Sustainability Report 2008

VALE

Sustainability Report Vale 2008

Profile

We intend to be increasingly integrated into local communities through our relationships and by balancing economic, social and environmental results

We search for, produce and market iron ore and pellets, nickel, copper, coal, bauxite, alumina, aluminum, potassium, kaolin, manganese, ferroalloys, cobalt, platinum group metals and precious metals. In addition, we are active in logistics, energy and steel production. The benefits of our business can be seen every day in the lives of people around the world. Iron ore, coal and manganese are feedstock for steel used in automobiles and buildings. Nickel is used in stainless steel production and in electronic and medical/hospital equipment; copper is part of TV sets and cell phones. Packing, automobile and aircraft industries use aluminum, and agriculture uses potassium to produce food products. Kaolin is used especially in paper manufacturing and in the ceramic and pharmaceutical industries.

AMERICAS

1. BRAZIL – VALE'S WORLDWIDE HEADQUARTERS
2. COLOMBIA
3. CHILE
4. ARGENTINA
5. PERU
6. CANADA
7. UNITED STATES
8. BARBADOS

EUROPE

9. FRANCE
10. NORWAY
11. GERMANY
12. SWITZERLAND
13. UNITED KINGDOM

AFRICA

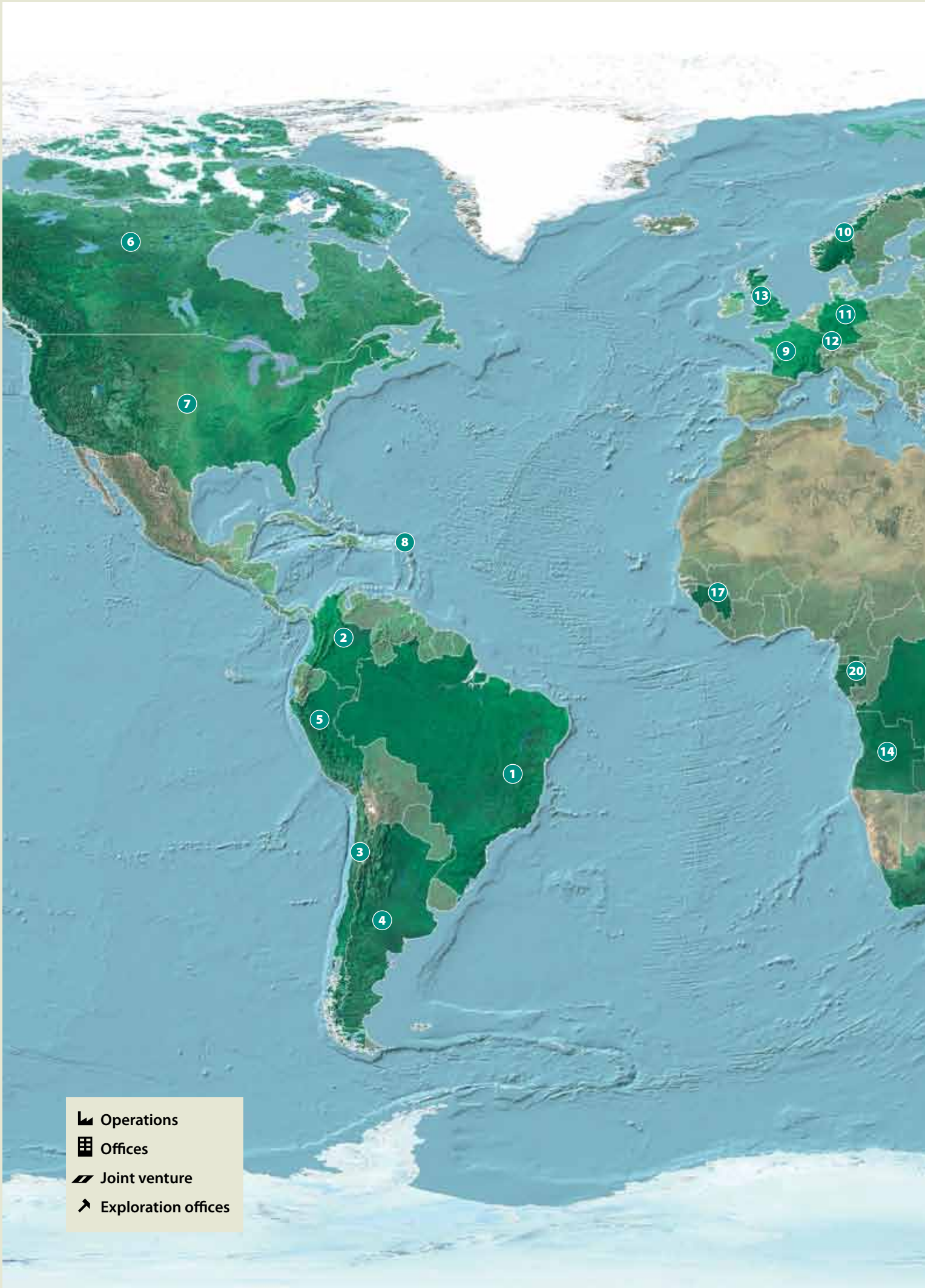
14. ANGOLA
15. ZAMBIA
16. MOZAMBIQUE
17. GUINEA
18. SOUTH AFRICA
19. DEMOCRATIC REPUBLIC OF CONGO
20. GABON

ASIA

21. INDIA
22. CHINA
23. MONGOLIA
24. OMAN
25. KAZAKHSTAN
26. JAPAN
27. SOUTH KOREA
28. TAIWAN
29. PHILLIPPINES
30. THAILAND
31. SINGAPORE
32. INDONESIA

OCEANIA

33. AUSTRALIA
34. NEW CALEDONIA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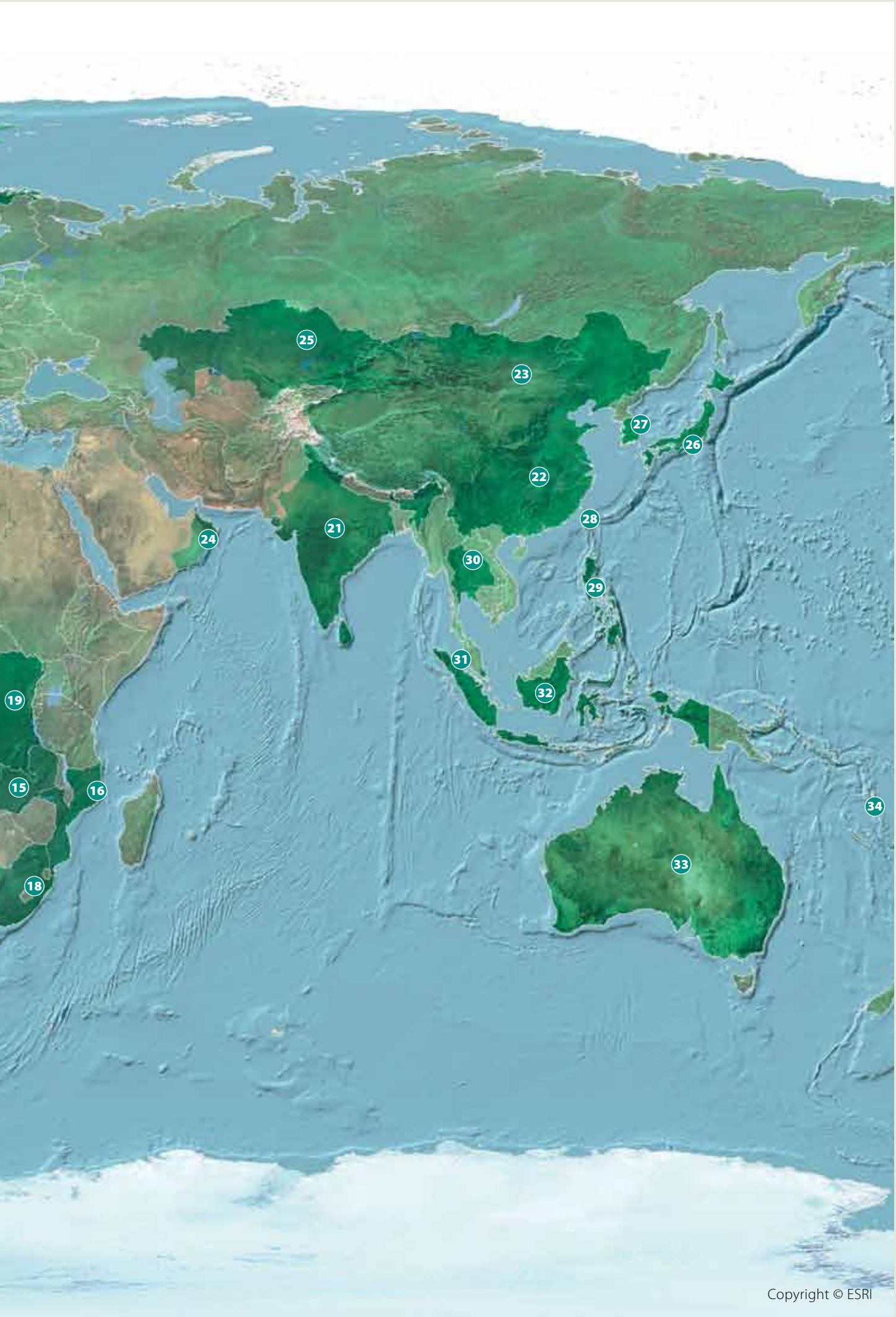
Operations
Offices
Joint venture
Exploration offices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OUR MISSION

To transform mineral resources into prosperity and sustainable development

CORPORATE INFORMATION

Name	Vale
Corporate name	Vale S.A.
Legal form	Publicly traded company
Papers traded in Stock Exchange markets	Bovespa (VALE3 and VALE5) New York Stock Exchange (VALE and VALE.P) Euronext Paris (VALE3 and VALE5 – since July 18, 2008) Latibex (XVALO and XVALP)
Worldwide headquarters	Rio de Janeiro, Brazil
Socio-environmental investments in 2008	US$ 909 million
Total workforce (Dec. 2008)	145,700 (Employees: 62,500 and Contractors: 83,200)
Corporate Credit Rating	Baa2 by Moody's Investors Service BBB+ by Standard & Poor's Ratings Services BBB by Fitch Ratings BBB (high) by Dominion Bond Rating Service
Recognitions & Awards	- Best rated mining company in carbon emissions per revenue (CDP – Carbon Disclosure Project) - Only Latin American company listed in the Carbon Disclosure Leadership Index (CDP) - *Vale Sustainability Report 2007* recognized as Notable COP (Communication on Progress) by Global Compact - One of the top 5 companies in Goldman Sachs (GS Sustain – 2008 report) evaluation for industrial metals, precious, steel and chemicals sectors - Winner in nine categories, Best Managed Companies in Latin America, awarded by Euromoney magazine - Winner in seven categories, 2008 edition, IR Magazine Awards, including the Gran Prix for best investor relations program in Brazil - 4th best Brazilian company in the global rank by Reputation Institute

Message from the Board of Directors

In 2008, Vale continued its strategy for sustainable development and reaffirmed its commitment towards ethics and transparency

Over the course of the year, Vale made investments to the tune of US$ 10 billion, its largest investment volume ever in history, excluding acquisitions, it also provided record-breaking distribution of dividends. Distribution reached US$ 2.8 billion, or 0.52 per share, 52% higher than the amount for 2007. The company still maintained a sound financial position, upheld in expressive cash position of US$ 12.6 billion, availability of significant credit lines in the medium and long term, and low-risk indebtedness.

For the third year running, Vale achieved certification in the internal controls set forth by the Sarbanes-Oxley Act, evidencing the consolidation of transparency and governance practices, as required of publicly traded companies with American Depositary Receipts (ADRs) listed on the New York Stock Exchange. Vale is guided by ethical, transparent behavior, and adopts other instruments to that end, such as Codes of Ethical Conduct and Reporting Channel connected directly to the Chairman of the Board of Directors.

In 2008, we experienced a period of turbulence in the global financial system. As of September, with the worsening of the crisis, there was considerable change in the world's economic activity, affecting different markets and regions.

The slower demand for minerals and metals resulted in moderate operating and financial performance for Vale in the last quarter 2008. However, even in face of the new economic scenario, Vale demonstrated its soundness and flexibility. Gross revenues in 2008 reached US$ 38.5 billion, an amount 16.3% higher when compared to the previous year, and net profit was US$ 13.2 billion.

During the turmoil in the international financial market, the company continued its strategy of sustainable development and reaffirmed its commitment towards transparency, not only in financial results, but also in socio-environmental performance, as demonstrated in this sustainability report, which follows the Global Reporting Initiative (GRI) guidelines, an internationally adopted standard. More recently, Vale has gained important recognition such as, for instance, the Transparency in Sustainability Award, presented by the Brazilian Institute of Investor Relations (IBRI), for companies listed on Bovespa. The award certifies its commitment to sustainability and alignment with the expectations of investors who guide their decisions by the Principles for Responsible Investment (PRI).

Therefore, I am proud to present this Sustainability Report 2008. In addition to Vale's results and practices, the information disclosed herein represents the challenges in the continuous search for sustainable development. Vale is attentive to the evolution in the critical issues of our times and committed to the engagement with public and private sectors, as well as with civil society in search for solutions to the challenges faced by the company.

On behalf of Vale's shareholders, I would like to thank our Executive Officers, employees and partners for the results achieved in 2008. Our accomplishments will serve to renew our confidence and belief in our Mission.

Sérgio Rosa – Chairman of the Board of Directors

Message from the CEO

We reaffirm our commitment to reconcile our objectives of growth and generation of value to our shareholders with the construction of a social, economic and environmental legacy in the regions where we operate

For the second year running, it is with great pleasure that I present Vale's sustainability report, prepared according to the Global Reporting Initiative (GRI) guidelines. With this publication, we reaffirm our commitment to transparency in our activities and the improvement of internal sustainability management. In 2008, we were recognized as a company committed to transparent communication, as our Sustainability Report 2007 was highlighted as Notable Communications on Progress by the United Nations (UN) Global Compact. Clearly, we are on the right track.

In 2008, we achieved record-breaking production in different products, with eight of them reaching the best sales in Vale's history: iron ore, nickel, copper, alumina, cobalt, precious metals, platinum group metals and coal. However, as from September 2008, we faced a period of severe crisis in the global financial system, with no region or country being held safe from its recession effects, resulting in elevated levels of uncertainty and the consequent shortage in the demand for minerals and metals.

In view of the scenario, Vale acted proactively by cutting production – with priority to units with higher costs –, and by setting up new strategic priorities, such as cost minimization, operational and financial flexibility, and a combination of cash preservation and search for profitable options for growth. Our investment budget for 2009 is US$ 9 billion and is especially focused on organic growth. We also adopted several initiatives aimed at retaining our employees, such as bargaining agreements with labor unions in Brazil, where 80% of our professionals are concentrated, and the concession of leave entitlements and re-qualification training courses, aiming to minimize the inevitable impact of the crisis on our workforce.

In spite of the volatility in share prices observed since the last quarter 2008, the distribution of dividends to our shareholders in 2008 was over 50% higher than the amount paid in the previous year. We also managed to keep our leadership in value generation to shareholders among the leading global mining companies in the last five years, with total return of 23.1% a year in US dollars.

At this moment we reaffirm Vale's commitment to sustainable development. We know it represents a permanent search for improvement. We are dedicated to this search because we believe it is the path that will lead us to the global leadership as a diversified mining company. As from the setting up of our Mission – "To transform mineral resources into prosperity and sustainable development" –, we designed a clear path for our growth, together with society. A strong example of our commitment is that we boast now a total reclaimed or planted area equivalent to that used by our mining operations, that is, our forest footprint is offset. We help preserve about 3 billion trees, that is, a tree for every two inhabitants of the planet.

The volume of resources used by Vale for socio-environmental investments is another demonstration of our commitment. In 2008, we invested US$ 909 million, an amount 32.6% higher than that of 2007. In addition to consistent investments in socio-environmental projects, we created our Sustainable Development Policy, a global document which establishes our objectives, guidelines and principles, supported by three pillars of action: Sustainable Operator, Local Sustainable Development Catalyst and Global Sustainability Agent. The activities based on each of these pillars aim at ensuring the alignment between our sustainability strategy and our business planning, having as common objectives to overcome local and global challenges to build a legacy to society at large.

It is worth stressing that we are continuously determined to develop practices to stimulate the value "Prioritizing Life and Safety", which is fundamental to us. Nevertheless, despite our efforts and advancements achieved, such as reduction of incident rate, we deeply regret the loss of nine valuable lives in incidents with Vale employees and contractors in 2008. In addition to our dedication to investigate every incident, we keep our target to promote a cultural transformation, turned to prevention, risk management and control of incident causes.

The Sustainable Development Policy strengthens our commitments to the global sustainability frameworks in which we participate, such as the United Nations Global Compact, International Council on Mining and Metals (ICMM), global sustainability forum for the mining industry, and Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria (GBC).

We have been making strides toward sustainable development. We continuously invest to perfect our productive processes, in search for eco-efficiency, for instance, with programs for energy efficiency and reduction of emissions and water consumption through reuse. An important milestone in 2008 was Vale becoming the only Latin American company listed in the Carbon Disclosure Leadership Index, CDP (Carbon Disclosure Project), and also the mining company better assessed in the indicator measuring carbon emissions per revenue.

Another aspect deserving highlight was the advancement in use of biofuels, in line with our Corporate Guidelines on Climate Change and Carbon, announced in 2008. Recently, we entered into a consortium to produce palm oil, raw material for biofuel, in northern Pará, Brazil. The production will allow us to fuel our locomotives, as well as part of our large-scale machines and equipment in the North System, as of 2014. The consortium will generate as many as 6 thousand jobs, for the benefit of 2 thousand families of small producers, in a region having one of the country's lowest human development indexes (HDI). In addition, it represents a reduction of about 12 million tons of CO_2 equivalent in the atmosphere over 25 years, when compared to regular diesel emissions, not considering emissions related to the biodiesel productive chain.

In October 2008, we announced the Knowledge Station Program, developed by Vale Foundation. It consists of putting together human and economic development centers in the regions where we operate. The centers perform a role as linking agents of social networks for local development, and they are jointly managed by Vale, the public authorities and society. Our target is to build 15 units by 2015, for the benefit of approximately 30 thousand children and adolescents.

We reaffirm our commitment to reconcile our objectives of growth and generation of value to our shareholders with the construction of a social, economic and environmental legacy in the regions where we operate. To that end, we are open to dialogue, and we promote voluntary joint activities with governments, other companies and civil society.

Finally, I would like to acknowledge those who collaborated to put into words in this report the Vale's sustainability practices carried forward in different businesses and regions, including Vale Inco and Vale Australia. I hope this publication will assist us in the dissemination of our activity on the road to sustainable development.

Roger Agnelli – CEO

Vale Executive Officers

Roger Agnelli

Chief Executive Officer

Executive Officer, Non-ferrous Minerals

Tito Botelho Martins

Eduardo de Salles Bartolomeo

Executive Officer, Logistics, Project Management and Sustainability

Chief Financial Officer

Fabio de Oliveira Barbosa

José Carlos Martins

Executive Officer, Ferrous Minerals

Executive Officer, Human Resources and Corporate Services

Carla Grasso

To read our report

This report aims at presenting the evolution of Vale's sustainability journey in an objective and transparent manner, to allow it to be readily understood

GRI Guidelines – For the second year running, we are publishing our Sustainability Report according to the Global Reporting Initiative (GRI) guidelines, G3 version, including the Mining & Metals Sector Supplement.

Global Compact and ICMM – Our activities, as described in this Report, are aligned with the principles of the Global Compact and the International Council on Mining and Metals (ICMM), international initiatives to which we are a signatory. The tables of contents on pages 104-108 assist in locating information related to the principles of those frameworks.

Reporting Period – Vale Sustainability Report 2007, our first report, included information extending back to the period 2005-2007 with the objective of demonstrating the evolution in the company's performance. The effort to collect data retroactively resulted in a complex panorama of our operations and prepared us for the process of perfecting our management and continuous learning of sustainability-related matters. The present report, covering from 2006 to 2008, includes improvements in its structure, contents, approach and comprehensiveness.

Structure – The way chapters have been organized allows tracking of results achieved by Vale in its three main activities, as determined by our Sustainable Development Policy: Sustainable Operator, Local Sustainable Development Catalyst and Global Sustainability Agent. Far more than a new format, the new structure reaffirms our commitment to harmonize the economic, social and environmental aspects of our business.

Materiality – Determining materiality of the topics covered in our report was based on stakeholder workshops held in the process of preparing the report 2007. For this report, we took into consideration external evaluations of our previous report (including contributions from specialists), as well as on the relevance of different sustainability topics in the current scenario, such as business performance, employment and labor relations, resulting from the worsening of the global crisis through the end of 2008.

Indicators – We reported on 73 indicators – 41 core, 21 additional and 11 from the Mining and Metals Sector Supplement.

Management Approach – We are globalizing corporate processes and documents considering the cultural diversity of each location as well as to the dynamics of each line of business. We are aware that this integration is a complex process which demands time and qualification of involved teams. The evolution of the process has already produced global corporate documents, among them the Sustainable Development Policy (please, refer to the Corporate Governance chapter).

GRI Application Level – This report maintains GRI B+ Application Level, reporting all profile items, information on management approach and at least 20 performance indicators. The addition of 22 indicators to the 51 reported in 2007 represents our continuous improvement in the process of perfecting our sustainability management. Additional details on page 103.

Boundary – In addition to information on the companies already included in the previous report, this report now encompasses information for 2008 from other units, highlighting Vale Australia acquired in 2007. The data for Vale Inco, acquired in 2006, have been included in the results since 2007. For additional information, please refer to the full boundary chart on page 100.

External Assurance – The information included in the *Sustainability Report 2008* has been externally assured by independent auditors KPMG Assurance Services, as per the declaration on page 102. The assurance scope included compliance with the GRI methodology, assurance of information on management approach and performance, and application level declared.

Assessment Form – As in 2007, a Report 2008 Assessment Form is available at www.vale.com.This initiative aims to gather opinion from our stakeholders for analysis, allowing us to improve our sustainability management and the reporting process of our performance.

