fledged fire service department with a team of 17 crew members and one fire officer, as well as two fire tenders (a water tender and a foam cum DCP tender). The department provides round the clock fire protection facilities not only to the plant but also to the neighbourhood outside the plant, where-in case of any fire; Sterlite provides its fire fighting facilities. Fire and rescue drills are practiced by the fire crew on a daily basis to make them active and fit for attending emergencies.

## Safety Stewards

Safety Stewards are the extended hands of HSE department. We have 38 stewards from all units of plant to represent and solve safety issues in their respective areas. In their own words, two of our Stewards share their experiences with us.



**M. Shanmuga Sundaram**

“My tenure here at Sterlite started two years back and I felt proud that I have been given the tough and highly sensitive responsibility as a HSE steward. The task in front of me was not easy but was definitely possible, bringing about a paradigm shift in the attitude of people towards safety. I had taken the contract manpower management as the primary challenge and to impart knowledge to contract workmen so that they will experience that their work must go hand in hand with safety. Instead of imposing

or insisting on safety procedures, we started practising safety measures in order to pave the way for them to follow.

Through giving PEP talks on ‘HOW TO DO’ and ‘HOW SAFELY TO DO’ the crew got complete clarity of executing their jobs safely. In addition, we conduct safety audits on equipment healthiness, safety interlocks, activity, risk registers, work permits, eye washer fountains, lifting tools and tackles, SOPs and SMPs compliance. This has enriched the level of confidence among the people and an assurance that they are working under a complete carpet of safety, which ultimately will bring fruitful results for us to become the world’s BEST IN CLASS Copper producer.”



**Mr. G. Muthukumar**

“In Utility department, we faced many challenges to create a safe place to work. In the LPG area, we faced frequent problems due to fire on the road side nearer to the LPG storage area. To control the heat generated due to fire, we installed a water curtain, safeguarded the area and fixed a hydrocarbon analyser to detect gas leaks. Contractor safety also plays a major role in maintaining the safe area. Gas cylinder handling, working at heights, handling pressure vessels, illumination, noise levels, inspection of ladders, staircases and safety showers were some of the problems we face. To improve contractor safety, PEP talks are given to contractors before starting any

job, including talks on handling of gas cylinders and usage of safety PPE’s. We have also taken the initiative of checking the thickness of pressure vessels once in six months. Ladder inspection and safety shower inspection were done in coordination with the safety department. A checklist was made for these inspections. Apart from that, internal and external audits were conducted for further improvements. Points arising out of the audits were addressed immediately. Also personnel were sent for safety training for refreshment of skills. Regular safety committee meetings were conducted and points raised in the meeting were complied on top priority. In LPG area, human body static current discharge rod was fixed to discharge the current. FOG lights were fixed in the oxygen plant area to improve visibility. Safety life jackets were issued to persons cleaning the algae growth in the reservoir.”



## HAZOP

In 2008-09, Sterlite underwent a HAZOP study by M/s. CLRI, Chennai as part of identifying potential risks in the manufacturing, production and storage stage. The study has covered all sections of the plant including smelter, utility, refinery, SAP, ETP, etc., and management has shown keen interest towards implementing the recommendations to reduce and eliminate the potential risk. The HAZOP study covered all the significant

products and services (100%). Also, a training on hazard identification and risk assessment of processes was imparted to all our safety stewards through M/s. BSC, UK during 2008-09. They also carried out a ‘Safety Advisory’ for us and gave recommendations on improving the internal safety standards to make them as Best Practices for SILL.

# Environmental Performance

At Sterlite, we adopt a precautionary approach to environmental management, continuously striving to work towards our long-term goal of environmental sustainability, i.e. designing more efficient processes that use fewer types and quantities of materials that are hazardous, and that produce lesser waste and emissions. This approach also encourages innovation which helps to reduce costs and gives better output in terms of reduced environmental impact. The overall environmental performance for the year 2008-09 is classified under the following heads and covers information for our Tuticorin and Silvassa plants.

- |                                       |                               |                               |
|---------------------------------------|-------------------------------|-------------------------------|
| 1. Raw material consumption           | 5. Emissions                  | 9. Climate change             |
| 2. Energy use and conservation        | 6. Effluents                  | 10. Environmental compliance  |
| 3. Water consumption and conservation | 7. Waste management           | 11. Products and services     |
| 4. Bio-diversity                      | 8. Ozone depleting substances | 12. Environmental expenditure |

## 1. Raw material consumption

Major raw materials used during reporting period 2008-09 are given below:

Raw Material Consumption				
Sr. No.	Material	2006-07	2007-08	2008-09
Raw Material (Tons)				
1	Copper Concentrate	10,38,841	10,94,315	10,38,551
2	Rock Phosphate	5,80,154	50,7031	5,61,174
Associated Materials (Tons)				
3	Limestone	33,461	20,206	24,494
4	Quartz Fines	90,200	94,255	10,3,858
5	Quartz Chips	38,958	38,057	36,779
6	Pig Iron	6,887	7,304	5,714
7	Coke	9,349	6,857	7,147

The major raw materials used in our plants are copper concentrate and rock phosphate, both of which are imported. We always endeavour to ensure raw material efficiency within our systems as it has a direct bearing on Cost of Production (COP), in addition to a load on environmental resources.



## Minimising waste through resource efficiency

CASE STUDY 1

Slag Cleaning Furnace (SCF) is used to treat the Pierce Smith Converter (PSC) slag, which contains 16-18% magnetite & 1-2% copper. We processed the slag in SCF by the addition of pig iron which reduces the magnetite, leading to reduction of the copper loss in the Granulated Slag (GS).