Contact – For additional information on sustainability, please visit us at www.vale.com and contact us through the Talk to Us channel, Sustainability category.

Local and global value

We endeavor to generate sustainable value for people and regions where we operate and to contribute positively to the debate on global issues

For Vale, sustainable development is achieved when its activities, particularly its mining operations, add value to its shareholders and other stakeholders. Vale's principle is to act with the objective of leaving a positive social, economic and environmental legacy in the areas where it operates, through a conscious and responsible management approach, voluntary corporate actions and the establishment of partnerships with governments, public institutions, the private sector and civil society.

The achievement of these principles along the life cycle of our activities shall be supported by three pillars of action:

- Sustainable Operator;
- Local Sustainable Development Catalyst;
- Global Sustainability Agent.

SUSTAINABLE DEVELOPMENT POLICY

The milestone of our strategic management in 2008 was the preparation of our Sustainable Development Policy, a result of the process of maturing our activity and of streamlining the initiatives in progress. More than a global document establishing objectives, guidelines and principles, the Policy is a tool that will contribute to align our sustainability strategy with our business planning and to rise above our local and global challenges.

By detailing our sustainability strategy and the way we are organized to attain our objectives, the Sustainable Development Policy reaffirms our commitments to stakeholders and the global initiatives that we support.

REAFFIRMED COMMITMENTS

Our sustainability strategy endeavors to materialize our long-term commitments to society. Therefore, even acknowledging the seriousness of the current economic crisis, we reaffirm our resolution to act according to the principles of our Sustainable Development Policy.

Please, visit the website ***www.vale.com*** *for the full version of our Sustainable Development Policy.*

The pillars of our Sustainable Development Policy:

SUSTAINABLE OPERATOR

To work sustainably is to act in a conscientious and socio-economic and environmentally responsible manner throughout the complete life cycle of our activities – from conception, project implementation, operational cycle and commercialization until the closure phase. It is **VALUE** creation.

Value added to stakeholders

Anticipation and prevention

Legislation as baseline: continuous improvement

Uphold organization and discipline

Ethics and respect in businesses

LOCAL SUSTAINABLE DEVELOPMENT CATALYST

As a catalyst of **LOCAL** development we seek to go beyond the impact management of our operations and projects, contributing voluntarily – through partnerships with governments, other companies and civil society – to build a sustainable regional legacy.

License to operate

Order for development

Communication and engagement

Alliances with key stakeholders

Legacy for the region

GLOBAL SUSTAINABILITY AGENT

The **GLOBAL** sustainability agent pillar is based on the acknowledgment, on one side, that certain global sustainability aspects may directly affect our businesses and, on the other side, that Vale – as one of the leading global companies in the mining sector – may contribute to the international promotion of sound sustainability practices.

Guaranteed transparency

Leadership

Observation of trends

Best practices

Act local, think global

Legacy for future generations

We add value to our stakeholders by generating optimum value to shareholders, maintaining fair work relations and conditions for employees and contractors, and seeking long-lasting win-win partnerships with suppliers. We seek to ensure greater reliability and value in our supply to customers, in addition to contributing to the sustainable development of the communities, regions and countries where we operate, mantaining a permanent open dialogue with our stakeholders.

The infographic below identifies the material topics of Vale's sustainability for our stakeholders. By identifying the issues, we endeavor to continuously perfect our sustainability management.

1

MINERAL RESEARCH

- Reclamation of disturbed land
- Respect for local culture
- Security of employees and the local population
- Minimization of environmental impact

2

PROJECT DEVELOPMENT

- Temporary jobs
- Employee housing
- Health and safety of employees and contractors
- Public safety
- Involuntary resettlement
- Vegetal suppression
- Regional impact assessment

3

MINING OPERATIONS AND PROCESSING

- Product quality
- Production volume and delivery time with competitive cost
- Eco-efficiency (water, waste, emissions, energy)
- Health and safety in the production process
- Environmental conservation
- Social/environmental excellence
- Recycling

4

MINE CLOSURE

- Environmental recovery
- Workforce transition
- Economic diversification
- Reduction of tax collection

5

ENERGY

- Environmental support capability
- Energy efficiency
- Energy matrix balance (energy demand vs. climate change impacts)
- Sustainable energy solutions

6

LOGISTICS – RAILWAY AND PORTS

- Proximity between railways and communities
- Safety along the railway
- Regional integration (transport of passengers/general cargo)
- Environmental impact in coastal areas

7

EMPLOYEES

- Health and safety
- Quality of personal and family life
- Personal development and qualification
- Relations with contractors

8

SUPPLIERS

- Development of local suppliers
- Employment of local suppliers
- Respect for human rights in the production chain
- Health and safety management to suppliers

9

CUSTOMERS

- Safety and quality of product and service
- Customer satisfaction
- Respect for human rights in the production chain

10

COMMUNITIES

- Coexistence with communities near company operations (noise; air emissions, traffic)
- Education and training of the local workforce
- Employment of local workforce
- Economic development
- Valuation and preservation of the local culture
- Demographic pressures generated by employment opportunities
- Demand for infrastructure and public services
- Increase in tax base collections
- Social investment

11

TRADITIONAL COMMUNITIES
(INDIGENOUS AND QUILOMBOLAS)

- Respect and prioritization of the traditional culture
- Respect for the use of land
- Promotion of harmonious coexistence

12

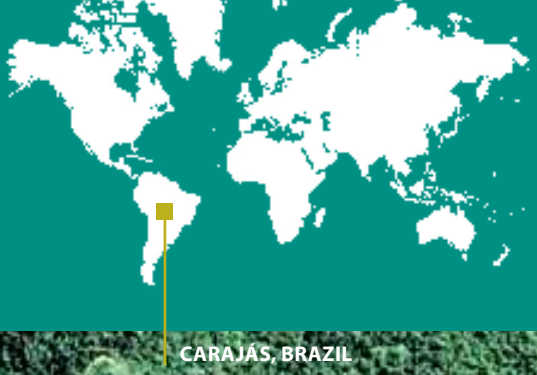
FINAL CONSUMERS

- Sustainability in the production chain
- Product safety and quality

Sustainable operator

We seek continuous improvement in our activities to achieve and surpass international standards in health and safety, labor relations, respect for human rights and environmental management.

Vale's operation in the State of Pará (Brazil), inserted in Carajás Mosaic of Conservation Units, with an area of over 8 thousand sq km, which we help protect.



CARAJÁS, BRAZIL

BUSINESS PERFORMANCE

Strength and flexibility to face new challenges

Consistent results reinforce our capacity to face the financial turmoil begun in 2008

In 2008, Vale celebrated its sixth straight year of growth, supported by its operational and financial performance. This year, in particular, our performance was characterized by record-breaking production figures (nickel, bauxite, alumina, copper, coal, cobalt, platinum group metals and precious metals) and sales (iron ore, nickel, copper, alumina, cobalt, platinum group metals, precious metals and coal). In addition, we experienced record-breaking income, profit, cash generation, investments and distribution of dividends.

Such a performance results from a long term growth strategy, combining discipline in capital allocation, level-headed risk management, environmental protection, and respect for the rights of shareholders, employees, suppliers, customers and communities where we operate. Likewise, Vale made use of the economic expansion cycle to grow, diversify its portfolio of assets, go global, and turn itself into the world's second largest mining company.

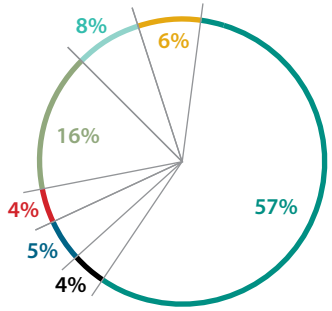
In last five years, our gross revenue grew more than fourfold, from US$ 8.5 billion in 2004 to US$ 38.5 billion in 2008. Compared to 2007, growth was 16.3% due to increased product prices which contributed 91.4% of the increment, and larger sales volume which contributed 8.6%.

At the same time, cash generation measured by adjusted Ebtida (earnings before interest, tax, depreciation and amortization, added to dividends received from non-consolidated affiliates) grew fivefold, evolving from US$ 3.7 billion in 2004 to US$ 19.0 billion in 2008. Net profit showed a similar performance increase by jumping from US$ 2.6 billion in 2004 to US$ 13.2 billion in 2008.

In September 2008, problems within the global financial system intensified and businesses and countries around the globe found themselves dealing with unprecedented economic challenges.

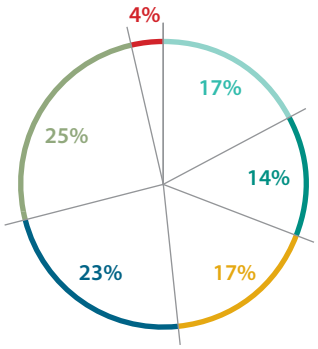
Revenue per product

(US$ 38.5 billion)



Revenue per destination

(US$ 38.5 billion)



*Includes bauxite, alumina and aluminum.

Our results reflect growth strategy with a long-term view.

Elevated levels of uncertainty and shrinking demand for minerals and metals posed serious challenges. Vale responded in a timely manner, adapting its production and implementing new strategic priorities intended to handle the new global economic scenario. We halted activities in operating units with higher costs, and focused strongly on factors such as cost minimization, operational and financial flexibility. Reconciliation of cash preservation with the search for profitable growth options assumed a fundamental character in our adjustment to the global recession scenario.

Our world-class assets, with low operating cost and high quality products, financial solidity and proactive reaction to changes in the economic cycle will allow us to face the recession period while still generating value.

Investments

In 2008, Vale invested US$ 10.2 billion, representing an increase of 33% over the US$ 7.6 billion invested in the previous year. The amount not only set a new historical record, but it was also the largest investment in mining operations around the world in 2008. Investments in organic growth reached US$ 7.5 billion (project execution and research and development).

We continue to diversify our activities, by expanding our portfolio of products and globalizing operations, and also by strengthening our commitment to corporate responsibility. In 2008, our expenditure on socio-environmental projects totaled US$ 909 million, an amount 32.6% higher than the US$ 686 million invested in 2007 (more on our environmental investments on page 45 and on social investments on page 64).

Economic value generated and distributed (US$million) – Income based on the origin of products

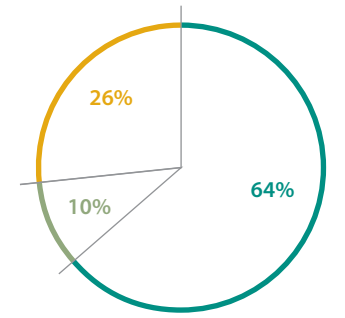
2008	Brazil	South America excluding Brazil	Canada	North America excluding Canada	Australasia	Europe	Africa	Total
Direct economic value generated								
a) Revenues*	29,925	0	6,607	59	1,983	617	0	**39,191**
Economic value distributed								
b) Operational Costs	13,720	20	3,616	42	977	467	102	**18,944**
c) Employee's salaries and benefits	1,344	0	990	20	289	66	0	**2,709**
d) Payments to capital providers	3,842	0	0	773	0	0	0	**4,615**
e) Payments to the government	2,337	0	1,062	0	314	15	0	**3,728**
f) Investments in the community	204	0	9	0	18	0	0	**231**
Total	**21,447**	**20**	**5,677**	**835**	**1,598**	**548**	**102**	**30,227**
Economic value retained								
(economic value generated less economic value distributed)	**8,478**	**(20)**	**930**	**(776)**	**385**	**69**	**(102)**	**8,964**

* The accounting standard used is USGAAP, applying only some adjustments as established by the GRI methodology: in addition to gross operating revenues, item a) Revenues, presented above, includes financial results and the sales of assets.

Financial soundness: fundamental to face turbulent times without losing the capacity to plan future investments.

Investment per type in 2008

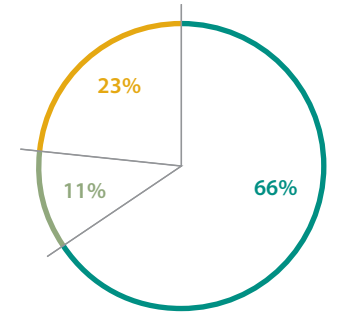
(US$ 10.2 billion)



- PROJECT EXECUTION
- RESEARCH AND DEVELOPMENT (R&D)
- MAINTENANCE OF EXISTING OPERATIONS

Investment per type in 2009

(US$ 9.0 billion)



- PROJECT EXECUTION
- RESEARCH AND DEVELOPMENT (R&D)
- MAINTENANCE OF EXISTING OPERATIONS

In the last five years we invested US$ 49 billion. Out of the total, US$ 28.8 billion were directed to the execution of a set of world-class projects in R&D and in enhancement of existing operations. The other US$ 20.2 billion were invested in strategic acquisitions which have allowed us to be ranked second in the nickel industry and enter the coal segment.

In addition to promoting global operations and diversifying our portfolio of assets, the investment cycle combined with productivity gains generated aggregate production at the annual average rate of 11.2% between 2004 and 2008.

The total approved investment budget for 2009 is US$ 9 billion, according to our press release disclosed in May, 2009.

Financial strength

Vale's financial position is anchored in strong cash generation, considerable available cash, medium- and long-term credit lines, and low-risk indebtedness – with low cost, high interest coverage ratios, and long maturity date. On December 31, 2008, our total debt was US$ 18.2 billion, with average maturity of 9.28 years and average cost of 5.8% a year. The debt amortization forecast for 2009 was only US$ 322 million.

Our net debt at the end of 2008 was US$ 5.6 billion against US$ 18.0 billion at the end of 2007.

On December 31, 2008, our cash position totaled US$ 12.6 billion, including US$ 2.3 billion in investments in low-risk fixed income assets, with maturity between 91 and 360 days.

Capital Market

The intensification of the financial crisis in the fourth quarter 2008 caused a sudden, substantial rise in the volatility of stock prices determined by intense devaluation. In spite of that, Vale kept its leadership position in the creation of value to shareholders among the large diversified mining companies, with total return to shareholders of 23.1% a year, in US dollars, during the last five years. In 2008, distribution of dividends reached US$ 2.8 billion, 52% above the US$ 1.9 billion paid to shareholders in the previous year.

Mineral research

As part of our growth strategy, we developed a program for mineral research with undertakings in 22 countries around the world. Prospecting chiefly includes copper, manganese ore, iron ore, nickel, bauxite, phosphate, potassium, coal, uranium, diamond and platinum group metals. In those projects, Vale operates both with its own teams and in partnership with other companies.

PRODUCTION (USGAAP)

Production volume in thousand metric tons (unless otherwise stated)	2008
Iron Ore	293,374
Pellets	34,252
Manganese	2,383
Ferroalloys	475
Nickel	275
Copper	312
Bauxite	4,403
Alumina	5,028
Aluminum	543
Metallurgical Coal	2,808
Thermal Coal	1,286
Potassium	607
Kaolin	1,129
Cobalt (tons)	2,828
Platinum (thousand troy ounces)	166
Palladium (thousand troy ounces)	231
Gold (thousand troy ounces)	85
Silver (thousand troy ounces)	2,308

*For additional information on our performance, please read Form 20-F available at **www.vale.com.***

The sustainability conducting wire

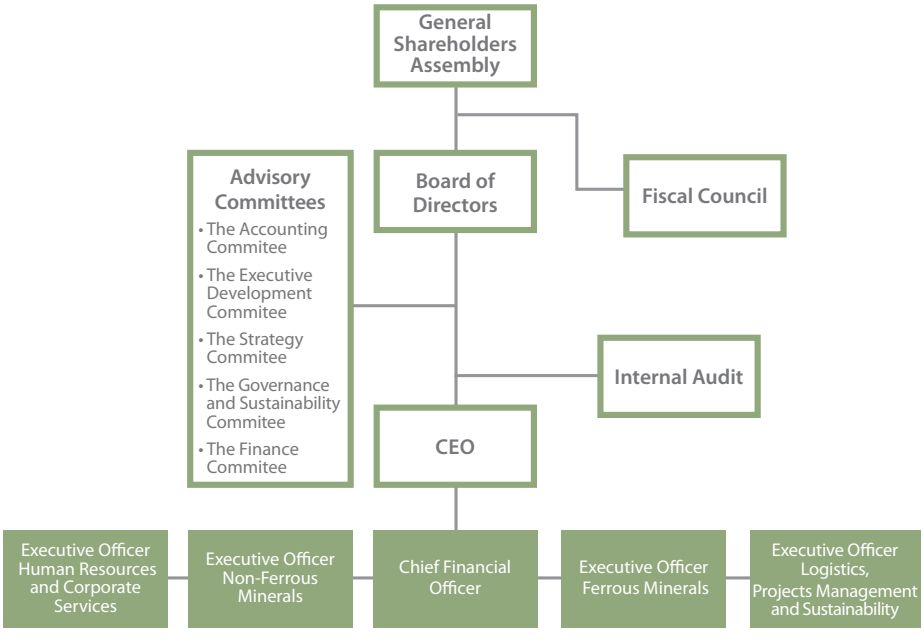
Our corporate governance is structured to meet global demands and promote our values

As from 2008, Vale has a specific framework for preparing and evaluating global corporate documents such as rules, policies and guidelines. The Global Assessment Committee is comprised of multidisciplinary representatives of Vale and subsidiaries (including international) to evaluate normative instruments taking into consideration legal and cultural aspects as well as the diversity of the regions where we operate.

Among the global documents currently undergoing assessment process disclosed in 2009 are Vale's Sustainable Development Policy, the Empowerment Policy, and Instructions for Management of Credit Risk, Market Risk and Operational Risk. Our Code of Ethical Conduct was also submitted to the globalization process and was approved by our Board of Directors in 2006.

The documents are assessed and approved by our Board of Directors, supported by the Governance and Sustainability Committee when these topics are involved. The Committee objectives are to evaluate our corporate governance practices and recommend improvements to the Code of Ethical Conduct and our management system in order to avoid conflicts of interest between Vale and its shareholders or management.

GOVERNANCE FRAMEWORK (JUNE 2009)



Board of Directors – sets general guidelines and policies for our business and analyzes plans and projects proposed by our executive officers, monitoring their implementation.

It consists of eleven members and eleven alternates, elected at a General Shareholders' Meeting, for two-year terms. Nine of our directors are appointed by our controlling shareholder, one is an independent member with no ties to the controlling group, and one is elected by our employees. Through the General Shareholders' Meeting – held once a year – minority holders can raise issues on the subjects in the agenda.

Non-controlling shareholders holding common shares representing at least 15% of our voting capital, and preferred shares representing at least 10% of our total share capital, have the right to appoint each one member and an alternate to our Board of Directors. If no group of common or preferred shareholders meets the thresholds described above, shareholders holding preferred or common shares representing at least 10% of our total share capital are entitled to combine their holdings to appoint one member and an alternate to our Board of Directors.

The compensation of Board members is a fixed amount. The global and annual director and officer compensation is determined at the General Shareholders' Meeting, taking into account factors ranging from attributes, experience and skills, professional reputation and market practices. The Board of Directors determines the distribution of such compensation among the directors, executive officers, and members of Advisory Committees. The Board is not submitted to a formal self-evaluation process.

The members of the Board of Directors have recognized reputations in the areas of finance and capital market, corporate governance, mining activities, mining business, and sustainability. Sérgio Ricardo Silva Rosa, Chairman of the Board, holds no position as executive officer at the company.

Permanent Fiscal Council – consisting of three to five independent members (and same number of alternates), under Brazilian corporate law, the Permanent Fiscal Council monitors Vale's management's activities and reviews the company's financial statements, reporting its findings to the shareholders. It is also empowered to perform the role of Audit Committee according to the Sarbanes-Oxley Act, as part of the U.S. capital market applicable laws.

Holders of preferred shares, as well as minority holders of common shares comprising at least 10% of the common shares outstanding may also elect one member of the Permanent Fiscal Council and the respective alternate. None of the members of the Fiscal Council may be a member of the Board of Directors or an executive officer, as per independence criteria determined by the Brazilian law.

Executive Officers – implement the general policies and guidelines determined by the Board of Directors, prepare plans and projects, and are responsible for the company's operational and financial performance.

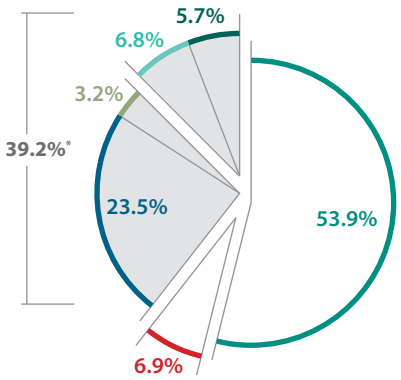
They are appointed by the Chief Executive Officer and approved by the Board of Directors. In addition to fixed compensation, our executive officers are also eligible for bonuses and incentive payments, according to the fulfillment of individual and collective targets related to their performance in economic-financial, technical-operational and sustainability aspects including health, safety and environmental indicators and targets.

The Vale Code of Ethical Conduct aims to guide the activities of employees, customers, suppliers and other stakeholders.

Shareholding Structure

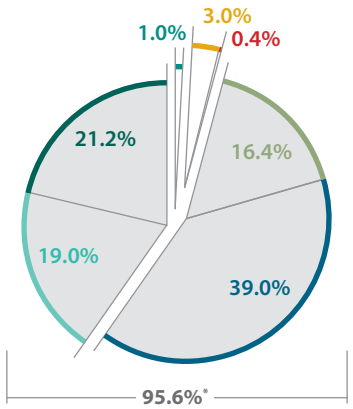
As of April 30, 2009

Common Shares (ON)



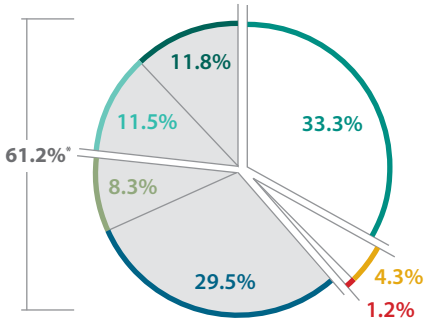
VALEPAR	53.9%
BRAZILIAN GOVERNMENT	6.9%
BNDESPar	6.9%
FREE-FLOAT *	39.2%
Non-Brazilian Investors	26.7%
NYSE ADR	23.5%
Bovespa	3.2%
Brazilian Investors	12.5%
Institutional investors	6.8%
Retail	5.7%

Preferred Capital (PNA)



VALEPAR	1.0%
BRAZILIAN GOVERNMENT	3.4%
National Treasury	3.0%
BNDESPar	0.4%
FREE-FLOAT *	95.6%
Non-Brazilian Investors	55.4%
NYSE ADR	39.0%
Bovespa	16.4%
Brazilian Investors	40.2%
Institutional investors	19.0%
Retail	21.2%

Total Capital



VALEPAR	33.3%
BRAZILIAN GOVERNMENT	5.5%
National Treasury	4.3%
BNDESPar	1.2%
FREE-FLOAT *	61.2%
Non-Brazilian Investors	37.9%
NYSE ADR	29.5%
Bovespa	8.3%
Brazilian Investors	23.3%
Institutional investors	11.5%
Retail	11.8%

* Free-Float: shares traded at Bovespa, Nyse, Euronext and Latibex stock exchanges, over the total of outstanding stock (total stock minus treasury stock).
For additional information on Vale's ownership structure, please refer to Form 20-F, at www.vale.com.

Our Vision

Our vision is to be the largest mining company in the world, and to surpass established standards of excellence in research, development, project implementation and business operations.

Our Mission

Our mission is to transform mineral resources into prosperity and sustainable development.

For the company's **shareholders**, Vale aims to provide a total return greater than the market average in the segments where the company operates.

For the company's **customers**, Vale aims to provide superior minerals, reliability and value, based on constant innovation and development.

For the company's **employees**, Vale aims to provide an ethical, transparent and challenging work environment that offers opportunities and engenders pride in the company, by following a competitive merit-based compensation system.

For the company's **suppliers**, through the company's long-term vision and willingness to enter into win-win partnerships, Vale aims to provide a continuous supply of quality goods and services at a competitive cost.

For the **communities** and countries where the company operates, through our ethical and respectful operations, Vale aims to ensure that its presence makes a positive contribution towards sustainable development.

For all **countries where the company operates**, Vales aims to improve the populations' standard of living and boost development through the generation of employment opportunities.

Our Values

Ethics and Transparency – Our behavior as an organization is characterized by behaving ethically and with integrity. We abide by the laws and moral principles established and accepted by society, and clearly communicate our policies and results.

Excellence in Performance – We are committed to the continuous improvement of our processes through the use of industry best practice peformance indicators. We promote a high-performance culture to ensure that we develop and sustain lasting competitive advantages.

Entrepreneurship – Our determined mindset is the heart of our organization. We are unrelenting in our constant search for new opportunities and innovative solutions in the face of shifting challenges and needs, thus ensuring the successful execution of strategies that contribute to Vale's growth.

Economic, Social and Environmental Responsibility – We acknowledge the need to promote development while ensuring sustainability and environmental responsibility.

Prioritizing Life and Safety – Safety is always on our mind. People are more important than material goods. For Vale, the lives, safety and health of our employees, customers and communities always come first.

Respect for Diversity – We acknowledge one another as equals, and respect our differences. We recognize differences as opportunities for integration, growth and as a competitive advantage.

Proud to Be Vale – Our pride in our company is the result of all our values. We behave as stewards of our business in the relentless quest to achieve our defined goals. We share and celebrate the fruits of our labor. We are proud to build something that will make a difference. This is why we are proud to be Vale.

TRANSPARENT RELATIONS

We seek to establish an ongoing dialogue with our stakeholders and take into consideration their opinions in our decision-making. As a company with different kinds of businesses, which operates in a number of geographies, we are challenged to hone our skills in listening to the views of stakeholders in different cultures as well as to communicate with them the way we do business. To support this process, and strengthen mutual understanding we establish a number of channels for communication and exchange of information, which meet the needs of our diverse range of stakeholders.

Public Policies

Around the world, mining is a heavily regulated industry. This leads Vale to maintain an ongoing dialogue with authorities at several government levels in the countries where it operates. We interact to ensure that our views are understood and considered in public policymaking.

Vale participates in domestic and international entities and associations, aimed at the development of norms and standards related to our industry. We endeavor to contribute not only to optimize the regulation of our activities, but also to propagate the best practices in our industry.

Since 2007, we have been a signatory of the United Nations (UN) Global Compact, aimed at strengthening corporate ethical values. Since 2006, we have been a member of the International Council on Mining & Metals (ICMM), focused on the sector's sustainable development and respect for human rights.

Through the Global Compact, we are also aligned with the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention against Corruption.

In addition, we are part of the Global Business Coalition on HIV/Aids, Tuberculosis and Malaria, an organization mobilizing resources in the treatment and prevention of these diseases.

Vale's relations with government authorities and with organizations and entities representing civil society are guided by our Code of Ethical Conduct and our company's vision, mission and values. We always seek constructive dialogue in an attempt to reach a consensus with those engaged in sustainable development policymaking and the mining sector. Our relationships are built upon transparency and trust. We seek to work together toward achieving clear objectives, and endorse a sound, well-informed approach to developing effective public policies.

Throughout 2008, Vale disseminated guidelines describing our position on public policy development. Specific training on Vale's Government Relations policies was delivered to approximately 50 employees in management positions at Vale who might interact with government authorities.

Target audience	Dialogue channels
General public	Vale Sustainability Report. Reporting Channel (described on our website). Surveys: reputation, image and opinion.
Shareholders, debenture holders and investors	Form 20-F reports, press releases, material facts, General Shareholders' Meetings minutes, Meeting with Investors and Quarterly Financial Report (ITR), Annual Information Report (IAN), published by the Securities Commission website (www.cvm.gov.br), and meetings with investors. Also available: email rio@vale.com and Investor Relations telephone line 55-21-3814-4540.
Customers	Campaigns, tours and meetings at Vale's operations.
Employees	Internal publications, Vale portal (intranet), organizational climate polls and surveys for reputation, image and opinion.
Suppliers	Tours and meetings at Vale's operations, interchange programs and structured meetings.
Communities	Socioeconomic diagnoses, public hearings, consultation meetings prior to project development, interviews and focal groups.
Governments and civil society	Participation in associations and entities and socioeconomic diagnoses.

Vale seeks to maintain impartiality in political activities and is guided by the regulatory framework of each country where it operates. Employees, as individuals and citizens, are free to participate in such activities provided their own personal opinions are clearly separated from the company's points of view.

In addition to the entities listed below – mostly focused on sustainable development with our voluntary participation – Vale is part of more than 200 sector, industry and trade associations.

Memberships in organizations and associations
Brazilian Foundation for Sustainable Development (FBDS)
Brazilian Mining Institute (Ibram)
Business for Social Responsibility (BSR)
CCI (Chambre de Commerce et d'Industrie)
Centre National de Recherche Technologique Nickel et son Environnement
Cobalt Development Institute
Ethos Institute – Business and Social Responsibility
European Association of Metals (Eurometaux)
Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria (GBC)
United Nations Global Compact
International Council on Mining & Metals (ICMM)
International Emission Trading Association (IETA)
Ontario Mining Association (OMA)
Reputation Institute
The Mining Association of Canada (MAC)
International Aluminium Institute (IAI)
The Nickel Institute
World Business Council for Sustainable Development (WBCSD)
World Economic Forum
Vale Columbia Center

INSTITUTIONAL RELATIONSHIP TOOLS

To disseminate corporate relationship guidelines, based on our Code of Ethical Conduct, in 2008 we promoted training for our internal stakeholders on our *Institutional Relationship Guide*, launched in the previous year. In partnership with Valer[1], we held ten events attended by about 300 people, for operations in Brazil, Chile, Mozambique and Peru.

We also released a *Guide for Engagement with NGOs*, which articulates how our company wishes to interact with non-governmental organizations around the world. Our goal is to ensure that our dialogue with these groups leads to positive partnerships and useful results. To date, 50 Vale employees in Brazil, Peru and Mozambique have received training related to this guide.

Another material action in 2008 was the start of implementation of our Issues Management methodology, called Integra as from 2009. It is aimed at improving the management of critical topics and institutional relationships at Vale. The work is under implementation in Brazil, Mozambique, Peru and Mongolia. It is expected to contribute to development of an updated, structured institutional corporate memory.

We are also reviewing, our *Manual for Management of Corporate Crises* which details the principles, responsibilities, processes and tools to be considered in the management of crisis situations. When finalized, we will introduce an employee training program.

1 Valer offers our employees and the communities where we operate personal and professional development activities.

ETHICS MANAGEMENT

The following Corporate Governance instruments have been adopted to ensure that we manage our business ethically:

- **Code of Ethical Conduct** – reaffirms our commitment with ethical, responsible and consistent action toward all stakeholders. The Code of Ethical Conduct shall be observed by the Board of Directors, Committees, Fiscal Council, Executive Directors, employees, interns, and all our subsidiaries and companies under operational control, as a guideline to our rules and policies. The full version of the Code is available at our website (www.vale.com).

- **Code of Ethics of the Financial Area** – Specific guidance is provided for professionals working in our financial, investor relations and controlling departments, who handle confidential information. This Code is also available at our website (www.vale.com).

- **SOX Certification** – Over the last three years, Vale has obtained certification of its transparency and good governance practices, as required under the U.S. Sarbanes-Oxley Act.

- **Reporting Channel** – As part of the SOX certification, it is directly connected to the Chairman of the Board. Vale has established this process for receipt of reports on possible irregularities in accounting and auditing issues or other violations of our Code of Ethical Conduct. Additional information available at our electronic address www.vale.com.

RISK MANAGEMENT

At Vale, our risk management processes have been established to address corporate governance needs and protect the interests of our stakeholders. We consider it crucial to balance economic development with respect for the environment, our employees and local communities. The precautionary approach is applied to the evaluation of risk processes as part of economic and financial viability, environmental studies and safety and health analyses of our employees and communities for the purpose of identifying imminent and future risks.

Efficient and effective risk management not only provides for periodic and systematic identification of risks at a point in time, but also allows changing risks to be managed. In order to attain such a major objective, ongoing processes are integrated into our daily activities, with clear definitions of responsibility.

Vale has a three-level approach to risk management: corporate, project and operational.

Corporate

At the corporate level, we analyze the following risks:

- **Market**: The assessment of market risks includes the influence of elements such as interest rates, currency and commodity prices on cash flow.

CASE

We inspire confidence

Bank Goldman Sachs, USA, listed Vale as one of the three best companies to invest in the Mining sector, in its report *GS Sustain 2008 – Global Basic Materials*, which considers also steel and chemical sectors. Analysis requisites included "ESG Performance" (environmental, social and governance), "Industry Themes" and "Cash Return". The publication of our Sustainability Report 2007 – the first based on GRI guidelines, has contributed to the positive assessment of the company by the investment bank.

In addition, in 2008 Vale was ranked 4th in Brazil and 43rd in the world in reputation. This was the result of the third annual survey conducted by the U.S. based Reputation Institute. The *Global Pulse 2008* independent study assessed the reputations of over one thousand large companies in 27 countries, with about 60 thousand respondents.

In Brazil we also received another acknowledgement. We finished first in the ranking of Brazil's most admired companies at the 11th *CartaCapital* magazine award. The prize is based on a survey conducted by TNS InterScience consultants involving over one thousand Brazilian executive officers. Those professional observers of best management practices are invited to nominate the companies thought to be most committed to ethics, quality, the country's development and social responsibility actions, among other topics.

"The award recognizes the work of all of us says Vale Chief Executive Officer Roger Agnelli, who accepted the award along with a group of Vale employees representing the main regions where our company operates. Over the last decade, Vale has been expanding and investing with persistence and discipline".

- **Credit:** Credit risk assessment includes the possibility of default by a customer or financial institution.

- **Operational:** Operational risk analysis considers the risk of potential loss as consequence of failure or inadequacy in internal processes, people, systems and/or external events. Operational risk management has several dimensions, among them: health and safety, environment, institutional and social relations, corporate and reputational safety. Risk management for health, safety, environment and sustainability is applied right from the conceptual project or acquisition of new facilities or activities, up to closure and decommissioning (disassembly or demolition) of equipment or sale.

- **Strategic:** Assesses the impact of strategic operations for Vale, such as merger and acquisition operations and sustainability trends.

Based on the analyses, potential actions to control risks are considered and adopted where justified. This may include contracting insurance coverage and hedging operations (financial operations aimed at protecting the company from adverse price movements in assets and products). During the elaboration of the annual strategic plan, we identify risks and opportunities in every business unit, which provides the basis for developing and updating corporate strategies.

Projects

We address risk management associated with capital projects through the methodology Integrated Risk Assessment and Management. The methodology provides for hazard identification and risk analysis through multidisciplinary workshops involving professionals from the areas of engineering, operations, maintenance, construction, environment, and health and safety, using external facilitators and specialists from corporate areas. In addition, a quantitative risk analysis is performed in the allocation of capital investments and lead times. The control and monitoring stage is conducted through planning workshops. Risk reassessment is applied as projects evolve.

Projects use the Front-End-Loading (FEL) methodology, developed by Independent Project Analysis (IPA). This methodology consists of a structured process for project development, which is used by a number of companies from around the world. Sustainability issues are included to allow for the continuous improvement of projects, particularly at the planning and design stage. The methodology is adopted for all projects which involve investments in excess of US$ 100 million.

Operational

At the operational level, we constantly monitor risks. During the period when facilities are under production stage, risk analyses are periodically reviewed. The task is accomplished by multidisciplinary local teams led by the areas responsible for operational risk management, among them safety and environment. The Operational Risk Management (ORM) model aims at assessing and mitigating risks which might generate financial, health and safety, environmental, society or reputational impacts.

In environmental risk management, for instance, we act to prevent occurrences involving hazardous substances, to keep operations in compliance with all existing laws, and to assess the impact of our operations on climate change. In 2008, we approved the Instruction Analysis and Management of Risks to Health, Safety and Environment, allowing for an integrated overview of the risks, involving also operational, social and corporate reputation factors (more on page 40).

Regarding social risks, it is our understanding that having a comprehensive knowledge of the areas where we operate is the basis for management. From information collected in socio-economic surveys, we act jointly with the community to maximize development opportunities and reduce risks associated with our operations (additional information in Local Development, page 60).

Anticipation and prevention of failures

According to our Sustainable Development Policy, we act preventively, aiming to avoid failures in the process, environmental pollution, labor-related incidents, occupational risks concerning health and safety, and reduce negative social and environmental impacts. We apply in all capital investments and operations a risk, impact and opportunity analysis of social, economic and environmental aspects. We support and adopt technologies – at compatible costs – that maximize eco-efficiency, safety and the sustainability of production processes, commercialized products and transportation modals.

ANTI-CORRUPTION

We act in accordance with the market's leading practices, by preventing losses and investigating cases possibly associated with fraud, deviations and illicit acts.

Alleged corruption cases are treated seriously and dealt with according to law. Individuals who are proven to be involved in corrupt behavior are deemed to be responsible and punished, through dismissal, contract termination and judicial notification.

The figures refer to measures taken specifically in cases of fraud against the company. Other cases of deviations from ethical conduct were not considered. None of these cases refer to irregularities or improprieties in our company's accounting records or internal controls. No cases of corruption (active or passive) involving public servants or government representatives were reported in the period.

The increase in identified corruption cases is considered to be the result of better analysis mechanisms adopted by Vale in the last few years[2].

In addition to our Code of Ethical Conduct and the Reporting Channel, we implemented an intelligence system that allows for standardization, sharing and strategic analysis of incidents. We have also created a process to assess and monitor suppliers, to detect their involvement in corrupt practices. Our Code of Ethical Conduct applies also to our subsidiaries and companies under our control. It establishes administrative measures to be enforced in cases of noncompliance (more on the Code of Ethical Conduct on page 25).

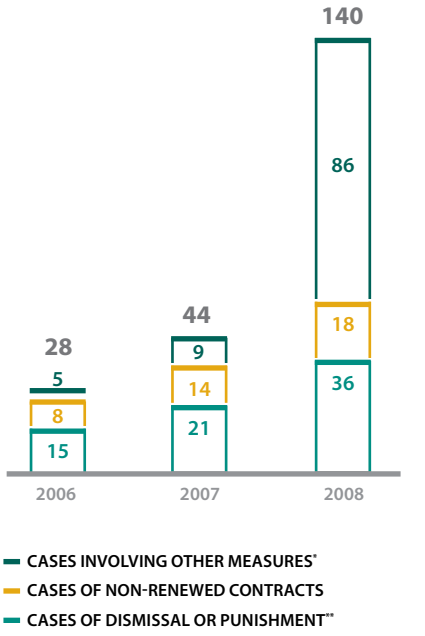
In 2008, 15.6% of managers and 1.3% of other employees received anti-corruption training. As examples of activities we should mention the performance, in the Brazilian operations, of awareness-raising events including topics such as fraud, security processes and risk management, emphasizing that Vale deems deviations and illicit acts to be intolerable. In some of our international operations, such as the Acton Refinery in Vale Inco Europe, Vale Inco Japan, Vale Inco Nickel Materials, Jinco Non Ferrous Metals and Vale Manganése France, there is a formal training process under way for all employees, based on the Code of Ethical Conduct and the Supplier Norm, including ethical aspects of business relations. However, the hand in of this code was not computed as an anti-corruption training.

In 2009, new anti-corruption procedures will be developed with the publication of a Code of Conduct for Suppliers[3] and with expanded training activities for employees. In addition, we are developing a guide to verify occurrences which may involve fraud and corruption in our investment projects.

Regarding assessment of corruption risks, in 2008 we employed a methodology based on the analysis of historical records of recurring situations connected to fraud, especially in the supply chain. From that analysis, we elected five projects in our own units in Brazil which were significantly represented in the volume of Vale investments, and we surveyed the involved suppliers. We evaluated the procurement processes and visited each one of them to verify whether noncompliance had occurred.

Albras, in turn, an aluminum manufacturer controlled by Vale, applied the auditing methodology recommended by the Committee of Sponsoring Organizations of the Treadway Commission (Coso - a non-profit entity created in the USA to prevent accounting frauds) in risk analyses that they performed. The Coso recommendations are recognized as an international model of good practices.

Incidents of corruption



* Examples of other measures taken: presentations to managers and directors of involved areas; notifications, disallowances and fines imposed, with the support of the Legal Department; vulnerability and risk analyses; and action plans were developed jointly with involved areas to mitigate risks and potential losses.

** Number of people involved in corruption cases dismissed/punished: in 2006, 58; in 2007, 113; and in 2008, 70.

2 The companies Vale Manganês, Urucum Mineração, CPBS, Onça Puma, Salobo, FCA, Hispanobras, Itabrasco, Nibrasco and Kobrasco already have anti-corruption routines and measures consistent with those adopted at Vale's own units. There is a considerable effort to integrate other companies to those routines.

3 Published in July 2009.

We provide an ethical, transparent workplace to our employees.

For 2009, we have identified the need to develop a global risk management model to assess losses in investment projects. The model is to encompass revised and enhanced policies, the development of a risk matrix, performance management, interaction with other areas within Vale, for improving controls and processes. We will start its application at our projects in Peru, Mozambique and Colombia.

LEGAL COMPLIANCE

In 2008, Vale recorded the existence of 191 legal processes, being 90 judicial and 101 relevant administrative processes[4]. In the period, there was no payment of fines or imposition of non-monetary sanctions[5].

Civil

Vale is cited in 69 lawsuits of no defined economic value, challenging the legality of the company's privatization process, which took place in 1997. All actions are awaiting final judicial decision. We do not believe that such actions will affect the privatization process or produce any negative effect whatsoever on the company.

Regulatory

We have one lawsuit of undefined economic value, which is aimed at invalidating the legal authorization that allows Vale and other companies to operate the Port of Praia Mole, in the Brazilian state of Espírito Santo. The company obtained a favorable judicial decision. The final decision is yet to receive confirmation by a superior court.

Tax

Vale challenged the incidence of Income Tax and Social Contribution on Net Profit over profits of affiliated and controlled companies abroad, and has filed a lawsuit and two administrative processes. The company has also challenged what it considers to be an improper collection of CFEM (Financial Compensation for Mineral Exploration) in 97 administrative processes and 16 lawsuits.

Labor

The company is challenging the collection of a FGTS (Government Severance Indemnity Fund) deposit through a debit note, which resulted in two administrative notifications on Vale. The company also faces a lawsuit of no defined economic value, involving our potash exploration underground mine in Sergipe.

In Australia, the Integra Coal and Broadlea Coal business units are involved in judicial actions filed by the New South Wales's Primary Industries Department and Queensland's Mines and Energy Department regarding work related incidents involving employees. In both cases, decisions on possible monetary sanctions are still pending.

Anti-competitive behavior

The process in which the Administrative Council for Economic Defense (Cade), the Brazilian anti-trust authority, approved the acquisitions by Vale of the mining companies Mineração Socoimex S.A., Mineração Trindade Samitri S.A., Ferteco Mineração S.A., Belém Administrações e Participações Ltda. and Caemi Mineração e Metalurgia S.A. was concluded, as well as the process of uncrossing the ownerships of Vale and Companhia Siderúrgica Nacional.

However, the approval was conditional on either: the renouncement of preferred rights related to Casa de Pedra agreement, signed with CSN, and the merging into a single company of the equity capital Vale has, directly and indirectly, in MRS; or sell all assets of Ferteco. Vale opted for the first alternative, closing the issue.

In the other two administrative processes that are pending decision, anti-competitive behavior is alleged regarding our logistics businesses. One of these involves Companhia Portuária da Baía de Sepetiba (CPBS), a subsidiary of Vale, for alleged refusal to ship third-party iron ore minerals. The other process involves railroad concessions granted directly to Vale (Estrada de Ferro Vitória-Minas and Estrada de Ferro Carajás) and its subsidiary FCA, for alleged abusive price increase for users. It is our understanding that the allegations in both cases are without foundation.

4 Processes are considered as relevant based on the following criteria: a) due to the monetary value, including indemnity claims and fines; b) due to topics of interest to the company or the public at large, regardless of monetary value; c) those resulting from non-monetary sanctions.