Earlier addition of pig iron was not based on the percentage of PSC magnetite but by adding 2 MT/blow. Stoichiometric calculation for the addition of pig iron has been established based on the percentage of PSC magnetite. This practice has helped in the reduction of pig iron consumption by 3 kg/T of anode copper and generation of granulated slag by 4 T/day (refer Fig. 5).

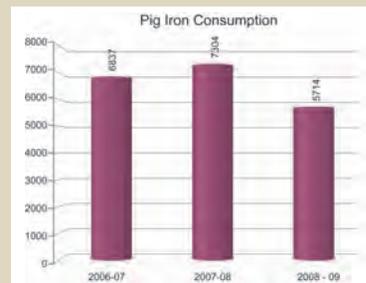


Fig 5

Earlier, at our Silvassa unit, furnace oil was used as fuel in boilers, to produce steam for the production process at various stages. This fuel has been totally substituted by bagasse, a bio waste generated by the sugarcane industry. Briquettes, with an equivalent ratio of 2.7: 1 Kg/lit on the basis of calorific value, are now manufactured from bagasse and used in boilers.

This initiative now results in reducing FO consumption by 5KL/d. Boiler ash generated in the process is used to make bricks. On everyday production of 20 tons of briquette, with every ton of briquette generating a 1-man day employment opportunity, results in additional employment of about 7000-man days/annum.

The project demonstrates leadership in environment management and we have planned to take it up as a CDM project.

## 2. Energy use and conservation

Smelting operations being highly energy intensive has galvanised us into making energy efficiency one of core focus areas. We have explored all possible measures and efforts to reduce energy consumption. We have a dedicated Energy Manager for our Tuticorin and Silvassa plants, whose main role is to identify and implement energy efficiency projects on a regular basis. During the reporting period our overall

energy consumption has increased due to lower volumes of production. We had 26 days of planned annual shut down, 6 days of complete production loss and 22 days of partial production loss due to process upset in our sulphuric acid plant. Fig 6 and Fig 7 gives direct and indirect energy consumption of SIIL for the last 3 years.

Consequently our Specific Energy Consumption (SEC) at both Tuticorin and Silvassa has increased from 9.51 to 9.6 (refer Fig. 8), mainly due to the production loss mentioned above.

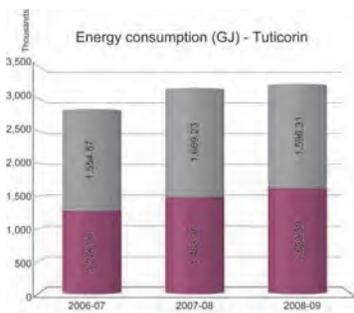


Fig 6

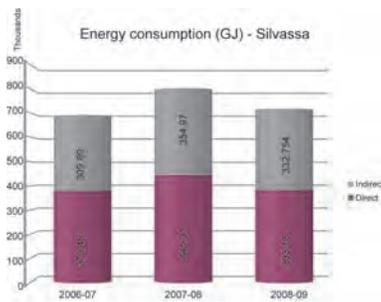


Fig 7

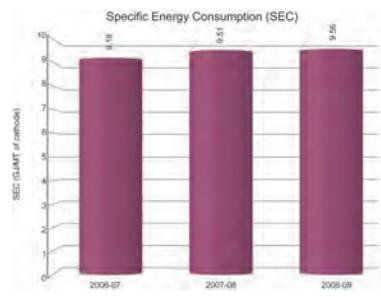


Fig 8

## Energy Conservation

We took several measures to reduce energy consumption which brought down the increased overall energy consumption. For example we were able to maintain a decreasing trend in the reduction of LPG consumption per ton of cathode (refer Fig. 9), with various conservation measures implemented in the anode furnace section.

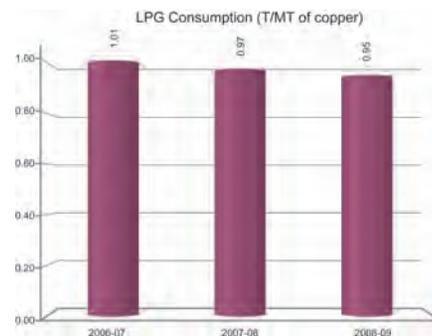


Fig 9

## Eco-innovation

At Tuticorin plant, phosphoric acid is produced by the digestion of rock phosphate with sulfuric acid in a series of reactor vessels. Around 4 MT/hr of steam was required to increase the temperature of flash cooler condenser water from 55°C to 65-70°C, which is used for the production of 43% phosphoric acid.

To nullify steam consumption, spray pipes were introduced in the entrainment separator to F/C condenser inlet vertical duct, so that the water would gain a higher temperature (approximately 70-75°C) by coming in contact with the hot gases from the reactor. This initiative not only resulted in monetary benefits but also lead to energy conservation. This project has been selected for INSSAN AWARD for Excellence in Suggestion Scheme.

By better availability of waste heat based power generation, we reduced the electricity purchased from the Tamil Nadu Electricity Board. The ISA waste heat recovery boiler based power generation almost doubled during the reporting period as compared to 2007-08. This led to savings of 130395 GJ, which otherwise could have been produced through use of fossil fuels.



### 3. Water Consumption and Conservation

At Sterlite, we focus on using water economically and managing water better. The Tuticorin unit, withdraws raw water from Papanasam dam, which however, is less than 5% of the total water holding capacity of 156 million cubic meter of the dam. At Silvassa, the major source of water is Damanganga River.

The total water withdrawal for both Tuticorin and Silvassa units from surface source for the last year is shown in Fig 10. The

total water consumption in Tuticorin unit has been reduced by 4% in the current reporting period as compared to the previous reporting period. Specific water consumption is given in Fig 11.