5 Vale will continue to include in its report existing cases which match materiality criteria. However, and for better compliance with the scope of GRI indicator SO8, Vale will start reporting only those values representing a defined amount acknowledged as due by Vale, or already paid, in order to prevent possible distortions regarding the reality of judicial and administrative processes, which, pending final decision, have no definition or precision of values under discussion. Form 20-F presents estimated provisioned values according to accounting criteria.

Overcoming capacity

People management is in line with our business strategy and, in view of the new economic scenario, we adopted initiatives to overcome the new challenges

We are a global company and we rely on qualified professionals. We therefore seek to develop competencies and foster the talents of our employees, by offering support for educational / training activities and providing remuneration in line with job requirements, employee performance, and the job market.

At the end of 2008, due to market oscillations, our projects were reviewed and production in some units was reduced. These actions impacted on our workforce.

However, we adopted several initiatives aimed at retaining our employees. We held discussions with 15 labor unions in Brazil, where 80% of our professionals are concentrated, in order to provide leave entitlements for employees represented by those entities. The rights and entitlements of all employees to May 31, 2009 were honored according to their collective bargaining agreements.

We also promoted internal relocation of 800 employees and granted collective vacation to another 5.5 thousand employees in the Brazilian states of Mato Grosso and Minas Gerais. We offered re-qualification training courses at the National Service for Industrial Training (Senai) to 390 employees whose labor contracts were temporarily suspended. We also provided in-company training to a large number of employees.

EMPLOYABILITY

Even in the face of the global financial crisis, total direct jobs remained practically stable when compared to 2007. The number of own employees, in turn, was increased by 5.5 thousand[1].

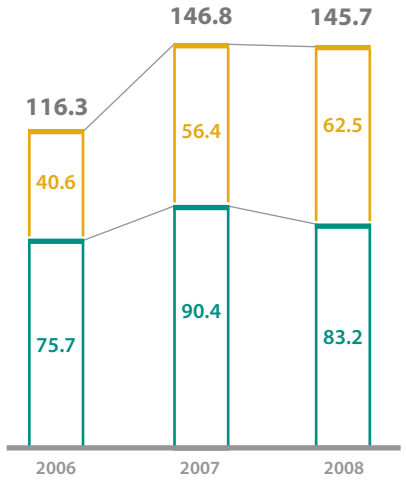
In 2008, the total number of employees (with indefinite labor contracts) and outsourced workers (contractors in permanent activities and in projects) was 145.7 thousand, 80% of whom are located in Brazil.

Besides that, Vale's workforce is composed of approximately 1,500 fixed-term contract employees, most of whom were operational apprentices in Brazil.

Our contractors were generally engaged in remodeling and expansion of new projects, maintenance, cleaning, and property security contracts, among other services provided.

Personnel

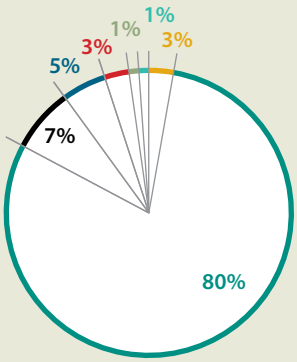
(in thousands)



- Chart does not include affiliates. Vale Australia included only in 2008. In 2007, if Vale Australia employees were included, the total number of jobs would reach 147.9 thousand, and our own employees would reach 57 thousand.
- The inclusion of Vale Inco data in 2007 accounted for an additional 13 thousand employees and 13 thousand contractors.

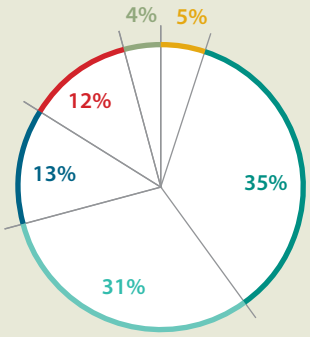
1 The variance shown in the chart beside for our own employees, between 2007 and 2008, was 6.1 thousand because the *Sustainability Report 2007* did not include Vale Australia.

Employees and contractors per country (2008)



- BRAZIL
- CANADA
- INDONESIA
- NEW CALEDONIA
- MOZAMBIQUE
- AUSTRALIA
- OTHERS

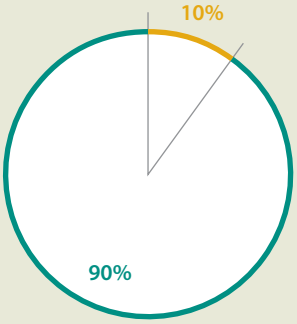
Employees and contractors per Brazilian states (2008)



- MINAS GERAIS
- PARÁ
- MARANHÃO
- ESPÍRITO SANTO
- RIO DE JANEIRO
- OTHER STATES

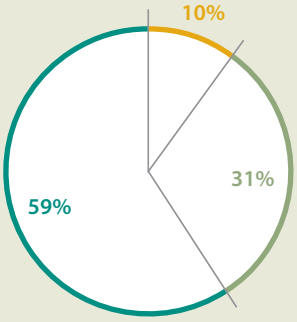
Profile of our employees

Employees per gender



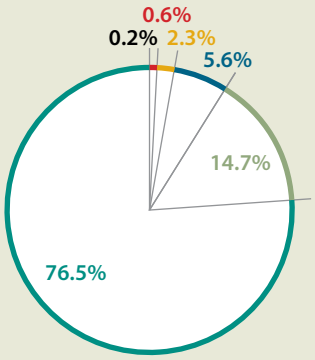
- MEN
- WOMEN

Employees per age bracket



- UNDER 30
- 30-50 YEARS
- OVER 50

Employees per category



- OPERATIONAL TECHNICIANS
- DIRECTORS
- GENERAL MANAGERS
- AREA MANAGERS AND COORDINATORS
- SUPERVISORS
- SPECIALISTS

We respect diversity

Respect for diversity is one of our Values, and is expressed in our Code of Ethical Conduct. Vale considers discrimination (based on ethnic background, origin, gender, sexual orientation, religious belief, union affiliation, political and ideological conviction, social class, disability, marital status, or age) to be intolerable.

In 2008, women represented 10% of our workforce, which is typical in our business segment. Of these, 49% held technical positions (operational and administrative) and 40% were specialists (analysts, engineers, geologists, etc.), 5% were supervisors and 4% were managers and coordinators.

The proportion of women at Vale either remained stable or increased in most employment categories. The only significant reduction was due to the inclusion of figures from Vale Inco that, among specialists, had a lower percentage of women. The opposite was the case with supervisors. The percentage increase in women in management positions resulted from the creation of new directing positions, which were filled by women.

Vale's highest management bodies – Executive Officers, Board of Directors and Fiscal Council[1] – consist of 34 people, including our chief executive officer (32 men and two women). Fifteen members are in the 30-50 age bracket, and 19 are 50 and over.

In accordance with our remuneration policy and Code of Ethical Conduct, there is no difference between the salaries of men and women. The chart beside shows this consistent trend over the years.

About 60% of Vale employees are in the 30 to 50 age bracket. In leadership levels (supervisors, area managers, coordinators, general managers and directors) the proportion is 73%.

In Brazil, Vale monitors possible cases of discrimination using tools such as "Alô RH" ("Hello HR"), responding to concerns raised by employees, and the Reporting Channel.

1 Position in May 2009.

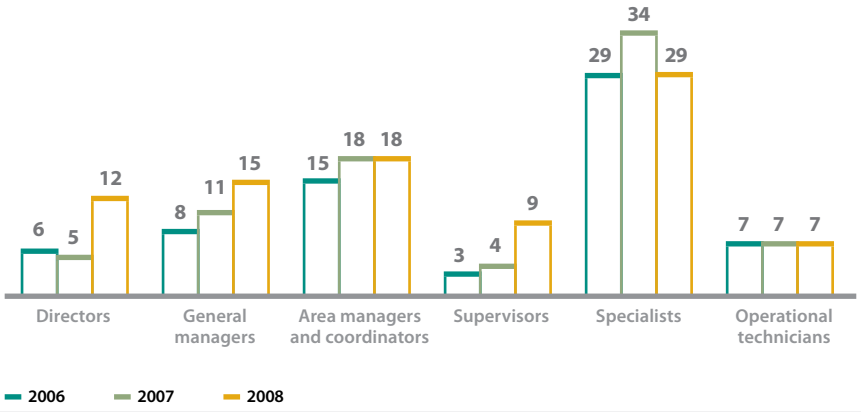
GLOBAL PRACTICES

In 2008 we completed the process of globalizing our remuneration performance, career development and succession practices. Guidelines already adopted at Brazilian operations and subsidiaries have been adopted by Vale Inco. Work that started in 2007 contributed to a guarantee of internal equity.

In partnership with international subsidiaries, we also progressed with strategic planning for the Human Resources area during 2008, seeking to anticipate demands for development of competencies and personnel hiring.

Ratio of women by employee category

%



Includes data from Vale Inco and Vale Australia as from 2008. Own employees, as per this indicator (LA13), amount to 96% (2008) of the total reported employees (LA1). Projects are not included.

Ratio of basic salary of men to women by employee category*

Own employees, as per this indicator (LA14) amount to 86% (2006), 75% (2007) and 98% (2008) of the total reported employees (LA1).

Strategic planning is important at both the start and closure of operations. At the start of new activities, it contributes to identification of labor qualification needs at the global level. At the closure of projects, it facilitates the transfer of skilled workers.

REMUNERATION AND PERFORMANCE

The remuneration policy at Vale is based on technical criteria that consider market specificities and employee qualifications.

As in previous years, in 2008 we conducted comparative surveys between our remuneration and that of the market in the different regions where we operate. We offer our employees' salaries equal to or higher than the minimum legal requirement, as determined in each location.

The remuneration package for employees includes payment of variable remuneration, based on performance results at company, departmental and individual levels. Targets are defined considering major strategic objectives as established for each year, measuring performance in economic-financial, technical-operational and sustainability (management, health & safety and environment) aspects.

At Vale managed units, operational and competency performance evaluation is carried out according to the Vale 'Program for Participation in Results' (PPR), defining annual targets aligned with the company's strategies. The process is characterized by interaction between employees and their managers, supported by computer software into which relevant information is entered.

In 2008, approximately 88% of Vale's employees received performance review. The small reduction against 2007 resulted from a smaller percentage of evaluation in some controlled companies. At Valesul, performance reviews were not conducted, and at Alunorte the evaluation process involved most employees (some employees were not evaluated as they were new in the job).

In spite of the fact that Vale Australia adopts performance evaluation, limited records allowed us to consider only 41% of the evaluations performed.

At Vale Inco operations, in Canada, where workers associated with labor unions are typically exempt from performance evaluation, the percentage was 35%, practically unchanged from the previous year.

In 2008 we standardized the performance evaluation process and we plan to implement a global system to record and follow up the information provided by 2010.

GRANTED BENEFITS

Benefits offered to the majority of employees at Vale include a private pension plan, health plan, and group life insurance.

We also offer commuting assistance, educational assistance, Employee Assistance Plan (EAP), workplace meals and/or meal tickets to a significant number of Vale employees (average of 85%).

In 2008, we expanded our EAP to additional Vale subsidiaries. It is our intention to make the program, which offers psychosocial support to employees and their dependents, universal across our operations.

We also made progress with our program to standardize our governing documents and guidelines at our Brazilian operations. In 2008, we updated documents related to health assistance to interns and special benefits for employees based in remote locations (housing and vacation tickets).

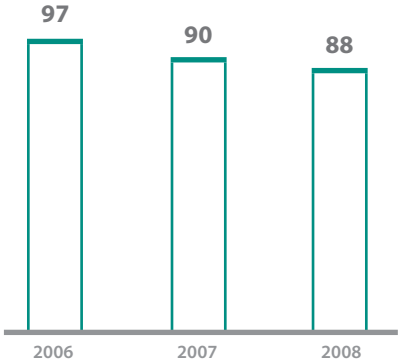
Age bracket per functional category

	Under 30	30-50 years	Over 50
Directors	0%	70%	30%
General managers	0%	72%	28%
Area managers and coordinators	4%	75%	21%
Supervisors	11%	72%	17%
Specialists	24%	62%	14%
Operational technicians	35%	56%	8%

In Brazil, Vale has agreements (TACs – Terms for Conduct Adjustment) signed with the Public Attorney's Office, for training and development of people with disabilities. In 2009, specific programs on the topic are being conducted at our own units in Brazil.

Percentage of employees receiving performance reviews

%



Own employees, as per this indicator (LA12), amount to 86% (2006), 95% (2007) and 96% (2008) of the total reported employees (LA1). Projects are not included.

As a rule, there are no differences at Vale between benefits granted to full-time and part-time or temporary employees. Exceptions are in some units of Vale Inco in regard to life insurance coverage, disability coverage, private pension plan and health plan.

Vale is now offering the Program in Support to Critical Incident, to all managed units in Brazil. A critical incident is any situation experienced by employees in which they suffer strong emotional and/or psychological reactions possibly interfering with their ability to deal with the situation, both at the time of the incident and afterwards.

In Brazil, through Valer – Vale Education, we developed the Program for Retirement Planning (PPA), in partnership with the Brazilian Micro and Small-Business Support Service (Sebrae). The initiative seeks to stimulate entrepreneurship based on a long-term view, reflecting our concern for employees leaving the company.

Complementary pension plan

In Brazil, Vale offers complementary pension plans, through Fundação Vale do Rio Doce de Seguridade Social (Valia), a non-profit closely-held entity, with administrative and financial autonomy. Valia serves the following companies which are part of the report scope: Vale, Urucum Mineração, Vale Manganês, FCA, CPBS, PPSA, Cadam and Valesul[2]. For additional information, please visit www.valia.com.br (available in Portuguese).

Most participants in Valia are associated with mixed plans of defined contribution with a component of defined benefit. For defined benefit the value is determined in advance with actuarial assessment regularly updated to ensure its concession. For defined contribution, its value is permanently adjusted to the resources maintained in favor of the participant[3].

The defined contribution component of the mixed plans aims to assure that the plan remains financially sustainable over time. On the other hand, the defined benefit component aims to avoid significant decrease in income in case of retirement due to disability or the provision of death pension.

2 Other companies which are not in the boundary of this report are also covered by Valia.

3 Net application result, values contributed by the participant and benefits paid by the plan.

Funds kept and maintained separately from company's resources
Plans offered by Valia in Brazil (2008)

Plan	Plan type	Participants (thousand) (1)	Coverage degree
Vale Mais, ValiaPrev and FCA (2)	Mixed (defined contribution plan with defined benefit component)	52.0	Over 100% (5)
Defined Benefit (3)	Defined Benefit	17.2	
Complementary Allowance (4)	Defined Benefit	2.1	47% with monthly contribution
Total		71.3	

(1) Includes active and assisted employees (retirees and pensioners).

(2) Employees contribute, on average, 4% of base salary (35% of plan costing). For participants migrating from Defined Benefit Plan to Vale Mais Plan, benefit was increased by 35% in 2008, with no need to raise contributions on the part of the participant.

(3) The Defined Benefit Plan is not available to new enrollments since April 30, 2000, when the Vale Mais Plan was implemented.

(4) Participants in this plan are retirees who left the company as part of the retirement incentive plan. Regarding the coverage degree, the sponsor (Vale) has contributed monthly to the plan since December 2001 with the aim of reaching liability coverage of 100% by November 2014. Monthly installment values are readjusted when necessary and the amount was US$ 9 million in December 2008.

(5) This coverage degree refers to the defined benefit amount of the mixed plan and Defined Benefit Plan.

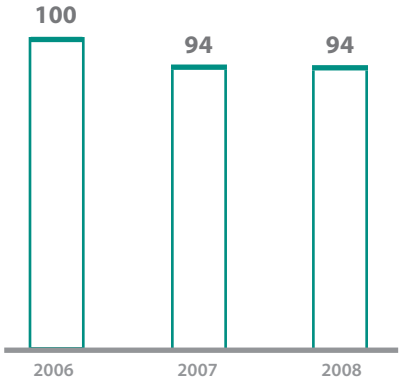
Funds kept and maintained separately from company's resources
Plans offered outside Brazil (2008) (1)

Country	Operation	Plan type	Participants (thousand) (2)	Coverage degree
Canada (3)	Ontario and Manitoba Operations	Defined Benefit	21.4	90% – 94%
Canada	Vale Inco Newfoundland and Labrador	Defined Contribution	0.3	NA
Indonesia (3)	PT Inco	Defined Benefit	3.5	Over 100%
United Kingdom	Clydach and Acton Refineries	Defined Benefit	1.4	83%
USA	Inmetco and Novamet	Defined Benefit	0.6	80%
Norway	Vale Manganese Norway	Defined Contribution	0.1	NA
Australia	Broadlea, Carborough Downs and Integra Coal	Defined Contribution	0.7	NA
Total			28.0	

(1) For those plans, in general, employees do not participate in plan costing.
(2) Includes active and assisted employees (retirees and pensioners).
(3) Coverage degree refers to data from last actuarial study as of December 31, 2007.

Employees covered by collective bargaining agreements

%



Own employees, as per this indicator (LA4), amount to 97% (2006), 97% (2007) and 98% (2008) of the total reported employees (LA1).

The companies Albras and Alunorte offer plans from an open entity, defined contribution. Vale Manganèse France does not offer a complementary retirement plan as this kind of benefit is warranted by the French government.

Plans whose obligations are met directly by the company's general resources are offered by some Vale Inco subsidiaries. These are defined benefit plans, and most of them are supplemental to funds kept and maintained separately from the company's resources or serve only a specific group of former employees[4]. In 2008, the estimated value of these obligations reached approximately US$ 85 million.

CONFIDENCE, A KEYWORD

At Vale, 94% of our employees are covered by collective bargaining agreements that respect, and in some cases exceed, legal requirements.

In Brazil, Vale adopted, in 2007, a two-year collective agreement, covering our own employees, regardless of their association with professional labor entities.

In international operations, such as Canada, Australia, Peru and Norway, labor unions represent only those employees who choose to be a member. In 2008, at Vale Inco, 78% of employees were covered by collective bargaining agreements (in 2007, the percentage was 73%).

At Vale Australia, 56% of the employees are covered by collective labor agreements. Due to changes in local legislation, existing individual agreements are now being replaced by collective bargaining.

As determined by our Code of Ethical Conduct, discrimination due to labor association membership is not tolerated. The dialogue with legitimate representatives of our employees, being unions or other labor associations, is the basis that guides our labor bargaining. Due to this approach, we have no records of sanctions or warning issued by surveillance agencies resulting from occurrences related to freedom of association and collective bargaining.

4 In those cases, employees do not participate in the fund defrayal.

TURNOVER

We have a quarterly monitoring system to support people management, with input of indicators such as employee turnover, retention and internal relocation of resources.

In 2008, based on this monitoring, the global turnover rate at Vale was 8%, resulting from retirements and dismissals. The result is consistent with the rates reported by other companies in the mining sector.

The age bracket above 50 years presents the highest turnover rate (19%). The turnover rate for women (12%) is higher than that of men (8%), and they represent only 15% of dismissed employees and 10% of the total workforce.

The relatively high turnover rates observed in China (32%) and Australia (18%) were mostly due to the high rate of employee resignations due to local market characteristics.

VALER, EDUCATION THAT TRANSFORMS

Education is a major component of Vale's commitment to social responsibility and sustainable development. Since 2003, the Department of Education, Valer – Vale Education (previously Corporate University), has planned for and, through regional Human Resources areas, implemented our people development strategy, both inside and outside the organization's horizons.

Through programs conceived and developed by Valer, we offer our employees and the communities where we operate, personal and professional development activities in the areas of basic education, technical skills, managerial development, corporate citizenship, and culture and arts.

The educational activities offered by Valer, and implemented by our regional HR areas in partnership with educational institutions in Brazil and abroad, are developed for three different audiences: operational technicians, specialists and leaders.

In 2008, for technicians alone, over 300 activities were offered. In this area, training focused on the improvement of processes and practices adopted at the mines, ports and railways operated by Vale, such as Post-Graduation in Port, Specialization in Railway Transportation and in Mineral Processing, which are pioneering courses in Brazil.

The number of training hours intended for operational personnel was reduced in 2008, the result of decreased demand from the previous year as well as the deceleration of Vale's growth pace in the last quarter of the year as the global economic crisis took hold.

Regarding the qualification of specialists and leaders, there was an increase in the number of training hours to ensure continuity in the development of strategic competencies for the organization.

At the end of 2008, Valer had 25 physical units in Brazil and one abroad, in China. The plan for expansion of international units, started in 2007, was suspended due to the global economic scenario. Nevertheless, several educational activities were globally implemented during the year.

Turnover per gender - 2008

	Total
Overall turnover	8.0%
Turnover Men	7.6%
Turnover Women	11.7%

Turnover per age bracket - 2008

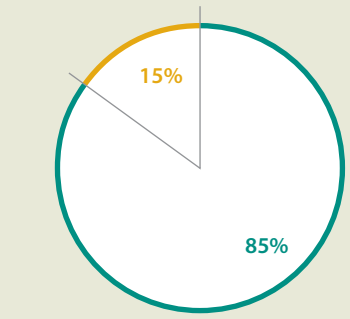
	Total
Under 30	7.0%
30-50 years	6.7%
Over 50	19.0%

Turnover per region - 2008

Country	Total
Brazil	8%
Canada	5%
Indonesia	7%
Australia	18%
China	32%
Others	7%

Own employees, as per this indicator (LA2), amount to 96% (2008) of the total reported employees (LA1). Projects are not included.

Dismissal per gender



WOMEN
MEN

CASE

Diversified workforce

As part of the development of the Moatize Coal Project in Mozambique, Vale identified the need to qualify local residents to operate the mine and associated activities. However, the need for qualified personnel to support broader regional development was also recognized.

In 2008, Vale developed courses and training programs to benefit about 600 people in the areas of carpentry, metalworking, tailoring, electrical trades, as well as civil construction, fashion and clothing manufacture.

In April 2009, the Program for Professional Training was implemented by Valer in Mozambique, which will qualify 110 professionals in Mining Operation and Welding, in Moatize. For the first time abroad, the program will be modeled after the Brazilian program which, in 2008, benefited 1.5 thousand young adults.

Training hours

- As Vale still does not have a global management system encompassing all training modes, considered information is managerial and was not part of the audit scope.
- In some units the reported training hours offered per profile was based on financial data, as there was not a system to manage/monitor offers intended for education.
- Own employees, as per this indicator (LA10), amount to 83% (2006), 93% (2007) and 95% (2008) of the total reported employees (LA1). Projects are not included.

Forming global leaders

Leadership development training offered by Valer is implemented in partnership with schools that have a global reputation in business management, among them IMD (International Institute for Management Development) and MIT (Massachusetts Institute of Technology). Training programs vary from language fluency to management supporting activities such as social dialogue, media attention, and relations with the public sector and NGOs. A milestone in 2008 was the 2nd Forum for Vale Leaders, in Rio de Janeiro, gathering together 150 executives from all regions of the world and businesses types to discuss topics such as identity, organizational culture and sustainability.

Bases for the future

Valer provides education initiatives for citizenship aimed at developing competencies extending beyond the technical dimension. Among these initiatives are the following programs: Environmental Attitude, consisting of dialogues on sustainability; Retirement Preparation Program, an initiative supporting employees in transition and planning for retirement[5]; and Educational Formation, aimed at reducing the educational deficit among adults, and providing employees and contractors with the opportunity to attend Elementary and Secondary school classes. In 2008, 552 people participated in the education for citizenship program, held in partnership with the Roberto Marinho Foundation, Sesi (Social Service for Industry) and Bradesco Foundation.

The commitment to individual development has also led Valer to establish the Culture and Arts Pillar in 2008, offering cultural and artistic activities to employees, their families and partnering companies.

5 In addition, we have other programs for employee outplacement and assistance in the transition to retirement (including pre-retirement planning) in different Vale companies.

Education and work

To ensure that more of our stakeholders have access to education opportunities, Valer has developed theoretical and hands-on mining skills training programs for members of our communities. In 2008, over 4,500 people attended programs with this focus, 1,000 of whom were hired by Vale. By offering access to learning and potential employment and income, we demonstrate our commitment to our communities and, as importantly, foster local development.

Strategic partnerships

The relationship between Vale and the academic community is essential for technological innovation and evolution of the mining industry. In 2008, major partnerships established by Valer with schools, universities, research centers and public and private institutions were:

- Signing of a Memorandum of Understanding between Vale and Unesco (United Nations Educational, Scientific and Cultural Organization), with the objective of intensifying the development of joint activities in the educational area.

- Partnership with the Ministry of Education (MEC), Itabira municipal administration (State of Minas Gerais) and Itajubá Federal University (Unifei) for the construction of an Advanced Campus – first university in the region.

- Partnership with Senai (National Service for Industrial Training) for professional education and re-training.

- Establishment of an agreement with the Dutch navigation school Shipping and Transport College (STC), to train people in port management. STC is located in Rotterdam, one of the world's major ports.

- Agreement with École de Mines in Paris, one of the most respected mining schools in the world.

- Partnership with the Australian University of Queensland, to offer courses in Minerals Industry Risk Management (additional details in the chapter Health and Safety on page 43).

In addition to the initiatives listed above, we highlight Vale's most recent initiative in science, technology and innovation (ST&I), the Department of Vale Technological Institute (DITV). This department aims at stimulating and strengthening Vale's relationships with academic institutions, government agencies and ST&I entities, as well as with internal units, by promoting strategic alliances, focused on the production of innovative scientific and technological knowledge, in order to build a sustainable legacy to society. In these lines, DITV activities seek to implement a new concept of interaction between Vale and its academic and ST&I interlocutors, making them strategic allies in a complementary, integrative and long-lasting fashion.

Vale has also an agreement with the École Polytechnique Federale de Lausanne (EPFL) aimed at developing new technologies for the mining sector. For this purpose, the company's business areas, especially Logistics, have determined the research areas they are interested in to be developed by EPFL for the benefit of our business.

Global education

In 2008, international education activities were offered to employees, including the Program for Certification in Maintenance, offered to technicians at the Vale Inco Nouvelle Calédonie project; and the Rite of Passage program, the first stage in the development of Vale leaders, held in Australia and China.

Training in Issues Management, Engagement with NGOs, Media Training, Institutional Relations and Social Dialogue was developed in Mozambique. Similar initiatives were developed in Chile and Peru.

CASE

Crisis response

In face of the global financial crisis that began in 2008, Valer supported Vale's HR strategy by providing re-qualification training to employees that had their labor contracts suspended in paralyzed mines.

At the beginning of 2009, Valer started re-training professionals in Brazil by preparing them for other functions within the company, such as mechanics, welders and industrial operators, aimed at maintaining employment levels. The activities were carried forward in partnership with Senai.

HEALTH AND SAFETY

Toward a culture of prevention

Prioritizing Life and Safety is a non-negotiable value to Vale. Our objective is to eliminate all possible causes of fatalities

Personal health and safety is a top priority Vale will never neglect. To fulfill our commitment to this value, we have defined our strategy based on a proactive, preventive attitude.

Activities, started in 2006 with established targets through 2015, include investments in management, infrastructure and technological innovation.

We act together with educational and governmental institutions in our sector to develop practices designed to strengthen our value "Prioritizing Life and Safety" (For more details, see page 43 in Activities with Society). We participate in ICMM (International Council on Mining and Metals), seeking to enhance mining sector activities in all countries where we operate.

Since 2006, we have made investments of over US$ 89 million in actions ranging from training to infrastructure improvement works. Our main target is to achieve by 2015 a cultural transformation that will allow us to improve our health and safety management for better control over the causes of incidents and fatalities, and to enhance the life quality of our employees. We are aware of the challenges imposed by such a target, but also of the importance of making all efforts to reach it.

CASE

Healthy life

Through implementation of the Healthy Mates Program in 2007, employees of the Vale Integra Coal operations, in the State of New South Wales, Australia, have been encouraged to adopt a healthier lifestyle. This program is different from other actions in the area of labor health because it is focused on individual fitness outside working hours. The program's core objective – through individual transformation – is to form a healthier, safer and more productive labor force, both at work and at their homes.

The program includes several actions with the same common message: keep fit for a healthier life. Although it has a collective target, goals are individually set so that each person will be motivated to meet their own needs. Tools include education and individual counseling by professional dietitians and physiotherapists to raise awareness of health issues, availability of gymnasium facilities for families, specific medical interventions, and supervision.

Highlights of results achieved to date include the involvement of 78% of the employees in at least one of the actions. At the same time, the implementation of the Healthy Mates program is considered to be a major factor in improved safety indicators. Among these is the 63% reduction in the frequency rate of incidents with lost days.

Reducing the occurrence of fatalities requires preventive actions. For this purpose, we invest in professional training, technology and awareness.

We have advanced in the implementation of the strategy with significant changes in health and safety results. However, we had nine fatal incidents in 2008, involving Vale employees and contractors. We are deeply saddened for those lost lives. We have redoubled our efforts to investigate every incident and search for tools that would intensify the transformation strategy toward a culture of prevention.

In 2008 we also started the process to globalize our Health and Safety Policy, aimed at adapting its contents to the legislation and culture of the different countries where we operate. The adaptation process also includes other health and safety corporate documents, regulations and systems.

Main Results

In 2008, we had a reduction of 50% in the occurrence of severe incidents when compared to the previous year. Other indicators also show improvement, as demonstrated in the charts on page 40.

In 2008, 2,860 incidents were recorded. The incidents leading to the loss of nine lives involved the following activities: vehicle driving; operation of movable equipment; sampling activity; maintenance of car dumper (work at height); cargo movement; highway transportation; electrical activities; and drilling activities.

Main Actions developed in 2008

Evolution in the implementation of Requirements for Critical Activities (RACs)
At the end of 2008, we reached 53% level in the implementation of RAC requirements in the Brazilian operations, which are deemed to be essential tools to reduce incidents. These requirements include adoption of rules, use of equipment, and infrastructure investments aiming at ensuring safety in the execution of 10 operating activities historically representing 71% of fatality risk[1].

Since 2007, the implementation of RACs has encompassed all areas of our business, including Brazilian subsidiaries. Our goal is to attain 70% level implementation in 2009 and 100% by the end of 2010. New Vale projects are already under construction with 100% fulfillment of RACs.

In 2008, we also began to include RACs in new clauses signed with contractors who perform critical activities. For existing contracts, we included a transition clause calling for timeframes for their compliance with the new rules.

1 Critical activities include: working at elevated heights; operating motor vehicles; mobile equipment, blocking and signaling; load displacement; working in confined spaces; operating machinery; stabilizing slopes; handling and detonating explosives and working with chemical products.

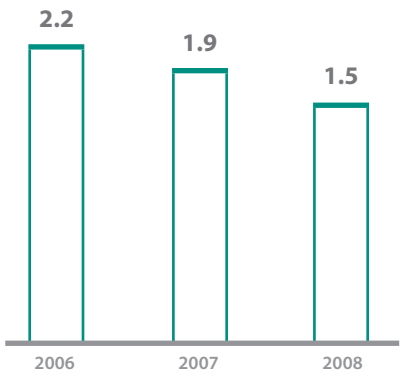
Behavioral Dialogue
Since 2007, the process of Behavioral Dialogue has been aimed at establishing an appropriate environment for joint reflection, exchange of ideas and experience in health and safety. The objective is to make people aware of the risk and share positive results, searching for solution to identified problems and continuous improvement of individual and collective behavior, and, consequently, improvement in the health and safety culture.

The process started in the Brazilian units of Taquari Vassouras, Itabira and São Luiz, where leaders have been mobilized to support the process. As of 2009 the process shall be expanded to all own units of Vale in Brazil.

Our Health and Safety Policy establishes the following commitments:
1. Controlling all risks associated with activities, processes, facilities, products, or services.
2. Acting preventively in the management of risks to the health and safety of individuals and facilities.
3. Complying with legal requirements for health and safety as well as voluntary commitments.
4. Continuously improving health and safety performance through adjustments in activities, processes, products, and services, focusing on innovative solutions and development of our people.
5. Encouraging the evolution of contractors' health and safety performance.
6. Maintaining communications channels with local communities and other stakeholders in order to keep abreast of the influence of operations on the health and welfare of our neighbors.

Lost time injury frequency rate (LTIFR)

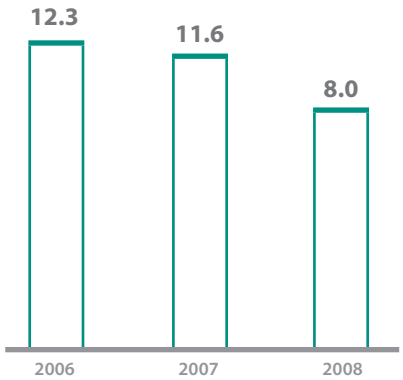
(number of lost time injuries per 1,000,000 hours worked)



Figures include employees and contractors.

Total injury rate

(number of total injuries per 1,000,000 hours worked)



Figures include information on medical treatment for both employees and contractors but do not include first aid cases. Figures for Vale Inco were included as of 2007, a period in which contractors were not considered. If the 2008 criteria were adopted in 2007, the injury rate value would be 10.7.

- Figures include injuries with and without lost time. Rate does not include occupational diseases.

For Vale Brazil, health and safety indicators are based on monthly man-hours worked estimated over for its workforce. Figures include mineral research companies, including international. For Vale Inco, Vale Australia and Moatize Project, real man-hours worked are used.

Health and Safety in variable remuneration

In 2008, an increase in the percentage of variable compensation, connected to Labor Health and Safety goals, was defined. In 2009, the percentage will change from 6% to 10%. The increased percentage is an acknowledgement of all employees' efforts toward a preventive approach and the prioritization of life and safety.

Diagnosis in pilot areas

To continue the Excellence Program, which is the basis for the Health and Safety strategy, in December 2007 Vale started the diagnosis of culture and risk mapping in four pilot areas (Itabira, Logistíca Norte, Serra Sul and Taquari Vassouras). The goal is to extend the mapping to all Brazilian operations within three years.

Investment in education

We invested in training and qualification programs. In 2008 alone, Vale's and contractors' employees had the opportunity to attend more than ten educational activities within the guidelines of promoting preventive behavior and prioritization of life.

Process for risk analysis and management

A Vale instruction on the Process for Analysis and Management of Risks in Health, Safety and Environment was approved in 2008. The main advantage of this Process is an integrated vision of risks, including operational, social, environmental, reputational, health and safety elements. The instruction establishes as a corporate guideline the identification of risks intrinsic to operations and the management of such risks, including new projects, through risk matrixes and decision-making. The document also identifies those responsible for ultimate management decision-making on issues such as lead times and investments.

Existing risks differ over the lifecycle of our installations and, therefore, require the adoption of different techniques and criteria for their assessment. Through this instruction, Vale has determined different methodologies to control, minimize and prevent risks in processes, activities, services and products, and their consequences for the health and safety of people and communities, the environment, property security, and reputation.

By 2010, the process will be globally disseminated and will follow the development of activities throughout the lifecycle of operations.

Responding to emergencies

Vale seeks to adopt in all units procedures for timely, effective response in emergencies. Our risk management system includes: Emergency Plan; Emergency Action Plan (PAE); Mutual Assistance Plan (PAM) if the emergency involves neighboring companies; Rules for Attention to Railway Occurrence (RAOF), Manual for Crisis Management, and Basic Risk Guidelines (DBR). To ensure proper attention to emergencies we perform regular training involving responsible teams, in most cases with simulation exercises.

With the approval of the Instruction for Analysis and Management of Risks in Health, Safety and Environment in 2008, we now have a tool available to standardize those systems. From now on, the objective will be to review the plans, for better definition of emergency scenarios and, consequently, the proper allocation of resources and development of site specific procedures.

Prevention and control of risks to health

Vale has an established system to identify risks to health in all units. The objective is to protect the health of its employees and to stimulate specific programs to be implemented throughout the corporation. The main directives are promoting health and stimulating preventive attitudes by employees, their families and people from the communities where we operate.

By the end of 2008, identified risks involved the following diseases:

- Occupational: neurosensory hearing loss, skeletal muscle diseases, contact dermatitis;

- Endemic: intestinal parasitosis and diseases transmitted by animals, dengue, malaria, Chagas disease, yellow fever, A and B hepatitis, HIV/Aids, leishmaniosis and tuberculosis.

Due to dissimilar health conditions in the regions where we operate, we seek to implement different actions which might respond to particularities. In line with this, we hold different programs for training, counseling, risk prevention and control, and medical treatment for our employees and their families. We are making efforts to expand the insertion of nearby communities in our programs. Beside is a list of activities implemented in some of our units.

Our employees are essential in disseminating preventive practices

Main actions

Public	Education/ training	Counseling	Prevention/ risk control	Medical treatment
Employees	Workshops on alcohol and tobacco; cancer and diabetes prevention campaigns; support group for people with diabetes, hypertension and heart conditions	Program of Assistance to Employee (PAE) with counseling on several topics, such as emotional problems, relationship difficulties, financial issues, alcohol and drug abuse, and stress	Prevention campaign on sexually transmitted diseases – STD/ AIDS. Cancer and diabetes prevention campaigns. flu immunization. Inspections for prevention and treatment of dengue and yellow fever	Health Plan and medical attention
Family members	Workshops on alcohol and tobacco; cancer and diabetes prevention campaigns; support group for people with diabetes, hypertension and heart conditions	PAE	Flu immunization Inspections for prevention and treatment of dengue and yellow fever	Health Plan (extended to family members)
Community	Prevention campaign on sexually transmitted diseases – STD/ AIDS	-	Program for affective-sexual education (Vale Juventude – developed by Vale Foundation), with sexual counseling and preventive action against sexually transmitted diseases	-

Creating, recognizing, replicating

For the second year running, Vale promoted the Living Good Practices in Health and Safety Award, an initiative aimed at encouraging the involvement of employees in the ongoing improvement of the management process. The dissemination of positive experiences, exchange of information and reward are elements which contribute to promoting a culture of appreciation and prioritizing life and safety.

In 2008, the award evolved to become more inclusive and interactive. It featured two assessments: one by an official jury, a panel of representatives from several areas of the company, and one by a popular jury – consisting of over 1,200 employees who voted via the intranet for one of the 30 cases of good practices in health and safety submitted.

The Living Good Practices in Health and Safety Award also presented two special prizes last year. The first recognized the most widely replicated best practice of 2007, while the second honored the department that incorporated the most best practices submitted in the previous year.

Awarded Works:

- **Official Jury** – "Replacement of conveyor rollers, routes of coal, bauxite and alumina", prepared by Department of Aluminum/Alunorte.
- **Popular Jury** – "Hydraulic Sack for LP Motor Traction bearing", prepared by the team at the Vitória-Minas Railroad.
- **Most replicated** – "With the Highway Control Center you will never travel alone".
- **Department with most replications** – there was a tie between the Department of Manganese/Alloys and Department of Copper Operation.

In search of excellence

Coordinated by an occupational hygienist, the Industrial Hygiene Technical Group relies on representatives from several areas of the company. In addition to participating in meetings and discussions, Group members attend the Specialization in Industrial Hygiene training program, created by Valer and delivered by the University of Sao Paulo (USP).

In only one year, the Group managed to attain such positive results that Valer elected it as an example of how a technical group should operate. In addition, the Health and Safety Department decided to create another three technical groups to work in the areas of Ergonomics, Risk Management and Investigation of Incidents.

The Industrial Hygiene Technical Group's mission is to assess the industrial hygiene conditions at Vale, identify new technologies and introduce rules to standardize the management of health risk control, regarding those factors considered to be more critical in the company: noise, dust and vibration. The core idea is to encourage people to build the basis for behavior that delivers sound occupational hygiene outcomes, increased knowledge and qualification on risks, as well as expanded partnerships with organizations and associations.

Agreements with labor unions
Health and safety is increasingly part of the dialogue between Vale and labor unions, including the scope of collective bargaining.

In Brazil, our employees are covered by union conventions and/or corporate regulations that define the mechanisms and requisites to prevent incidents and occupational diseases such as maintenance of joint health and safety committees, use of personal protection equipment, and training in instruments such as the right to refuse unsafe work.

In our international operations, the coverage of aspects related to health and safety follows the same principles as prioritizing life and safety. Variations occur only to conform to different local regulations and specific requests from employee representatives. In all international units, relevant health and safety items not covered by collective bargaining are included in the company's own policies or in the local legislation.

Participation in health and safety committees
Vale employees are represented in Joint Management - Employee Health and Safety Committees which are intended to contribute to preventing incidents and labor-related illnesses.

ACTIVITIES WITH SOCIETY

MinerAção Program
Vale is a founding member of the MinerAção Program, created by the Brazilian Institute of Mining (Ibram) with the objective of seeking joint actions to reduce the number of work-related incidents in the sector. Among the actions are investments in training, a database of sector best practices, and corporate alignment toward the need for cultural changes.

EMESRT
Since 2008 Vale has been attending the meetings of The Earth Moving Equipment Safety Round Table (EMESRT), a group created in 2006 by major global mining companies and supported by the International Council on Mining and Metals (ICMM).

EMESRT proposes a partnership of major equipment suppliers and mining companies to support the adoption of measures to influence the development of equipment which minimizes health and safety risks for users.

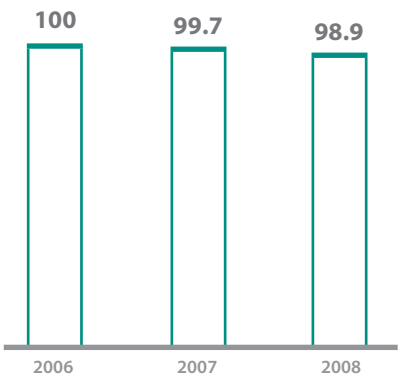
Best Practices
Since 2007, Vale has been strengthening its participation in Safety, Health, Environment and Community (SHECBenchmarking), which is a database gathering the best practices in safety, health, environment and community of the mining sector around the world. Managed by the International Council on Mining and Metals (ICMM), SHECBenchmarking is an internet gateway designed to promote the exchange of experiences and alignment of the sector's companies.

Engagement of learning institutions
In July 2008, Vale hosted a meeting on risk teaching and management with representatives from ten Brazilian universities. The event, held in partnership with the University of Queensland, Australia, aimed at training engineers in risk management, a critical element in sustainability.

Product and Service Safety
As a mineral extraction company, our health and safety risk management pays special attention to the extraction/processing and distribution/supply stages of our activities.

However in 2008 Vale successfully pre-registered alloys and nickel products and intermediates in order to comply with the first stage of the European Regulation EC 1907/2006 regarding Registration, Evaluation and Authorization of Chemical Substances (Reach), thereby better managing and controlling the risks presented by these

Workforce represented in formal health and safety committees
%



In some units, the number of represented employees did not reach 100% due to: rearrangement of administrative buildings, number of employees insufficient to form a committee, new projects, and new hiring throughout 2008.

Safe and efficient

The decision to invest in health, safety and environment innovation is bringing new benefits to different areas at Vale. In 2008, a highlight was the automated truck wash system at the Carajás mine using industrial robots. In addition to eliminating the risk of incidents with personnel, the investment saves water and time, and reduces waste.

substances and extending assessment to use and disposal stages. Vale's participation in specific consortia aims at continued compliance with the Reach regulation, and allows for product registration (except exempt minerals) starting at the end of 2010 and completing in June 2018.

With the publication of systemic requisites RS03 (Risk Analysis and Management) and RS14 (Product Management) in our Brazilian units in 2008, we now have available a more comprehensive tool for risk management in all stages of our product and service lifecycles. In addition, the implementation of our Instruction for Analysis and Management of Risks in Health, Safety and Environment will allow us, in 2009, to advance in the process of risk analysis of our activities, products and services in Brazil (please refer to page 40, in Process for Analysis and Management of Risks).

Our logistics operations perform health and safety analyses tailored to meet the specific conditions at individual locations, with special attention to the shipment of hazardous substances.

Labeling

According to International Labor Organization (ILO) Convention 170, labeling procedures are mandatory for hazardous chemicals only. In view of the fact that most of our products are not classified as hazardous, labeling procedures are generally unnecessary.

However, Material Safety Data Sheets (MSDS) have been developed for our products, in which their physical and chemical properties, handling care, and measures to control and reduce risks are defined, in addition to recommended emergency procedures.

Some nickel compounds are subject to classification and labeling requirements, which are complied with by Vale Inco. Information on Origin of Components, Contents, Safe Use of Product or Service and Product Disposal is available upon request.