Nearly,15% of the total water used is recycled back into the process. Taking a step further in water conservation, we have developed two rain water catchment ponds of capacity 53,277 m<sup>3</sup> to collect rain water. The water collected has been used for green belt management.

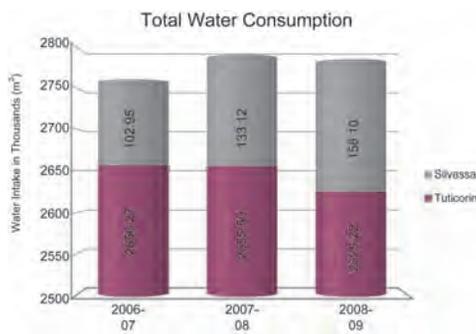


Fig 10

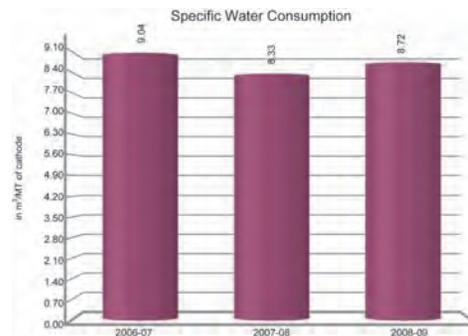


Fig 11

### 4. Habitat Protection - Bio-diversity

Both Tuticorin and Silvassa plants are located in industrial complexes. However the Gulf of Mannar, a protected area, is located at a distance of 9 km from our Tuticorin plant. In order to understand the impact of our activities and operations on the surrounding bio-diversity, we have engaged a highly reputed institution of the Government of India, namely the Forest Research Institute (FRI), Dehradun, for carrying out a bio-diversity impact assessment study. The study covers an area of 10 km radius around our Tuticorin plant.

In the preliminary FRI report submitted, there is no IUCN red list species identified in the study area that are directly affected by Sterlite operations. However, two floral species (*Cissus Quandrangloris* and *Commiphora Berri*) listed in rare category of IUCN, are reported in areas around the plant. The final study report, once received in November 2009, will enable us to identify the positive and negative impacts of our existing operations and activities on the biodiversity in the area. The study will also include the development of an assessment tool/model to help us identify the impact of our future expansion/modifications/new projects and to manage plans/projects in order to further improve the bio-diversity value around our plant. We have also requested FRI to suggest methods of conserving (in-situ/ex-situ) the endangered/rich medicinal plants (if any) in the study area and further explore possibilities of developing it as a corporate social responsibility amongst the Self-Help Groups.



## 5. Emissions

It's been a challenge to control emissions in a smelter across the world. However, by the virtue of best available techniques for air emission control systems, we have been able to meet and go beyond air emission regulatory standards. Our operations mainly generate airborne emissions such as sulphur dioxide, hydrogen fluoride and dust. We have robust emission monitoring systems including:

- Online analysers in stacks (8 Nos.)
- Workplace analysers (28 Nos.)
- Continuous ambient air quality monitoring systems (7 stations) and
- Ambient air quality monitoring systems (9 stations)

These systems enable us to track our emission performance and thereby reduce the risk to communities living in the vicinity of units. Studies were undertaken by M/s. Worley Pearsons, a renowned company in the field of gas collection systems to reduce fugitive emissions in the smelter plant. As per their recommendations, duct modifications were carried out both in RHF- HVS and converter primary gas collection system. This initiative led to the reduction of sulphur dioxide emissions from 0.67 kg/T to 0.60 kg/T as shown in Fig. 12 below.

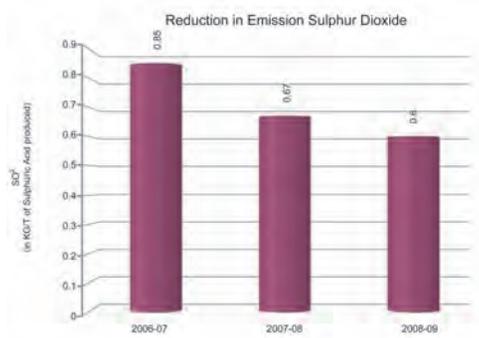


Fig 12

## 6. Effluent

Waste water generation in our plant premises amounts to 4,180 m<sup>3</sup>/day. Out of this, 2,030 m<sup>3</sup>/day is treated and recycled back to slag granulation, lime preparation and gas cleaning. The remaining is blown down and wash water of 2,150 m<sup>3</sup>/day is recycled into the process without any treatment. Hence, there is no discharge of water. The entire plant has been following 'ZERO DISCHARGE CONCEPT' since inception. This concept has also resulted in conserving the raw water of about 4,180 m<sup>3</sup>/day.

## 7. Waste Management

Waste ejected from various processes are categorised as either hazardous or non-hazardous waste depending upon their characteristics. Hazardous waste primarily generated from our site include ESP dust, spent catalyst, ETP Cake, scrubber cake, D O powder, arsenic cake, nickel sludge, heavy metal sludge, oil sludge and used oil. Non-hazardous waste includes copper slag, gypsum and lime grit. The table gives the names and amounts of hazardous and non-hazardous waste generated along with their disposal methods for the reporting period:

Other emissions such as SPM, flourine and NOX were reduced as compared to last year, as shown in figures 13, 14 and 15 respectively.