At the end of 2008, Vale Inco began implementation of the Globally Harmonized System (GHS), an international framework to harmonize concepts connected with the health and safety aspects of chemicals. Among the actions already adopted by Vale Inco is the creation of new labels and MSDS.

Fulfillment of actions forecast for 2008
All the actions highlighted as priorities in our *Sustainability Report 2007* and planned for 2008 were developed. The initiatives listed below give continuity to our strategy on health and safety management.
• Implementation of new Requirements for Critical Activities;
• Promotion of the 2nd edition of the "Living Good Practices" Award;
• Performance of independent audits to assess compliance with legal requirements at Vale contractors' facilities;
• Implementation of the behavioral dialogue methodology in pilot areas;
• Continuous implementation of the health and safety information system in several units;
• Strengthening of integration of best practices in health and safety at Vale and Vale Australia;
• Creation of the technical group on industrial hygiene;
• Implementation of the Instruction for Analysis and Management of Risks to Health, Safety and Environment;
• Development and implementation of new training and qualification tools on health and safety.

Ongoing commitment

Environmental impact management and ecosystem conservation are priority focus areas in our operations

The commitment to environmental conservation is a fundamental element in Vale's sustainability strategy. The essence of our approach is to search for balance between the socio-economic development of the regions where we operate and maintenance of the quality of natural resources, biodiversity and life.

We invested in environmental impact management at our operations and in the research of new technologies to continually improve our environmental control systems.

The directives guiding our activities are explained in Vale's Sustainable Development Policy, which describes the way we do business – from the decision-making process up to the actions performed in our daily operations.

In a management improvement action, we started, in 2008, the internal course for Qualification of Environmental Auditors in Brazil. In addition to increasing the number of employees qualified to perform environmental audits, the initiative encourages an impact prevention culture and the exchange of experiences and knowledge on environmental management among people from different business areas.

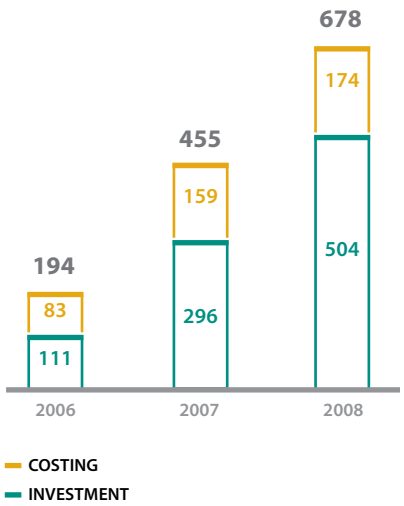
The course is focused on the company's leading processes – mining, plants, railway transportation and ports, and considers significant environmental aspects and impacts; documentation, applicable environmental legislation, verification of legal compliance, auditing techniques. Throughout the year four classes were offered, from which 62 employees graduated. The professionals will now work as members of Vale's environmental audit team.

ENVIRONMENTAL INVESTMENTS

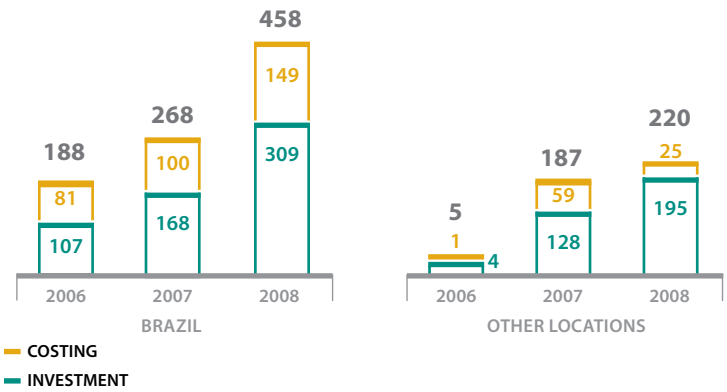
In 2008, financial resources applied in Vale's environmental area totaled US$ 678 million, which was nearly 50% higher than in 2007. Most of that amount was spent in three areas:

- acquisition and implementation of environmental control equipment, intended to improve performance in existing operations;
- environmental maintenance and geotechnical safety of our dams and waste rock piles;
- reforestation and reclamation of degraded areas, as part of the Vale Florestar Program.

Environmental expenditure
(US$ million)



Environmental expenditure per location
(US$ million)



ENVIRONMENTAL QUALITY

The Environmental Quality Management System guides the development of measures for environmental monitoring, conservation and reclamation of disturbed ecosystems. Our system is based on the ISO (International Organization for Standardization) 14001 standard and also on additional aspects that we add in order to obtain Vale's environmental quality standard. To enhance environmental management and deliver continual improvement in our performance, several of our operations are periodically subject to internal and external audits.

Our environmental policies, norms and some general-purpose environmental procedures are defined at corporate level, and operational management is the responsibility of the managers of business areas.

MANAGEMENT OF WATER RESOURCES

In 2007 we set the target of increasing by 1.5% the volume of water resources reused in iron ore, pelletizing and logistics operations in Brazil during 2008. The outcome of actions accomplished during 2008 exceeded the target, increasing from 65% to 74% in the reuse ratio in those units. A major investment needed to achieve this result was an increase in the capacity to hold water for later reuse. With increased availability of process water, several operational areas were able to optimize water reuse.

As part of their efforts to find ways to improve water efficiency, a group of employees within the Carajás unit, State of Pará, Brazil, developed a project that achieved 37% reduction in water consumption at the maintenance sector for trucks and other mining equipment, relative to past withdrawal[1]. The only necessary investment was the installation of a reservoir to collect rainwater, holding more than 60 m^3. The water is filtered and then used to wash components and parts for equipment under maintenance. The results were so positive that the project will be replicated in other sectors. In 2008, the total volume of water used in Vale operational units was recorded as 335 million m^3. The water used by Vale is mostly drawn from surface sources and ground sources.

Actions to increase recirculation rates and water reuse in several units contributed to increased efficiency in the management of the resource. Even adding figures from

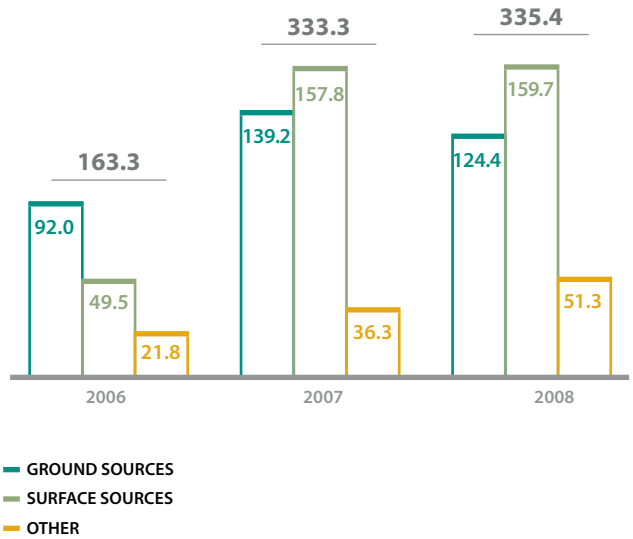
1 Mine dewatering.

ISO 14001 Certified Units
Iron ore and pelletizing (all iron ore mines and pelletizing plants in Tubarão and Fábrica);
Manganese and ferroalloys (Azul and Morro da Mina, Vale Manganèse France and Vale Manganese Norway AS);
Nickel (Vale Inco Europe, Taiwan Nickel Refining Corporation, Jinco Nonferrous Metals, IATM Dalian, IATM Shenyang.);
Port of Tubarão;
Aluminum (Alunorte, Albras and Valesul);
Kaolin (PPSA and Cadam);

Subsidiary companies Samarco and MRN also have ISO 14001 certification.

Total water withdrawal by source

(million m^3)



- Ground sources: water arising from wells, including mine dewatering.
- Surface sources: water arising from rivers and lakes.
- Others: rain water, water supplied by public utility (concessionaire).

Vale Australia in 2008, the withdrawn water volume remained the same as in the previous year. In 2008, the reuse rate reached 76%, higher than that of 2007. This means that out of 1,368 million m³ of water required for Vale's operations in the year, only 335 million m³ were withdrawn from nature. Among the reasons for the result, highlights are the increased reutilization rate in the aluminum business, reaching 91% in 2008, and the introduction of an improved calculation system at Vale Inco, which now considers the rate of reused water at the plants.

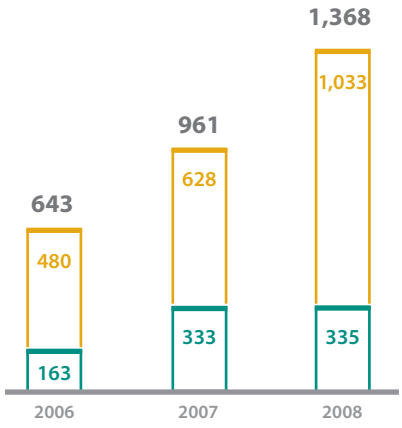
Disposal

Water resources management includes actions to reduce effluent generation and improve disposal systems. Considering the diversity of products and activities at Vale, there are significant differences in the systems used for treatment of liquid effluents. Among these are decantation/sedimentation primary level systems for treatment of effluents from processing (industrial effluents with high contents of solid particles); and physical or physical-chemical systems (coagulation/flocculation) for the treatment of oily effluents from repair facilities.

In addition to protecting local environments by complying with legal quality standards for disposal of waste water, effluent treatment systems at Vale, in some cases, aim to reuse the water in our own processes.

Total water consumption: recycled (re-circulated and/or reused) + withdrawal

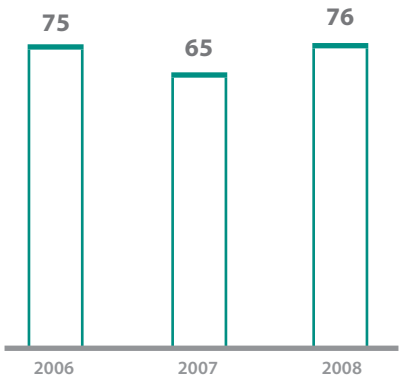
(in million m³)



- REUSED AND/OR RECYCLED WATER
- WITHDRAWAL WATER

Percentage of recycled water* (re-circulated and/or recycled water)

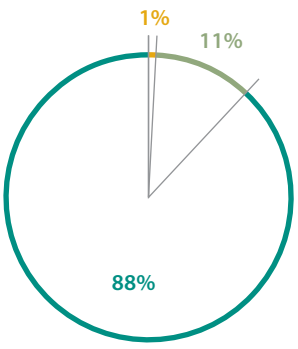
%



* Calculated by dividing the amount of recycled water (re-circulated and/or reused) by total water consumption. If the Vale Inco water recycling rate had been included in 2007, estimated percentage would have been 70%.

Total volume of effluents generated and discharged in 2008 per type

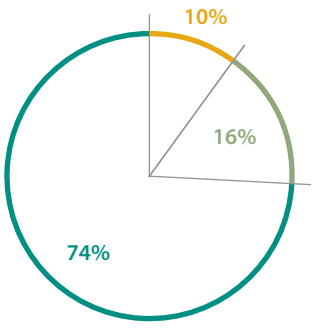
Total: 115 million m³



- INDUSTRIAL LIQUID EFFLUENTS
- OILY LIQUID EFFLUENTS
- LIQUID EFFLUENTS REQUIRING NO TREATMENT *

Total volume of effluents generated and discharged in 2008 per destination

Total: 115 million m³



- OCEANS
- LAKE
- RIVER

* Water used in cooling processes.

WASTE MANAGEMENT

The waste management programs at Vale's operational units aim to reduce internal generation and final disposal of wastes. This involves the separation of different materials so that they can be recycled or reprocessed for use in other productive value chains. We have been investing in the development of local suppliers and in research for new reprocessing technologies. In case reprocessing is not possible, we use final disposal in sanitary landfills taking into consideration all applicable environmental controls. The final destination of waste is determined by its characteristics (hazardous or non-hazardous).

Our specific target – set in 2007 – was to reduce by 1% the generation of oil contaminated residues in iron ore pelletizing and logistics operations in Brazil, in 2008. All operational areas met the target, and the overall reduction averaged 34.1%, exceeding our expectations by a huge margin.

Among the actions contributing to the improvement were:

- improvement in treatment of oil filters for locomotives, Vitória-Minas Railway (EFVM);
- implementation of a drying process for oily residues collected from water/oil separators, in the manganese area;
- specific training for employees to raise awareness of waste management;
- investment in railway fueling stations to reduce the generation of contaminated ballast.

In 2008, Vale generated a total of 487 thousand tons of waste of which 19% was hazardous.

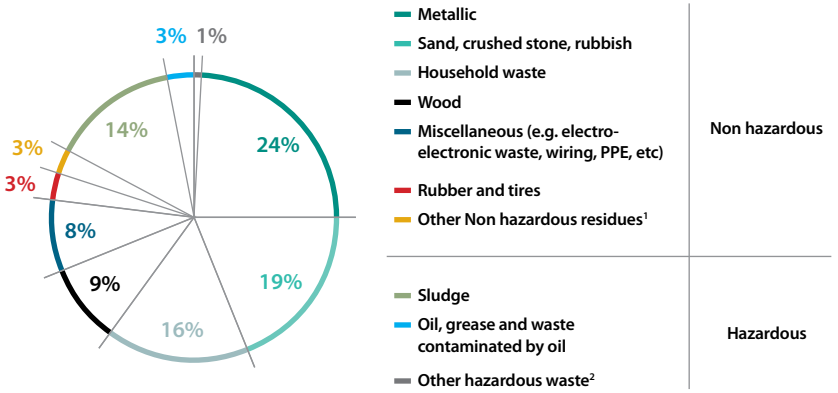
The increase in volume of hazardous waste from 2007 to 2008 is especially due to the inclusion of figures from the coal business.

Aggregate amount of residues generated

(thousand tons)

Total generation 2008 per type of waste

(total = 487 thousand tons)



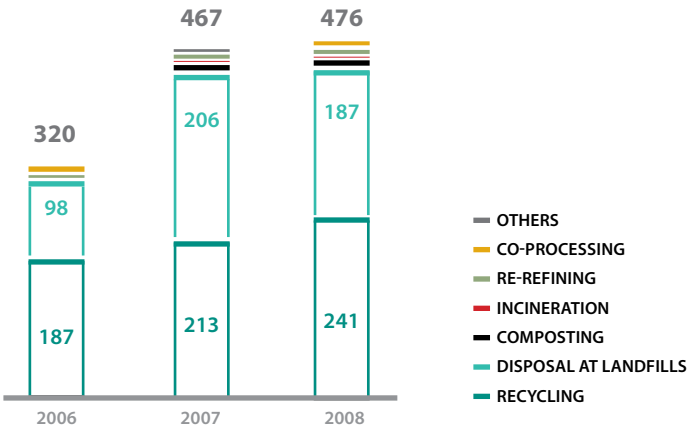
[1] Plastics, paper, cardboard, glass, fabric, canvas and polymers.

[2] Residues of health services, batteries, asbestos, residues containing mercury (e.g.: fluorescent lamps, etc.), paints and varnishes.

The most common final waste disposal methods at Vale are recycling and disposal in landfill. The observed trend of increased recycling is in line with the Vale's waste management objectives. The Iron Ore and Manganese business areas are responsible for 67% of the destination for recycling, especially due to the sale of metal scrap for reprocessing in the furnaces of steel plant. Efforts are being made by operational units to expand their waste destinations and reduce their waste generation.

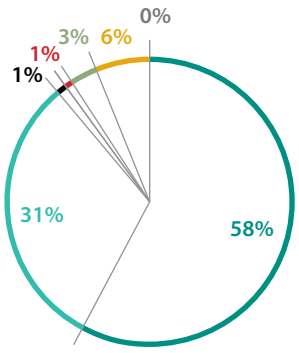
Total waste disposal

(thousand tons)



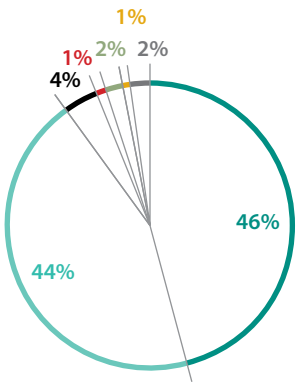
Final Waste disposal 2006

320 thousand tons



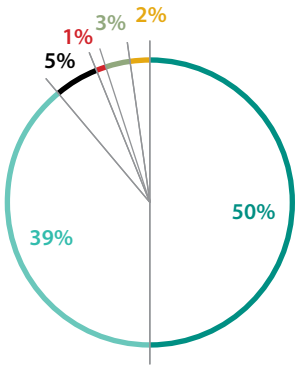
Final Waste disposal 2007

467 thousand tons



Final Waste disposal 2008

476 thousand tons



Waste disposal in landfill includes disposal in both internal and external landfills. The reduction in recycling in 2007 is due to the inclusion of Vale Inco. In 2008, the increasing trend resumed.

The differences between the amount of residues generated and the amount of final disposal are due to temporary storage.

Vale is concerned about the correct storage and disposal of its residues. When generated, they are disposed of in internal intermediate areas and later sent to certified destinations, observing required environmental controls in every stage.

Vale does not transport hazardous waste to other countries. The only exception would be Inmetco, a subsidiary located in the USA that sends lead-containing batteries for recycling at a specialized company in Quebec, Canada. However, in accordance with a bilateral agreement between Canada and the United States of America, any shipments of waste for processing can be transported between the two countries as a "product" and, therefore, are not classified as waste[2].

2 In our *2007 Sustainability Report*, the transportation of 416 tons of hazardous waste was reported (0.55% of total generated hazardous residues), but the bilateral agreement between USA and Canada mentioned above was not considered. Therefore, waste transported between the two countries was not reported as hazardous waste in 2008. The value reported in 2007 was also restated.

MINING AND METALLURGICAL WASTE

The activities of mining and metallurgy generate large volumes of ore residues, usually waste rock, tailings and slag. Vale's mineral-metallurgical waste is generally considered inert, based on the analysis of material characteristics carried out according to industry specific norms[3]. In order to improve the management of waste dams (tailings, water and sediments) and piles (waste rocks and ore), we are implementing the Dam and Pile Management System (SGBP) in Brazil.

This system will provide the company with a tool for decision-making in investments, strategies for increased production, and supervision of action plans resulting from audits, licensing conditions, or operating demands for dams and piles. In addition, SGBP will allow for consolidating

3 The only exception is spent pot liner (SPL) generated in our aluminum production units in Brazil. The waste, which is classified as hazardous, is generated during the production of aluminum, due to the wear of the electrolytic pot. The generated amount of SPL represents less than 0.003% of the total volume of waste. We ensure its correct destination: granulometric analysis performed internally at our own operational unit and destination for co-processing in cement plants, all duly licensed to execute the activity.

CASE

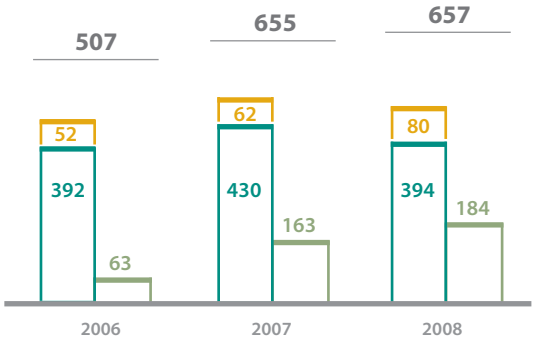
Incentive to selective collection

Awareness-raising, investment and action - this was the approach taken by the Composting Project, carried out at the Carajás Mine, State of Pará, Brazil. The first stage of the project was improvement in the selective collection process, both in the residential and the commercial area of the Carajás Urban Nucleus. It included an awareness-raising campaign, conducted in partnership with students at the local school, and the distribution of purpose-specific bins for collection of organic material and booklets with guidelines for garbage separation.

At the same time, investments were made in the waste storage system, aimed at expanding composting capacity. To ensure best results, a specific selective collection committee was established for process inspection and assessment.

The main result was to assure that only a small part of the waste generated at the Nucleus would be sent to landfills. In addition, the increased volume of fertilizers produced by the composting system – from 700 t in 2007 to 1,000 t in 2008 – allowed for the material to be used by small rural producers of the region, especially in the Environmental Protection Area of Gelado, as well as for the use of organic fertilizers for reclamation of degraded areas and for seedling planting.

Total ore and metallurgical residues
(million tons)



* Includes tailings and waste rocks from mining nickel, potash, manganese, coal and copper, slag (manganese alloy), red mud (alumina) and SPL (aluminum).

and making available information on geotechnical structures, creating indicators and risk matrices for operational and corporate areas.

Every three years, we conduct a technical corporate audit on the 220 tailing dams and 260 waste piles existing in Vale Brazil. The stability of piles and dams is considered in environmental risk controls and mapped according to the Sarbanes-Oxley Act (Sarbox).

At Vale Inco's Sudbury unit, dam and pile stability risks are initially assessed by an external specialist board (Geotechnical Review Boards), which provides an overview with recommendations and guidelines for improvements. The board assembles once a year to review all aspects concerning the structure, construction and operation of the waste disposal areas.

At Vale Inco units, the potential for leaching of metals that are present in waste rock is considered as part of the Mine Decommissioning Plan, through the performance of tests at waste disposal areas. In the Sudbury units, alternatives for large scale assessment are under implementation.

In the Newfoundland and Labrador units, the potential for leaching of metals that are present in waste is assessed at the environmental studies stage and in the project's pilot plan.

Vale Inco is part of the International Network for Acid Prevention (Inap), a global initiative aimed at developing ways to manage environmental contamination risks due to materials resulting from mining waste.

Recycling

In general, in mining, logistics and energy generation there are not many recycling opportunities available within internal productive processes. However, some areas perform post-consumption product recycling. Among them, the Aluminum Business Unit, through the Valesul plant for alumina processing into aluminum in the State of Rio de Janeiro, Brazil[4]; and the Nickel Business Unit through use of Inmetco units, located in the USA, and Vale Inco Europe (Clydach refinery), United Kingdom.

4 Packages were not considered in this indicator due to their insignificant mass compared to the products themselves.

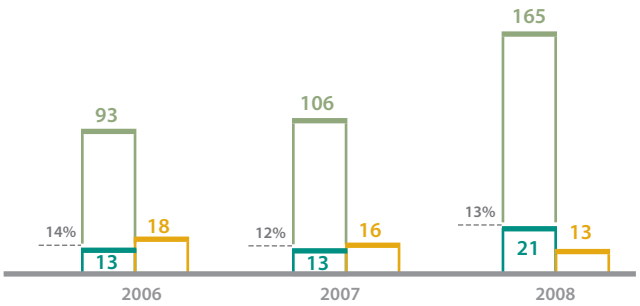
For nickel units, this is the first reporting period, which represents an improvement when compared to the previous period.

Valesul controls the percentage of internal scrap recycling, and re-fusion of recovered products, to increase the use of external scrap and allow increased production. The amount of internal scrap generated by Vale is affected by a number of elements such as production mix, process efficiency and operating practices. In general, the objective is to reduce the generation of internal scrap in order to minimize the need to smelt the same input material twice. The reduction allows increased re-fusion of external scrap, that is, the reuse of post-consumption products.

Our aluminum operations at Valesul and Albras, as well as nickel operations at Inmetco, Thompson, Sudbury and Acton, must be particularly noted for the reuse of secondary secondary material by products (post-consumer and industrial scrap). The increase in 2008 illustrated in the chart below reflects the inclusion of figures from our nickel operations.

Percentage of post-consumption material used, against sales

(thousand tons)



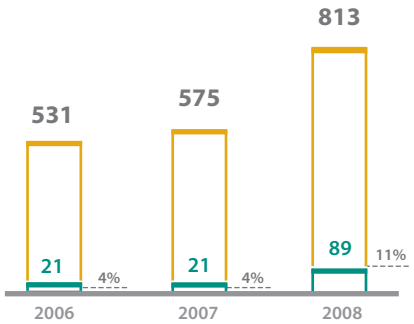
- AMOUNT OF POST-CONSUMPTION RECYCLED MATERIAL
- AMOUNT OF PRODUCT SOLD
- AMOUNT OF PRODUCTS AND PACKAGES INTERNALLY RECYCLED

% RECYCLED POST-CONSUMPTION MATERIAL/SOLD PRODUCT

Percentages above do not include internal recycling, according to GRI methodology.

Percentage of secondary material, against sales

(thousand tons)



- AMOUT OF PRODUCT SOLD
- AMOUNT OF REFUSE FROM INDUSTRIAL SOURCES AND POST-CONSUMPTION RECYCLED MATERIAL

% (RECYCLED POST-CONSUMPTION MATERIAL + INDUSTRIAL REFUSE)/SOLD PRODUCT

Percentages above do not include internal recycling, according to GRI methodology.

With the inclusion of Vale Inco in 2007, surface withdrawal became our major source of water collection.

Material	Volume acquired in 2008
Ammonium nitrate	146.1 thousand tons
Conveyor belts	330.8 thousand meters
Crossties	1.4 million units
Explosives	5.9 million tons
Lubricant oil	23.7 million liters
Off road tires	6.9 thousand units

Materials which are considered Vale's fixed assets were not considered.

MATERIALS USED

Regarding raw materials acquired from suppliers, which are used in our productive processes but are not part of final products, we identify six most significant items according to their acquisition costs, as per the table above. In addition to these items, fuel consumption is approached in the energy section. Except for crossties, which are made of certified wood, the others are classified as non-renewable items.

ENVIRONMENTAL RISK MANAGEMENT

Our businesses involve storage, handling, processing, transportation and disposal of chemical substances, such as lubricant oils and fuels, some of which are potentially hazardous. The management of these materials aims at minimizing risks by making use of technical procedures, qualified teams, specialized consulting companies, and periodic auditing to ensure strict compliance with applicable laws and requirements.

In 2008 we implemented a Process for Analysis and Management of Risks in Health, Safety and Environment, based on an integrated view of environmental, health and safety risks (additional information on page 40).

This will enable us to normalize the classification of hazardous activities, and decision-making criteria, throughout our businesses according to the risks identified in the various stages of the life cycle of our enterprises.

However, in 2008, 34 significant spills[5] were recorded, which resulted from leakage in associated control systems.

The environmental impacts of such events are soil or water contamination. However, emergency response plans were implemented to remedy the impacts in all units, followed by preventive maintenance to control systems.

In order to address emergencies, every operational unit at Vale relies also on a specific Plan for Emergency Attention and qualified personnel to minimize losses and prevent environmental damage. Our units maintain insurance coverage for environmental damage caused by spills.

Product spills	Volume (m^3)
Brine	1,075.0
Alcohol and hydrocarbons	136.2
Water with solids in suspension	350.0
Other chemicals	0.8
Total	1,562.0

COMPLIANCE

The process for maintaining environmental compliance requires ongoing monitoring and assessment, as well as agility in identifying controls for potential non-compliance. There are no new cases considered significant or relevant[6] to be reported in the period of 2008. However, five cases mentioned in the report 2007 were concluded, with nine cases (judicial and administrative) still pending decision in 2008. In the period, there was no payment of fines or imposition of non-monetary sanctions[7].

In Brazil, the sanction imposed on Vale for irregularities in the Carajás railroad fuel depot, in Pará, was suspended (non-monetary administrative sanction). In the previous report, we reported that the problem had been remedied and operations restarted.

There were three administrative fines imposed by environmental control agencies regarding a railroad incident at

5 "Significant spills" as defined by GRI corresponds to "critical incident" as used by Vale, that is, those outside the borders of the operational unit's property causing residual impact on the environment and/or on health and safety within or outside the operational unit.

6 Processes are considered as relevant based on the following criteria: a) due to the monetary value, including indemnity claims and fines; b) due to affecting the interests of the company or the public at large, regardless of monetary value; c) those resulting from non-monetary sanctions.

7 In 2007, 14 processes were reported, being 10 lawsuits (damage indemnification actions) and four administrative processes (3 monetary and 1 non-monetary sanctions), which involved a total value of US$ 2 billion at the time. The total included actual and estimated fines (based on the values requested in the actions), however it does not represent a real, defined amount, since there is no liquidity expressed in a final court decision or in an instance of acknowledgement by Vale, until the case is resolved. In view of the above, and to comply with the scope of GRI indicator EN28, Vale expresses in its report this year the existing cases which match the relevant criteria, and reports only those values representing a defined amount acknowledged as due by Vale, or already paid, in order to prevent possible distortions regarding the reality of judicial and administrative processes, which, pending final decision, have no definition or precision of values under discussion.

Ferrovia Centro Atlântica (FCA), which is controlled by Vale, in the City of Itaboraí, in Rio de Janeiro. One of these was cancelled by court order, with final decision still pending. The other two were settled in agreements signed with the public agencies. In one of the agreements, certified by court decision in an action filed against the company (FCA) for the same occurrence, the administrative fines were suspended and the process was terminated. The definitive cancellation of the fines will occur after the agreement is fulfilled.

Among relevant lawsuits, two are in progress involving the Vale iron mine operations in Itabira, Minas Gerais, Brazil, for alleged damage. There are also four other lawsuits associated with the MBR's Capão Xavier mine licensing, in Belo Horizonte, Minas Gerais, Brazil, and, in the city of Vitoria, Espírito Santo, Brazil, a lawsuit was filed in response to alleged air pollution. In all of these, the company is arguing that the accusations are unfounded.

In Canada, one of the two judicial processes involving Vale Inco was concluded. A case filed by the Ontario Ministry of the Environment, alleging SO_2 concentrations in excess of the level allowed in our Sudbury operation, which was reported in our GRI Report 2007 was withdrawn by the Ministry of the Environment. A civil action is still in progress, in which real estate value decrease is alleged as a result of supposed long-term soil contamination related to the Port Colborne refinery, in which the company is pursuing its defense.

ENERGY

Energy efficiency, our priority

At operational and corporate levels, we endeavor to adopt actions aligned with our Corporate Guidelines on Climate Changes and Carbon (For additional information www.vale.com). We intend to increasingly advance in the use of renewable energy sources and in systematizing information that will help us in strategic decision-making and risk reduction.

In order to plan for integrated energy efficiency actions, we conduct diagnoses to identify risks and opportunities associated with our operations. Based on the results of such technical studies, we establish both specific measures to be adopted in the short term, and long term initiatives to be implemented over an extended period.

A typical example is the diagnosis conducted in 2008 at the Pellet Plant in Fábrica (Minas Gerais, in Brazil). The study was concluded in June 2009. The unit relies on an Energy Efficiency Technical Group (GTEE) to implement the recommendations identified.

In addition to forming new GTEEs, we have other diagnoses under way. Among them are the energy surveys being completed across Vale Inco operations (including Sudbury, Thompson, Clydach and PT Inco) to support our plan to reduce energy consumption at Vale Inco operations by 5% below 2008 levels in 2009 and 2010. Other surveys are being planned by the following operational units in Brazil: Kobrasco Pellet Plant (State of Espírito

CASE

Spotlight on efficiency

The UK currently has some of the strictest environmental and energy legislation in the world, including a Climate Change Levy which was introduced in 2001. The Levy is an energy tax that adds approximately 15% to typical energy bills of UK businesses. Energy intensive industries including base metal smelting can commit to a Climate Change Levy Agreement which allows the company to reduce the energy tax by up to 80% in exchange for meeting energy saving targets.

The Clydach Refinery in Swansea, Wales, has a Climate Change Levy Agreement in place. In order to meet energy efficiency targets and minimize the energy tax to be paid, the Refinery has undertaken a number of initiatives including the appointment of an Energy Superintendent, who is responsible for promoting energy awareness and identifying projects to decrease energy use.

Communication with employees has also been a high priority in the Refinery's efforts to save energy; presentations on Refinery energy usage have been delivered to shift workers during their annual training days covering usage, policy, projects and long term plans. An energy section has been added to the monthly communication brief (made available to all employees) highlighting ongoing usage and any relevant energy information/news for the month.

The involvement of employees has been essential in the process that also relies on investments in new technologies, close monitoring of consumption, as well as identification of waste reduction opportunities. With these and other measures under-way, the Refinery is targeting an energy efficiency improvement of 5%, in 2009.

Santo), Vale Manganês Plant (State of Minas Gerais), Barão de Mauá Building (headquarters in Rio de Janeiro), as well as mines and plants in Alegria, Mariana Complex (State of Minas Gerais); Conceição (State of Minas Gerais); and Carajás (State of Pará).

We made progress in 2008 toward the use of innovative technologies and increased use of renewable energy sources in Brazil (more in VSE, page 83). We have also promoted actions for training, awareness-raising, and mobilization which contribute to the global effort towards climate balance and reduced energy consumption.

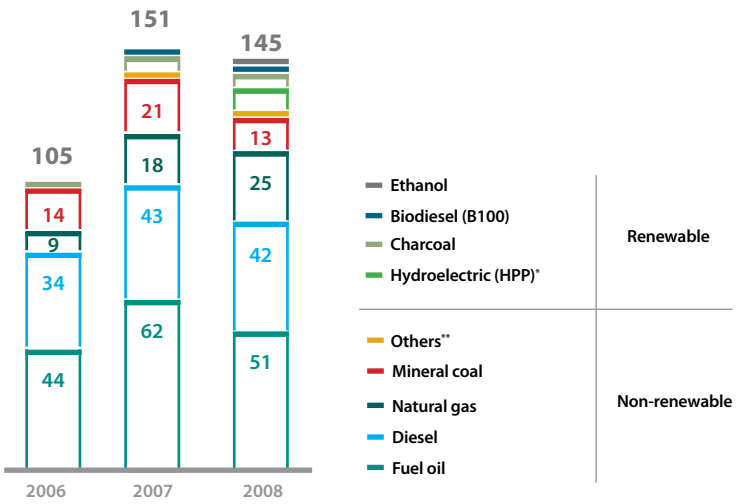
DIRECT ENERGY CONSUMPTION

Direct power consumption is characterized by the use of fuel energy directly in the processes. At Vale, the processes consuming most direct energy are pelletizing plant furnaces, train locomotives and steam generating boilers for potash and alumina production.

DIRECT ENERGY

Aggregate consumption of fuel materials

(thousand TJ / year)



*Small owned hydroelectric power plants.

**Propane, LPG/Propane, Kerosene, Gasoline, Coke and CO rich gas.

Vale consumed 145 thousand terajoules (TJ) of fuel material in 2008, representing a 4% reduction from 2007. This was partly due to reduced production in some of our operations, but also due to improved data collection: we started considering all types of fuels consumed by Vale (higher specificity at collection) and also specific heat of combustion factors for each country, instead of global average factors.

In 2008 we had two instances of fuel replacement in Brazilian units. Pelletizing plants started using natural gas instead of fuel oil, and Alunorte started to replace that source with coal. The replacement caused a 22% reduction in fuel oil consumption, an increase of 84% in the volume of natural gas, and 40% increase in coal consumption in our Brazilian units.

We also pioneered Brazilian companies in testing the feasibility of pure (B100) biodiesel and mix B20 (20% pure biodiesel and 80% petroleum diesel) in our operations during the year 2007. In Brazil, Vale increased the percentage of biodiesel addition to diesel from 2% to 3% as from July 2008. With the continuity of the federal government's program for incentive to biofuel production, perspectives are that by 2020 a 20% mixture be enforced. Through investments in our own biodiesel production, we pursue the use of 20% mixture as soon as 2014 (more in Vale Carbon Program Fundamental Principles on pages 77-79).

Diesel consumption, another fuel widely used at Vale, was reduced by 2.4%. The decrease reflects the lower production in the last quarter.

Total direct energy consumption in usual units

Fuel	2008	Units
Charcoal	155	thousand metric tons
Coal	906	thousand metric tons
Natural Gas	899	million m^3
LPG	2,319	tons
Fuel Oil	6	million metric tons
Gasoline	6	million liters
Diesel	359	million liters
Biodiesel B2	959	million liters
Kerosene	6	million liters
Propane	427	thousand m^3
Coke	23	thousand metric tons
CO Rich Gas	8	million m^3
HHPs	2.20	TWh

INDIRECT ENERGY CONSUMPTION

During 2008 our indirect energy consumption reflected the economic times. Our electricity consumption increased between January and September and declined from September to December.

In total, Vale's indirect energy consumption reached 19.3 TWh representing a decrease of 15% against 2007. The result was also influenced by improvements in both data collection methodology and in the concept of this indicator for the year 2008[8].

TOTAL ELECTRIC POWER CONSUMPTION

As large energy consumers, it is our understanding that, when investing in production to supply our global operational demands, we protect ourselves against price volatility, and to minimize regulatory, climate and supply risks.

Vale produces 34% of its electric power requirement, whether through hydroelectric power plants or fuel generating potential.

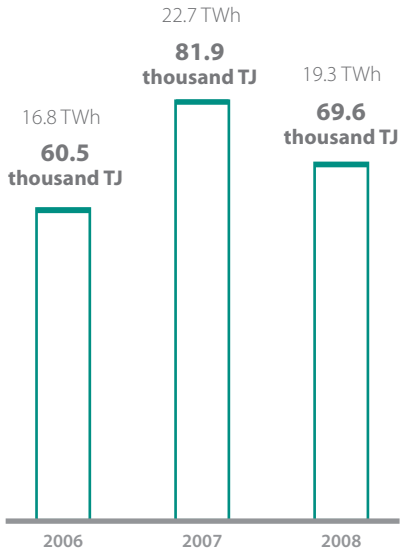
Of the total consumption, 6.2 TWh were produced by our own hydroelectric power plants in Brazil and abroad (66% produced by plants in which we participate through consortia and by our HPPs in Brazil; and 34% by Vale Inco hydroelectric plants in Canada and Indonesia).

We also use 1.5 TWh of electric energy produced by thermal sources:

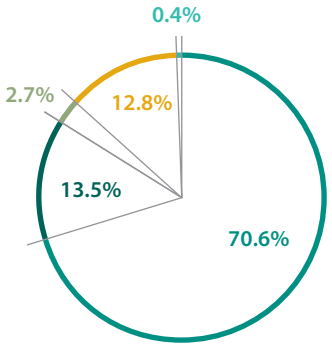
- energy cogeneration at Alunorte makes use of process steam to generate 0.23 TWh (23% of consumption);
- the Cadam process uses fuel oil generators to supply the entire unit with 0.23 TWh;
- Our Voisey's Bay and PTInco operations together generate 1 TWh of electricity.

8 The current methodology does not consider some materials which have been reclassified as direct energy. If we applied that same concept to 2007, the company's reduction in indirect consumption would be 4.3% from 2007 to 2008.

Aggregate consumption electric power



Distribution of total energy consumption



- BRAZIL
- NORTH AMERICA
- EUROPE
- ASIA
- OCEANIA

SUPPLY MIX

Vale's consumption of energy from all direct and indirect sources is shown in the supply mix.

As can be seen in the chart below, 76% of our indirect energy (acquired energy) comes from hydroelectric sources, thus contributing to low levels of indirect CO_2 emissions (additional details in Climate Change on pages 76-84).

OUR OPERATIONS INITIATIVES

In addition to the corporate actions mentioned above, we identified other energy efficiency opportunities:

Automation

- At the Sossego Plant (State of Pará, Brazil), where we produce copper, our employees identified automation opportunities in several processes. This led to the commencement of real time monitoring of the plant. Alerts are provided when any equipment is idle, that is, working without contributing to the productive process. Should this occur, the operator has the option of turning off the process. This has allowed electric power consumption to be reduced by around 1.5%.
- We reconfigured the vacuum pump filtration system and automated water withdrawal pumps at the Conceição Mine (State of Minas Gerais, Brazil).
- Other opportunities for reduction in energy consumption were identified in Vitória (State of Espírito Santo, Brazil) from assessment of the furnace, dryers, and aerators at pelletizing plants.

Railways

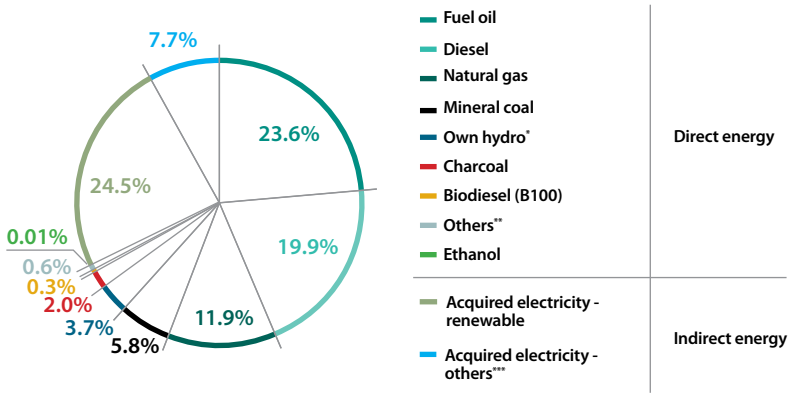
- After operational studies, Vale has decided to use an operational model with longer train compositions, which allow for increased energy efficiency and productivity. In 2008 at Carajás Railway (EFC) 220-wagon trains were replaced with longer 330-wagon compositions. The change produced energy efficiency gains of approximately 3%. This strategy was also used at the Vitória-Minas Railway (EFVM), with compositions changing from 168 to 252 wagons. Efficiency gains were comparable to those experienced at EFC.
- In the second half 2008, Vale started operational tests for an electro-pneumatic brake system at EFVM. The application system is transmitted by an electric cable to the entire train almost immediately, differently from the usual process in which the signal is propagated through air tubes. The system also allows the machinist to apply and release the brakes gradually, for enhanced adjustment. The new technology allows for reduction in unnecessary stops, increased energy efficiency, improvement in speed and enhanced safety.

Ports

- At the Ponta da Madeira Maritime Terminal (State of Maranhão, Brazil) a study was conducted to assess the profile of energy consumption per produced ton. The survey determined 21 priority actions for optimized energy consumption. The actions will be implemented throughout 2009. The work will serve as basis for replication within Vale operations at other ports.

Aggregate energy supply mix - Vale 2008

(Total = 214.6 thousand TJ)



* Small owned hydroelectric power plants.
** Propane, LPG/propane, kerosene, gasoline, coke and CO rich gas.
*** Biomass, nuclear, thermal.

Quality management

- The Program for Automated Fuel Management aims at ensuring the quality, and controlling the quantity, of fuel received in our operating areas.

All information on fuel usage is readily available to local fleet and station managers via the computer based system, along with a set of equipment performance indicators and inventory reconciliation. It is possible to directly monitor fuel consumption above expected levels and leakage in equipment.

The program is under implementation at EFC and at the units of Carajás, Paragominas and Sossego (in State of Pará, Brazil), at Mariana and Itabira (State of Minas Gerais, Brazil), to control the use of approximately 35% of total fuel consumption, thus providing energy efficiency gains to Vale.

CASE

Green train, more gas to locomotives

In February 2009 we announced the Green Train, a project developed over the past four years. Using an unprecedented technology in Brazil, we will test the performance of locomotives fueled by a mix of regular diesel or biodiesel and up to 70% of natural gas. The project is under test implementation at the Vitória-Minas Railway (EFVM).

In line with the Vale Carbon Program (more on page 76), the Green Train project was supported by companies White Martins S.A. and Gás Local, which transformed natural gas into liquefied gas, therefore contributing to overcoming a major barrier in fuel storage, besides adding an innovative character to the project.

Estimates indicate that the use of gas in locomotives at EFVM and EFC railways will prevent the emission of 73 thousand tons of CO_2 equivalent per year to the atmosphere. This corresponds to the CO_2 sequestration of over 155 hectares of native forest, and equals to the emissions of a non-industrial city with approximately 9 thousand inhabitants.

Local sustainable development catalyst

Through the transformation of mineral resources into social development, economic prosperity and environmental preservation, we contribute to the well-being of society. However, it will only become possible if we respect the cultural and institutional characteristics of every region where we operate.

Province of Tete, Mozambique, where the Moatize coal exploration project in under way. The project involves investments in human capital, infrastructure and promotion of economic activities.

MOATIZE, MOZAMBIQUE

Local sustainable development catalyst

Through the transformation of mineral resources into social development, economic prosperity and environmental preservation, we contribute to the well-being of society. However, it will only become possible if we respect the cultural and institutional characteristics of every region where we operate.