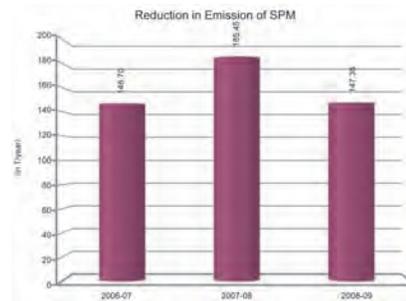


Fig 13

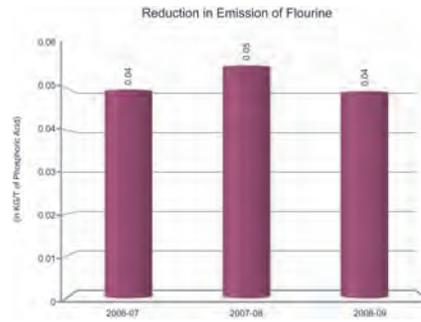


Fig 14

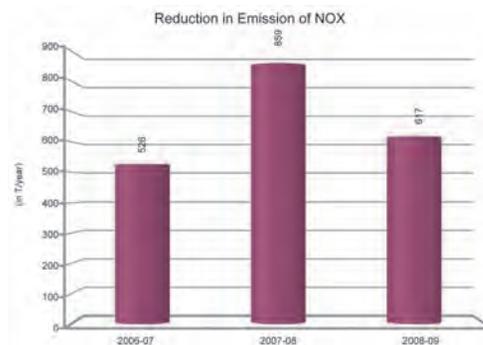


Fig 15

LIST OF HAZARDOUS AND NON-HAZARDOUS WASTE			
UNIT	TYPE OF WASTE	QUANTITY (TONS/YR)	DESTINATION
HAZARDOUS WASTE			
Tuticorin	ESP Dust	10011	Reuse
	Scrubber Cake	33473	Secured Landfill
	ETP Cake	28747	Secured Landfill
	Spent Catalyst	4	Secured Landfill
	D.O. Powder	449	Sold to Authorised Recyclers
	Arsenic Cake	580	Secured Landfill
	Nickel Sludge Residue	752	Sold to Authorised Recyclers
	Heavy Metal Sludge	123	Secured Landfill
	Used Oil	118	Sold to Authorised Recyclers
	Oil Sludge	963	Sold to Authorised Recyclers
Silvassa	D.O.Powder	576	Sold to Authorised Recyclers
	Nickel Sulphate	518	Sold to Authorised Recyclers
	Nickel Sludge Residue	149	Sold to Authorised Recyclers
NON-HAZARDOUS WASTE			
Tuticorin	Copper Slag	601727	Sold to outside parties for various applications
	Gypsum	823537	Sold to outside parties for various applications
	Lime Grit	2109.33	Sold to outside parties for various applications



All the hazardous waste mentioned in the above table are disposed of in an onsite Secured Landfill (SLF), with the exception of ESP dust, D O powder, nickel sludge, used oil and oil sludge, which are sold to authorised recyclers, except ESP dust which is reused. Fig 16 shows total amount of hazardous and non-hazardous waste generated in SIIL (Tuticorin and Silvassa) in the last 3 years.

It can be observed that though the total amount of waste generated has increased, the share of hazardous waste has reduced. This has been a result of the focused approach driven by our HSE policy to improve our environmental performance. We have taken several initiatives to keep tabs on our waste generation, both hazardous and non-hazardous. Some of the success stories which indicate our commitment and seriousness in waste management are given as case studies in this section.

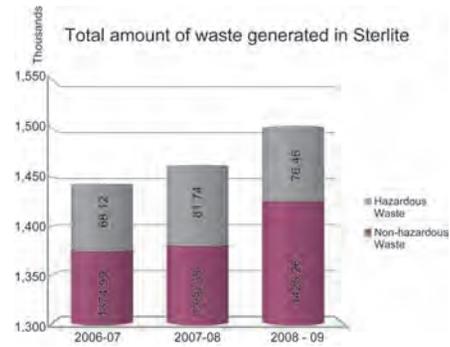


Fig 16

### Innovation in treatment process to reduce hazardous waste

#### CASE STUDY 4

The bleed from the Gas Cleaning Plant at Tuticorin was treated in ETP 2 & 3 by using ferric sulphate. In this process arsenic was removed from the water and fixed in the form of stable ferric arsenate as hazardous cakes ( $Fe_2AsO_4$ ). Specific hazardous cake generation is  $0.25 \text{ MT/m}^3$  of effluent treated. In order to reduce hazardous waste generation, sodium sulphide technology was introduced, based on the affinity of arsenic towards the sulphide ion and the low solubility of the product at low pH levels. The function of the sulphide addition system is to precipitate the majority of heavy metals (as metal sulphides) present in the weak acid effluent. The remaining weak acid, free from trace heavy metals, is neutralised with lime to produce gypsum, which is essentially non-hazardous in nature.

As a result of this modified treatment process in new ETP 4, specific hazardous cake generation has been reduced by 50% (i.e.,  $0.11 \text{ MT/m}^3$  from  $0.25 \text{ MT/m}^3$ ) compared to conventional effluent treatment methods practiced in ETP 2 or 3. Thereby, less waste goes to landfills. This project has also resulted in lower consumption of raw materials such as lime and ferric sulphide. On an average  $0.140 \text{ MT}$  and  $0.07 \text{ MT}$  of ferric sulphide and sodium sulphide respectively, are required to treat  $1 \text{ m}^3$  of effluent. On an average,  $0.03 \text{ MT}$  and  $0.015 \text{ MT}$  lime are required to treat  $1 \text{ m}^3$  of effluent in ETP 2 or 3 and ETP 4 respectively. Lime consumption is just half in sodium sulphide treatment as compared to ferric sulphide treatment, because sodium sulphide is basic in nature. Further it also acts as neutralising agent.



### Changing hazardous waste into utility

#### CASE STUDY 5

In refinery purification cells, soluble impurities like arsenic and antimony are removed from electrolytes by electro-winning process as Deoxidised (D O) powder. The approximate generation of D O powder is around  $40 \text{ MT/month}$ . D O contains around 50% to 70% of copper, 20% of arsenic and other impurities. Currently D O powder is sold to outside vendors who are paid for only 60% of the copper content. Hence the potential cost in losing the copper is around Rs. 33 lakhs/month.

Since D O powder has 20% arsenic, it can be charged in the anode furnace, which reduces the arsenic master alloy addition. It also helps recover copper and saves Rs.10.4 lakhs/month in the cost of arsenic master alloy. Initially, we tried charging it into the anode furnace but this led to a blast due to its high moisture content. So, we decided to briquette the D O powder which reduced its moisture content and the arsenic master alloy in a safe way. Trials using D O briquettes were successfully carried out and briquette production will be commissioned in the year 2009-10.



As a result of our process, we generate two types of non-hazardous waste i.e. Slag and Gypsum. Gypsum is generated at our Phosphoric Acid Plant at Tuticorin. The generation of gypsum increased in the reporting period due to the expansion of the Phosphoric Acid Plant from 600 MTD to 750 MTD. However as shown in Fig. 17, the rate of disposal is higher than that of generation. A higher disposal rate is maintained due to past accumulated stock which we will exhaust by the end of 2009.

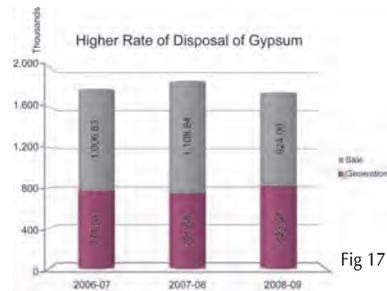


Fig 17

The other non-hazardous waste generated is copper slag. We have carried out numerous research studies through reputed institutions to explore the use of copper slag as an alternative material for industrial applications like cement manufacture, concrete preparation, road construction, etc. A majority of research studies have shown positive results for copper slag and we are taking it up with relevant sectors. Our initiatives during the reporting period resulted in increased slag sales by 17 % as compared to the last reporting period (refer Fig. 18). However, we do accept that considering the accumulated amount of copper slag, we have a long way to go and must stay committed.



Fig 18

Further our scope of effective waste management is not only restricted to process waste but also covers other waste generated in a typical office scenario. We have developed a system of waste segregation at source by using 3 bin systems. In this system, we have provided 3 types for bins for collecting bio-degradable, non-bio-degradable and hazardous waste. This has reduced the amount of solid waste to be disposed considerably through internal & external recycling and reuse.

## 8. Ozone Depleting Substances

We have slowly phased out all equipment containing ODS. The exception is air-conditioners which consist of Freon R22, an ozone depleting substance. We're in the process of phasing out Freon R22 quickly, even as the actual phase out as per Montreal protocol is only in the year 2020. The present quantity of this ODS is approximately around 0.48 tonnes and 0.22 tonnes in Tuticorin & Silvassa respectively. We are in process of identifying alternatives for the same and will replace them shortly.

### Industrial Ecology through slag characteristic improvement

#### CASE STUDY 6

Angular shaped granulated copper slag (GS) finds great demand as a sand blasting material. It has rust peeling and a polishing effect on surfaces after it is blasted with a high pressure torch. The ISO 11127 standard needs slag conductivity to be below 25 mS/m to save the parent material against corrosion. Slag conductivity is caused by the effect of the inherent parent material and process parameters. At our Tuticorin plant we took on a TQM Project for decreasing slag conductivity from the current value of 300 mS/m to 25 mS/m. The project identified that TDS of the granulation system medium is 90% responsible for the cause. The project identified that processes that decrease slag conductivity are raw water granulation, post cleaning of granulated slag with raw water and dry granulation.

Lab trials validate the technical feasibility of the solution and bring down the conductivity of GS to 10 mS/m. A pilot trial was taken to post clean the slag with raw water and 55 MT of slag was produced with a conductivity of 10 mS/m. The RO 1300 m<sup>3</sup>/day is ordered in our system for water balance and the slag conductivity project, after approval of conceptualisation and adaptability of solutions. The project is in progress for further production of graded slag from raw slag and installation of an RO plant. Gradation unit for raw water cleaning, post cleaning and grading the slag, which can directly be sold in Middle East, South East and United States Market.

## 9. Addressing climate change with Clean Development Mechanism

At SILL, we acknowledge the threats/risks posed by global warming to the entire humanity. Therefore, we are taking all possible measures to reduce our impact on climate change. As a Company in the manufacturing sector, we see both risk and opportunities for us due to climate change. We have not done any quantified assessment of financial risk/opportunities related to climate change as of now. Nevertheless some potential risks directly affecting our bottom line due to climate change are:

- In the last few years, at Tuticorin, we have witnessed the occurrence of both drought and heavy rains. Since, our production process requires a huge quantity of water, any abrupt variation in the rainfall pattern will have a direct bearing on availability of water for us.
- Climate change and failure of rainfall will affect the market and supply chain of the by-products Sulphuric Acid and Phosphoric Acid, as they cater to the fertiliser industry.

### Risks and Opportunity Management

- Energy efficiency is a key part of solving climate change, generating host of opportunities for the copper sector, as copper metal is amongst the best conductors of electricity with a high potential to solve problems like transmission loss of energy. Thus increased consumption of copper to deal with energy losses will have a positive impact on the sustainability of our society and also of Sterlite - being a leading producer of Copper in the country.
- Setting-up a desalination plant to meet the water requirements, as a result of the abrupt variation in water availability due to rainfall pattern
- Increase rain water catchment capacity and ensuring 100% recycling of effluent generated
- Identification and implementation of renewable energy sources: At our Silvassa unit, we are using biomass as fuel for the boiler, plans are in discussion stage with consultants for exploring wind energy potential at our Tuticorin unit, as the surrounding areas have a high potential for wind energy
- Identifying and implementing energy efficiency projects: Two energy efficiency projects mentioned in the report are in progress to reduce our energy consumption
- Inventorisation of our GHG emissions on annual basis and developing plans and projects to minimise or reduce GHG emissions

### Climate Change Mitigation - CDM

Another measure taken to reduce the impact of climate change has been to form a dedicated and formalised CDM cell as part of HSE on September-07. So far in our journey of identification and implementation of CDM project's we have identified the following:

- Power generation from waste gas from ISA smelter

- LPG reduction in anode casting plant
- Steam generation from waste heat recovery from the sulphuric acid plant

ISA WHRB project was submitted for registration to UNFCCC after successful validation during the reporting period. For the remaining projects, host country approval was obtained and they are currently at a validation stage. Together these three projects would result in the reduction of 43,000 tons of CO<sub>2</sub> emission/year to the atmosphere.

Another project, waste heat recovery from captive power plant is currently at a validation stage under VCS-2007 standard as Voluntary Emission Reduction (VER) project due to its common practice in industry. This would result in the reduction of another 15,000 tons of CO<sub>2</sub> emission.

To facilitate and motivate greater employee involvement in identifying various CDM projects, an Entrepreneurship Framework was announced by the CEO. With this, a project owner would be awarded Rs.25,000 upon successful registration of his/her project. The owner will be awarded 2% of total CDM revenue or Rs. 1,00,000 upon CER realisation. A separate intranet facility has been created to post online suggestions on feasible CDM project. Some ideas have been awarded with cash. Two ideas have been conceptualised for implementation. We started assessing our business carbon footprint from 2006-07 onwards. For the year 2007-08, a footprint study was extended to Silvassa operations as well. Our GHG inventorisation is being assessed according to GHG protocol under scope 1 and scope 2, where we have direct management control. Our inventorisation was disclosed as part of last year's sustainability report and Carbon Disclosure Project (CDP) framework as well. GHG inventory for the year 2007-08 and 2008-09 was disclosed as follows:

Scope of Emission	Unit in tons of CO <sub>2</sub>	
	2007-08	2008-09
Direct GHG emission	380630	350309
Indirect GHG emission	158171	148283
Total GHG emission	538801	498592
Specific GHG Emission/Ton of cathode	1.59	1.58

### Training programme for CDM

A formal induction on CDM is given to all 135 GETs, including the ones who joined in 2008. Besides this, an external training programme on energy conservation and CDM opportunities was conducted by M/s. Siri Energy, Hyderabad.



## 10. Compliance

We have a robust system of ensuring regulatory compliance and have a process of updating our senior management on a monthly basis through the legal department. During the reporting period there were no monetary or non monetary fines/penalties on us from any statutory body.

## 11. Products and Services

We deal primarily with products like copper cathodes and copper rods, which are in a pure form and have negligent traces of precious metals such as gold, silver, platinum, palladium etc. Hence, they have no impact on environment during handling operations. However, there are certain by-products such as sulphuric acid, phosphoric acid and hydrofluorosilicic acid which are also produced and sold for outside applications. During production, storage and transportation, all standard operating procedures are followed. Emergency scenarios such as any leaks/spillages are controlled by following the Emergency Preparedness and Response Plan (EPRP), made available at site. Further we put heavy emphasis on the education of drivers/transporters on emergency instructions to be followed in line with the Transport Emergency (TREM) card issued to all of them.

We also have a thorough system of checks of tankers by competent persons to avoid spillages/leakage during transportation. It was very unfortunate that during the reporting period, one of the acid tankers tilted and resulted in the discharge 30 MT of sulphuric acid on ground. The area was neutralised immediately with lime and the contaminated soil was transferred to our Secured Land Fill.

We are also carrying out a Life Cycle Assessment (LCA) study to estimate the environmental impact of our process. Presently we are focusing on the copper manufacturing process, right from the transportation of copper concentrate from ports to the supply of finished copper to customer. The study will be completed by the end 2009 and we expect to take a resultant improvement project during the next reporting period.

Products produced on site do not require any packaging process; except for Copper rods, which use wooden pallets as packaging material. However, consumption was very negligent,

to the order of 40,463 pallets, during the reporting period. In order to offset the wood utilised, the Company is planning to compensate by planting an equal number of trees in its premises, next year.

## 12. Environmental expenditures

With our focus on protecting the environment, we always have separate budgets for environmental improvement. The break-up of the environmental expenditure during reporting period is represented as

TOTAL ENVIRONMENTAL EXPENDITURE FOR 2008-2009		
S. No.	Disposal, Treatment & Remediation Costs	Unit in Lakhs
1	Treatment and disposal costs	2,537
2	Costs involved in treatment of emissions	2,833
3	Expenditures for the purchase and use of emission certificates	14
4	Insurance for environmental liability	3
5	Clean-up costs, including costs for remediation of spills as reported in EN23	1
S. No.	Prevention & Environmental Management Costs	For the year 2008-09
1	Personnel employed for education and training	No separate personnel for training. Personnel for environmental management will take care of training & education
2	External services for environmental management	86
3	Personnel for general environmental management activities	65
4	Research and development	74
5	Extra expenditure to install cleaner technologies	5,619
6	Extra expenditure on green purchases	5
7	Other environmental management costs	3,438
TOTAL (in Rs.)		14,674.59

Since the collection of high-quality and reliable environmental expenditure data is crucial for us to take informed decision we have carried out an Environmental Cost Accounting (ECA) project in the reporting period. A brief view on our ECA is provided as a case study below.

### Adding cost to environment

#### CASE STUDY 7

Conventional management accounting systems attribute many environmental costs to general overhead accounts, which do not reflect the organisation's efforts towards sustainability and to provide management with information needed to make sustainable business decisions.

We took up a project to estimate environment costs at our Tuticorin plant. We used guidelines developed by United Nations Division for Sustainable Development. A major challenge faced during the implementation of project was linked data collection, since it requires lot of data under several subheads. EMA were carried out for the whole plant and environmental cost centre were identified for each area. Some striking information was generated during the course of project, which highlighted a considerable loss of resources in almost all areas. Some common environment cost centres were spillage/leakage of raw materials, efficiency loss, lack of optimisation in raw material addition, steam losses, lack of housekeeping, etc.

Several improvement projects have been identified, which will result in energy, water conservation and waste reduction. Estimated savings from the identified project are approximately Rs. 40 lakhs/month.



# GRI Index

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3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	none
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GRI	Description of the Std. Disclosure	Page nos
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Performance Indicators				
GRI Code	Description	Coverage F, N, P	UNGC Principles	Page No.
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.	F		26,27
EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change.	F	7,8	59
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	F	6	40
EC6	Policy, practices and proportion of spending on locally-based suppliers at significant locations of operation.	F		45, 47

Note: F - Fully covered. P - Partially covered. N - Not covered.

Performance Indicators				
GRI Code	Description	Coverage F, N, P	UNGC Principles	Page No.
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	F	6	45-47
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro bono engagement.	F		27
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	P		37
EN1	Materials used by weight or volume.	F		53
EN2	Percentage of materials used that are recycled input materials.	F		53
EN3	Direct energy consumption by primary energy source.	F		54
EN4	Indirect energy consumption by primary source.	F		54
EN5	Energy saved due to conservation and efficiency improvements.	F		54
EN6	Initiatives to provide energy efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	F		54
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	F		55
EN8	Total water withdrawal by source.	F		55
EN9	Water sources significantly affected by withdrawal of water.	F		55
EN10	Percentage and total volume of water recycled and reused.	F		55
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	F		55
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	F		55
EN13	Habitats protected or restored.	F		55
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	F		55
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	F		55
EN16	Total direct and indirect greenhouse gas emissions by weight.	P		59
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	F		59
EN19	Emissions of ozone depleting substances by weight.	F		58
EN20	NO, SO, and other significant emissions by type and weight.	F		56
EN21	Total water discharge by quality and destination.	F		56
EN22	Total weight of waste by type and disposal method.	F		56, 57, 58
EN23	Total number and volume of significant spills.	F		50
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.	F		57
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.	F		56
EN26	Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation.	F		60
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	F		60
EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	F		60
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce.	F		60
EN30	Total environmental protection expenditures and investments by type.	F	7,8,9,10	60
LA1	Total workforce by employment type, employment contract and region.	F		38, 40
LA2	Total number and rate of employee turnover by age group gender and region	F		43
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	F	6	44

Note: F - Fully covered. P - Partially covered. N - Not covered.

Performance Indicators				
GRI Code	Description	Coverage F, N, P	UNGC Principles	Page No.
LA4	Percentage of employees covered by collective bargaining agreements.	F	1,3	40
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	F	3	40
LA7	Rates of injury, occupational diseases, lost days and absenteeism and number of work related fatalities by region.	F		51
LA8	Education, training, counselling, prevention, and risk control programmes in place to assist workforce members, their families, or community members regarding serious diseases.	F		49
LA9	Health and safety topics covered in formal agreements with trade unions.	F		50
LA10	Average hours of training per year per employee by employee by category.	F		49
LA11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	P		42
LA12	Percentage of employees receiving regular performance and career development review.	F		42
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity.	F		22, 39, 40
LA14	Ratio of basic salary of men to women by employee category.	F	1,6	40
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	P		50
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.	P		50
HR4	Total number of incidents of discrimination and actions taken.	F		44
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.	P		44
HR6	Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.	F		40, 44
HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour.	F		44
HR8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.	P		44
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.		1, 2, 3, 4, 5, 6	
SO1	Nature, scope, and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	F	1	28
SO2	Percentage and total number of business units analysed for risks related to corruption.	P		40
SO3	Percentage of employees trained in organisation's anticorruption policies and procedures.	F		40
SO4	Actions taken in response to incidents of corruption.	F		40
SO5	Public policy positions and participation in public policy development and lobbying	P		16
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	N	10	
SO7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes.	F		60
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	F		60
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvements and percentage of significant products and services categories subject to procedures.	F		60
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes.	F		60
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.	F		60
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	F		16

Note: F - Fully covered. P - Partially covered. N - Not covered.

# Glossary

ACT UP - Accelerated Competency Mapping & Upgradation Program	HR - Human Resources	ODS - Ozone Depleting Substances
AFT - Advanced Fire Fighting Technology	HAZOP study - Hazard and Operability Studies	OEM - Original Equipment Manufacturer
AGM - Assistant General Manager	HIRA - Hazard Identification and Risk Assessment	P <sub>2</sub> O <sub>5</sub> - Phosphorous Pentoxide
AIDS - Acquired Immune Deficiency Syndrome	ISA WHRB - ISA Waste Heat Recovery Boiler	PPE - Personal Protective Equipment
AMs - Assistant Managers	INSSAN Award - Indian National Suggestion Schemes' Association Awards	PSC - Pierce Smith Converter
ASTM & IS - International Standards laid down by American Society for Testing and Materials	ISO 9001:2000 - International standards requirements for quality management system	PRA - Participatory Rural Appraisals
ASQ - American Society for Quality	ISO 14001 - defines terms of fundamental concepts related to environmental management, published in the ISO 14000 series of International Standards	PF - Provident Fund
ASNs - Advanced Shipping Notifications	ICPCI - International Copper Promotion Council (India)	POs - Purchase Order
BSC - British Safety Council	ICDC - Indian Copper Development Centre	PCRA - Petroleum Conservation Research Association
BT Mercer and Hewitt Consulting Groups - Human Resources Consultation Firm	ICA - International Copper Association	QESMS - Quality, Environment, Safety Management System
CEO - Chief Executive Officer	IFFCO - Indian Farmers Fertiliser Cooperative Limited	RO - Reverse Osmosis
COO - Chief Operating Officer	ICAI - Institute of Chartered Accountants of India	RFID - Radio Frequency Identification
CSR - Corporate Social Responsibility	IIT - Indian Institute of Technology	RHF - HVS – Rotary Holding Furnace & Hygiene Ventilation System
CCR - Continuous Cathode Rod	IIM - Indian Institute of Management	RFQs - Request for Quotation
CFL - Coromandel Fertiliser Limited	ILO - International Labour Organisation	SIIL - Sterlite Industries (India) Ltd
CSI - Customer Satisfaction Index	IUCN - International Union for Conservation of Nature and Natural Resources	SHGs - Self-Help Groups
CSMC - Contract Safety Management Cell	INR - Indian Rupees	SWEP - Sterlite Women Empowerment Project
CDM - Clean Development Mechanism	KRAs - Key Result Areas	SAARC - South Asian Association For Regional Cooperation
CO <sub>2</sub> - Carbon Dioxide	Kg - Kilogram	SEBI - Securities Exchange Bureau of India
CDP - Carbon Disclosure Project	Kg/T - Kilogram per Tonne	SMP - Senior Management Program
CER - Carbon Emission Reduction		SBU - Strategic Business Unit
CPCB - Central Pollution Control Board	KL/d - Kilo Litre per day	SPIDER - Standard Practices Implementation, Development, Evaluation and Rating
DO Powder - Deoxidised Powder	Kg/lit - Kilogram per litre	SEC - Specific Energy Consumption
EHS - Environment, Health and Safety	LME - London Metal Exchange	SCF - Slag Cleaning Furnace
ESI Act - Employee's State Insurance Act, 1948	LMS - Learning Management System	SLF - Secured Landfill
ECP - Employee Contact Program	LTIFR - Lost Time Injury Frequency Rate	SPM - Suspended Particulate Matter
ESP dust - Electrostatic Precipitator Dust	LCA - Life Cycle Assessment	SO <sub>2</sub> - Sulphur Dioxide
ETP - Effluent Treatment Plant	LNG - Liquefied Natural Gas	SOX - Sulphur Oxides
EPRP - Emergency Preparedness and Response Plan	MT - Metric Tonne	SRM - Supplier Relationship Management
ECA - Environmental Cost Accounting	MT/hr - Metric Tonne per hour	TPD - Tons per day
EOI - Expression of interest	MoU - Memorandum of Understanding	TPA - Tons per annum
FICCI - Federation of Indian Chambers of Commerce and Industries	MCF - Mangalore Chemicals and Fertilisers	TQM - Total Quality Management
FACT - Fertilisers and Chemicals Travancore	MAS - Management Assurance Team	TUFemina - Women's group at Sterlite, through which women employees can interact with each other and share their experiences
Fe <sub>2</sub> AsO <sub>4</sub> - Ferric Arsenate	MBA - Masters in Business Administration	TPM - Total Productive Maintenance
FRI - Forest Research Institute	MDP - Management Development Program	TANSACS - Tamil Nadu State AIDS Control Society
GM (HSE) - General Manager (Health, Safety and Environment)	m <sup>3</sup> /day - Cubic metre per day	TREM - Transport Emergency card
GRI - Global Reporting Initiative	MoEF - Ministry of Environment and Forests, Government of India	TDS - Total Dissolved Solids
GJ - Giga Joules	MT/m <sup>3</sup> - Metric Tonne per cubic metre	UNFCCC - United Nations Framework Convention on Climate Change
GS - Granulated Slag	NGO - Non Governmental Organisation	VP – Vice President
GAIL - Gas Authority of India Limited	NVBDCP - National Vector Borne Disease Control Program	V-Meet - Vendor Meet
GHG - Green House Gas	NOX - Nitrogen Oxides	VER - Voluntary Emission Reduction
GJ/MT - Giga Joules per Metric Tonne	OHSAS 18001 - international occupational health and safety management system specification	WSO - Work Safety Online
GPS - Global Positioning System	OH&S - Occupational Health and Safety	XLRI - Xavier Labour Relations Institute
HIV - Human Immunodeficiency Virus	OHC - Occupational Health Centre	
HSE - Health, Safety and Environment		

## Feedback Form for Sustainable Development Report 2008-09

Please tick (✓) the most appropriate box.

	Poor	Average	Good	V. Good	Excellent
1. Relevance to sustainability of information given in the report	<input type="checkbox"/>				
2. Completeness of the information	<input type="checkbox"/>				
3. Quality of the information	<input type="checkbox"/>				
4. Mode of presentation	<input type="checkbox"/>				
5. Your suggestions on improving our report					

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Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Organisation: \_\_\_\_\_

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Sterlite sincerely thanks you for your time and comments.

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