LOCAL DEVELOPMENT

Legacy for future generations

Along with society, we work toward building a sustainable development model to last beyond the closure of our operations

The search for building a positive social, economic and environmental legacy in the areas where we operate is one of the principles that uphold the Vale's Sustainable Development Policy. Our activities – especially mining – are limited to the life of the deposit being mined; therefore, our presence in a specific area is generally finite. Our challenge, during the mineral development cycle, is to perform actions that will catalyze regional economic strengths which would perpetuate social welfare of communities, balanced with the environment.

To meet this challenge, Vale undertakes activities to increase the positive effects of our presence, reduce the social risks of operations, and, simultaneously, contribute to strengthening the basis for local development in the long run. We invest in integration with public and social agents to encourage:

- local hiring of employees and suppliers;
- education for human development, for work and for income generation;
- planning for usage of taxes generated by our operations;
- diversification of the local economy;
- strengthening of institutions;
- environmental and cultural conservation.

Therefore, we build transparent relationship networks, based on ongoing dialogue and respect for the culture of each people. At the same time, we invest in management tools

CASE

Reader friendly

Making available educational materials that are not only of high quality but also reader friendly is fundamental to learning. It was this reasoning that led PT Inco's Community Relations Department, a Vale Inco controlled company, to embark on an ambitious textbook writing project in partnership with local educators in Indonesia's South, Central and Southeast Sulawesi provinces. "Through an assessment of needs conducted in 2004, we discovered that many of the books used by local elementary and junior high schools contained content that was unfamiliar and therefore not relevant to both students and teachers," says Ann Sjamsu, Superintendent Community Development at PT Inco.

To address this shortcoming, PT Inco asked Makassar State University (MSU) to help develop a training program that would provide a group of talented local teachers with the additional writing and research skills they would need to create new standardized books. MSU was also asked to assume responsibility for approving the information contained within the new works. "Our aim was to create reading material that would be based on the national curriculum but reflect local content and culture," notes Sjamsu. That goal is already being realized. In 2008, nine books authored by local teachers were published and are now being used by hundreds of newly engaged Indonesian schoolchildren.

We build a sustainability legacy by investing in educative activities.

to enhance the development of the regions. We intend to work with society to build the basis for continual improvement in the quality of life.

LOCAL DEVELOPMENT MANAGEMENT

In the different areas and regions where we operate, we have a number of programs and tools to manage the socio-environmental impacts resulting from our activities.

In viability analyses for project implementation we adopt the **Front-End-Loading (FEL)** methodology, which encompasses social, health, safety, and environmental aspects, as well as operating and economic risks (more in Risk Management on page 25).

In addition, based on environmental, social and economic impact studies carried out in **EIA/RIMA (Environmental Impact Assessment)** we consider the potential impacts of our presence in the regions during the licensing and implementation stage of our projects.

The tools, combined with **Socio-economic diagnoses** prepared by Vale Foundation, guide our **Programs for Management of Environmental and Socio-Economic Impacts**, aimed at searching for mechanisms to mitigate and prevent negative impacts, and maximize the positive impacts of our activities. The programs are applied according to the needs of each venture and considering the particularities of each region.

Through these tools, we have been able to identify the main impacts associated to mining activities. Among them, we highlight:

Positive direct economic impacts:
- Job generation
- Professional qualification
- Increase in tax income
- Procurement of local products and services
- Investments in infrastructure

Negative direct economic impacts:
- Environmental impacts such as dust and noise
- Interference in land usage
- Risk of incidents

Positive indirect economic impacts:
- Increase in salary volume contributing income generation
- Leverage of other economic sectors
- Attraction of suppliers
- Development of local suppliers
- Attraction of investments from several government spheres and private enterprise

Negative indirect economic impacts:
- Pressure on infrastructure and public services due to demographic increase
- Real estate speculation in remote areas due to low availability and high demand for housing
- Creation of the effect known as economic leakage resulting from hiring suppliers and employees from other regions due to lack of specialized local companies and workforce

In 2008, we performed new Socio-Environmental Diagnoses. The studies conducted for the operations of Carborough Downs, Integra Coal and Broadlea in Australia showed that the contribution to the region's economy, due to investments in infrastructure and the effect of income from the jobs generated, was the main indirect economic impacts identified.

In Mozambique, at the Moatize project, job generation in several economic sectors was the main indirect impact identified. A study is in progress to measure and monitor project impacts through socio-economic indicators.

In the case of socio-economic diagnoses performed for the areas where Brazilian operations are located, a regional input-product matrix was used. The methodology inter-relates several industries, thus allowing estimation of how the demand variation caused by one industry impacts the others. Assembled as a regional system, it allows the estimation of regional and inter-regional impacts caused by larger demand for inputs and workforce resulting from Vale's new enterprises in the region.

Training young people in the communities where we operate contributes to local development.

PROGRAMS AND PRACTICES FOR IMPACT MANAGEMENT

With the objective of leveraging and realizing the positive potential of our presence in the regions, we work with structured projects in the several relationships that we establish.

Professional qualification
We seek to maximize the recruitment of local residents where we operate, especially in remote areas. We invest in Professional Qualification programs related to mining activities and other activities in the local economy. Through these programs we seek to contribute to employment and income generation and to diversify the economy in the communities where we operate.

Relationship with communities
Throughout all stages in our ventures (from implementation to closure), we rely on a Communication and Institutional Relations team. Our community relationship programs are based on a participative, ongoing dialogue between the community and Vale. The programs include: tours of mines for communities, meeting with leaderships and participative forums.
In addition, we endeavor to maintain a direct, transparent dialogue, both with the community and local authorities, in order to build a harmonious relationship.

Relationship with traditional communities
We pay special attention to traditional communities living in our areas of operation. The basic guideline of the Program for Interaction with Indigenous Communities is to guarantee that the benefits generated by the project can also be enjoyed by indigenous communities, respecting their cultural traditions and preventing, mitigating or compensating for possible adverse effects that our activity might generate (more on Indigenous People, pages 97-99).

Appreciation of culture
We understand that we can contribute to, and participate in, programs for appreciation, revival, protection and use of cultural assets. We support projects and establish agreements for restoration of cultural and archaeological heritage

Programs and practices per stages of enterprise	Implementation	Operation	Closure
Study for environmental, social and economic impact	x		
Management of environmental impact	x	x	x
Plan for Mine Decommissioning	x	x	x
Program for Supplier Development		x	
Program for Professional Qualification – Employees	x	x	x
Program for Professional Qualification – Community	x	x	
Program for Community Relationship	x	x	x
Program for Relationship with Traditional Communities	x	x	x
Program for Appreciation/Protection of Cultural Heritage	x	x	
Social programs	x	x	x

INTENSE OCCURRENCE **MODERATE OCCURRENCE**

sites where we operate. An example is the project for revival of Kanak people language (refer to case on page 98).

In addition to these programs directly applied in our units, Vale Foundation works for development of the communities where Vale is present, contributing to strengthen people and respecting local cultural identities by means of structured social programs.

VALE FOUNDATION

Based on the knowledge and respect for local identity, Vale Foundation seeks to expand its contribution to the integrated development of the areas where Vale operates. Aiming to improve quality of life through human and economic development, the Foundation is constantly improving its management approach, in a joint learning process with the communities. In these lines, it is based on three priority areas:

1. **Infrastructure** – We develop actions aimed at improving urban infrastructure in line with public policies, from the development of executive projects, articulation and support to municipal administrations in collecting funds available with federal and state governments, as well as in the implementation and management of the process.

2. **Public Management** – To ensure that we contribute to the development of the communities where we operate, Vale seeks to ensure that collected taxes are managed wisely and transparently and used to improve the quality of existing services.

3. **Human and Economic Development** – In partnership with public authorities and civil society, we contribute to the construction of centers for human and economic development, which we call Knowledge Stations.

CASE

Opportunity generation

With the goal of strengthening local development, Vale Foundation intends to build about 15 units of Knowledge Station – Nucleus for Human and Economic Development, by 2015. The initiative will benefit approximately 30 thousand children and young adults aged 7 to 19, in its operation areas in Brazil.

The Knowledge Station is a Civil Society Organization of Public Interest (Oscip) and was established following the model to allow for direct participation of the community. The organization's managing partner is Vale Foundation and the project relies also on the partnership of municipal administrations and organized civil society.

The Knowledge Station model expands the concept of traditional school. It works with physical, emotional and cognitive development in an integrated fashion through activities intended for competitive sports, culture and professional qualification. The Station operates as an Educational Center, upheld on four pillars: Permanent technical support; Organization of business process; Center of technological reference; and Center for processing and commercialization.

The initiative aims to strengthen communities to generate income and deliver sustainable development for the population, matching demands as identified in the Integrated Management Plan of the regions – resulting from studies which have been guiding the company's strategic sustainability actions.

Program	Description	Benefited in 2008
Vale School	Works in the training of teachers and managers of the Public School Network to improve the quality of Elementary School education, involving school principals and technicians from municipal education secretariats.	108,639 teachers and students
Vale Museum	The museum promotes contemporary arts, preserves the history of railway, and offers professional courses in cultural production.	48,914 visitors
Vale Network	The network invests in job and income generation based on social responsibility projects and corporate volunteering.	3,468 young adults and entrepreneurs
Vale Literacy	The program trains reading and writing tutors and promotes the inflow of new students to classrooms, aiming at reducing adult illiteracy and enhancing citizenship.	16,631 teachers and students
Vale Youth	Contributes to personal, social and productive development of young adults by offering affective and sexual education and formation as local development agents.	55,643 young attendees
Vale Volunteers	Encourages a volunteering culture within Vale, strengthening social dialogue and contributing for local development.	61,795 benefited by 7,271 volunteers
Vale Music	Promotes classical music learning and preservation of the local cultural music genre for children and teenagers.	770 children and teenagers
New Alliances	Trains members of public management councils in development of actions that contribute to compliance with Brazilian legislation concerning child and adolescent rights (named "Child and Adolescent Statute").	341 qualified people

Fulfilling a target established in 2007, executive projects in line with public policies to obtain government funds for infrastructure works and housing have been concluded with local municipal administrations. This stage was essential to provide the cities with enough resources to execute public works in housing, sanitation, transportation and security, which were identified as top priorities for future development in the Integrated Management Plans due to the existing deficit.

The opening of the first Knowledge Station, in Tucumã, State of Pará, in October 2008, was a milestone in the advancement of structured social actions. The action reinforced Vale Foundation's commitment to invest in human development as a basis for local institutional strengthening (read more on page 63).

Recently, we also established a Foundation in New Caledonia as a result of the Pact for Great South Sustainable Development where the Vale Inco Nouvelle Calédonie Project is under implementation. The Foundation aims at fostering sustainable development in the region (more on the Pact in New Caledonia on page 94).

Over 2008, Vale Foundation modified its internal structure, strengthening its management tools and teams for development of its strategy. In parallel, social programs intended for the areas of Education, Culture and Citizenship Promotion were aligned and integrated with the activities planned for different regions. For additional information on the strategy and programs, and for updated news on the activities, please visit the Vale Foundation link at the website www.vale.com.

SOCIAL INVESTMENTS

Vale's strategy for sustainable development is anchored in our capacity to generate and distribute value. In addition to direct and indirect mechanisms for distribution of wealth, such as payment of taxes, salaries and benefits, and acquisition of products and services, we make social investments in projects to benefit local communities.

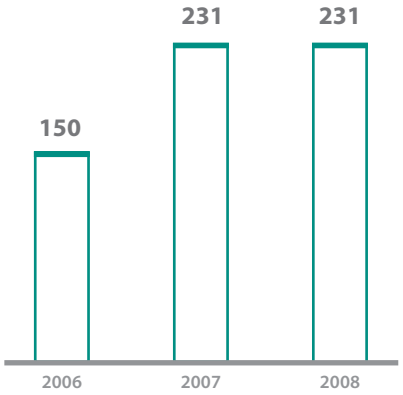
These investments include activities in education, culture, income generation, and strengthening of social capital, through programs developed by Vale Foundation, sponsorships[1] and donations, among others. In 2008, Vale made social investments of US$ 231 million.

About 95% of these investments were voluntary actions, either directly executed by Vale or in partnership with civil society organizations.

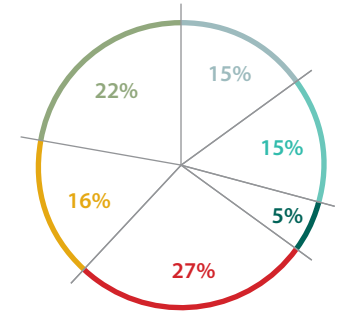
1 The Vale's sponsorship policy considers, for approval, the adequacy and relevance of projects for the local reality, and their alignment with our strategy for sustainable development. Top priority areas are: cultural, environmental, social and technical.

Total social investment

(US$ million)



Social investment per segment in 2008



- CULTURE
- EDUCATION
- TRADITIONAL COMMUNITIES
- TRAINING
- INFRASTRUCTURE
- COMMUNITY RELATIONSHIP/ DEVELOPMENT

Investments in infrastructure

Total US$ million		2006	2007	2008
		31.9	99.2	37.7
By kind	Support to services	7%	6%	19%
	Construction works	93%	94%	81%
	Total	100%	100%	100%
By format	*Pro bono*	9%	14%	18%
	Commercial engagement	19%	13%	40%
	Materials/products	72%	73%	42%
	Total	100%	100%	100%

By kind – **Support to public services:** payment for services such as remuneration of nurses, teachers etc. **Construction works:** road construction, school and hospital building, among others.

By format – ***Pro bono*:** activity developed for public benefit, such as allocation of people with defined function in activities during the entire working period, using Vale funds. **Commercial engagement:** activity generating public benefit, but that primarily generates economic benefit or return on investment for the company. **Materials/products:** in kind investment in infrastructure, through service supply, or through delivery of a product.

About 16% of the amount invested by Vale is intended for urban infrastructure improvement works. In the municipality of Canaã dos Carajás (Pará, Brazil), for instance, an agreement was signed for expansion of the Water Treatment Station. In Governador Valadares (Minas Gerais, Brazil) the Mr. Simpson viaduct was remodeled; and in the State of Pará sections of PA-150 highway were renewed in partnership with the State Government. In the last three years, investments reached the tune of US$ 169 million. Investments in infrastructure were lower in 2008 than in 2007, due to project conclusions.

LOCAL HIRING

Local job generation contributes to provide positive impacts for the local economy. Vale encourages local hiring in countries and regions where jobs are important for local sustainable development.

In Brazilian units, in other developing countries and where Vale Inco has specific Impacts and Benefits Agreements (IBA's) with indigenous communities such as Newfoundland and Labrador, local hiring is a common practice, whenever candidates are available with the required qualification. The practice is stimulated by specific training programs.

Professional Education Centers (CEPs), created by Valer, in partnership with teaching institutions, contribute to promoting local hiring by offering professional education activities to Vale employees and for the population in regions where projects are developed. In 2008, CEP Itaqui-Bacanga was opened, in the State of Maranhão, Brazil, and construction started for the unit of Paragominas, State of Pará, in Brazil. The three units working since 2005, in the State of Pará (Parauapebas, Canaã dos Carajás and Ourilândia do Norte), have qualified 2,793 people.

In 2008, Vale provided approximately 75%[2] of local hiring[3]. For management positions, the rate is 46%[2] as the competencies required for management positions are more specific.

ARTISANAL AND SMALL-SCALE MINING

Artisanal and small-scale mining activities are not usual within our operating areas. Even so, Vale participates via ICMM, in the debate about CASM – Communities and Small-Scale Mining.

However, Vale has granted free and voluntary concession of its mining rights over Santa Efigênia Quarry to the Labor Cooperative, in the State of Minas Gerais, Brazil, the only such activity of Vale in the country.

In addition, in 2008, we recorded the presence of artisanal and small-scale mining-type activities in a number of our concession areas in Indonesia – especially during the period of higher nickel prices. To address this situation, PTI has been working with local authorities and investing in several community development programs focusing on the areas of education, health and agricultural development. The instances of these artisanal or small-scale mining activities, however, have decreased significantly since the onset of the economic downturn.

With the beginning of Vale's activities in some African countries, we will monitor this kind of activity in our operations or in adjacent areas and will act, whenever possible and necessary, to promote better social and environmental practices.

INCIDENTS

Preventive action, ongoing monitoring and control of risks to people living in the regions where we operate are aspects that matter in the management of the Vale's relationship with communities. Our action is based on risk prevention and timely response to people in the occurrence of an incident, also involving the community in this process.

Vale maintains a system to record and investigate the causes of incidents, which contributes to our knowledge of the risks, to the creation of prevention mechanisms, and to the reduction of consequences of incidents that do occur. At the same time, we have developed education and awareness-raising programs, encouraging the participation of communities in prevention efforts, in the search for solutions, and in the identification of improvement opportunities.

CASE

After the earthquake, hope

In 2008, following an earthquake that hit the Chinese province of Sichuan, solidarity was a watchword at Vale. By donating in kind through the China Youth Development Foundation, the company is supporting the reconstruction of two damaged schools.

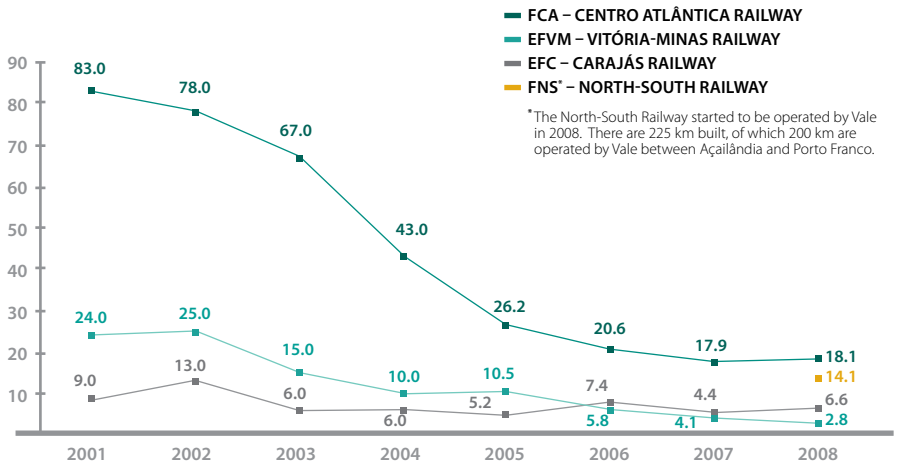
The donation will benefit 2 thousand students and teachers from Shima Middle School and Bishan Primary School, located respectively in Cang Xi and Yongxing Town, in the Chinese province of Sichuan. The two teaching institutions will be renamed Vale Hope School at the conclusion of the reconstruction works.

In addition to helping repair the damaged schools, the company made a donation in kind to the Chinese Red Cross for other victim assistance operations.

2 As of 2008, this indicator reports global results. It does not include Canadian operations where monitoring is not performed. In 2007, only major Brazilian units had been considered. Own employees, as per this indicator (EC7), account for 83% (2008) of the total reported employees (LA1). Projects are not included.

3 Although this indicator considers the state where the employee was born as "local", our recruitment practices, whenever applicable, prioritize residents in the state, not necessarily people who were born in that same state.

Incidents in railways operated by Vale in Brazil per MTKm
(million of train-km)



Location	Incidents and measures taken
Brazil/Minas Gerais	• Pipeline disruption at the Cauê mill dam: We cleaned a mud-covered area, recovered the system and improved the structure. • Rain water leaked from the drainage system at Conceição Mine, resulting from intense rainfall: In addition to cleaning affected areas, we reconstructed the drainage system, which subsequently received approval from the state environmental agency. • Polymer spill at the MG-123 highway, municipality of Rio Piracicaba: Vale called the supplier to remove the residues.
New Caledonia/ Vale Inco Nouvelle-Calédonie	• Mud accumulation at Kwé Bay, due to excessive rainfall: We made improvements to sedimentation ponds and run off water management devices. • Occurrence of green coloration in the Truu River, after performance of tracer testing at the mine: Emergency measures that were implemented included a system to supply drinking water and food to the local population. Meetings were held to clarify the impact and explain that there was no harm to health. After the event, an agreement was signed assuring that future tests would only be performed after consultation with local authorities.
Canada/Sudbury and Garson	• At Sudbury, a seismic event occurred in local mines shortly after a regularly scheduled blast. No one was underground at the time and there were no injuries: The company's communication channel recorded messages from the public. Responses to these messages were provided either by Vale Inco personnel, or by the insurance company that assesses the validity of a claim. • Seismic event in Garson with workers rescued from underground. No injuries were incurred.

Vale Railways in Brazil

Vale operates approximately 10 thousand km of railway network in Brazil. The lines serve nine states, crossing around 400 municipalities. In many places, communities experienced significant growth associated with the railways, representing a significant risk of incidents.

Despite ongoing improvement in the indicator Incident per MTKm (million of train-km), which considers incidents in relation to the number of trains and traveled distances, we recognize that further improvement is still required.

The main initiatives in progress include:
- analysis of risk vulnerability
- educative and awareness campaigns
- assessment of new technologies such as electro-pneumatic brakes
- training of security agents
- night patrols
- improved signage

Environmental

In 2008, we recorded the occurrence of seven significant environmental incidents[4] in all our operations (table beside). Three occurred in Minas Gerais, Brazil; two in New Caledonia at the Vale Inco Nouvelle-Calédonie Project; and two in Canada[5].

INVOLUNTARY RESETTLEMENT PRACTICES

To develop its activities in mining, logistics, energy and other undertakings, Vale acquires land and, when displacement of communities is unavoidable, implements resettlement plans. Where land acquisition and resettlement activities occur, we always try to reach an amicable settlement.

The company seeks to adopt practices which are aligned with the World Bank recommendations and its Operational

4 "Significant incident" as defined by GRI corresponds to "critical incident" as used by Vale, that is, those outside the borders of the operational unit's property presenting residual impact on the environment and/or on health and safety within or outside the operational unit.

5 Subject to the materiality principle, we started reporting railroad incidents separately through the internationally adopted indicator (incidents per million of train-km). Spill figures are reported in the environment chapter under indicator EN23, on page 52.

Mine Decommissioning Guide assists operating units involved in mine closure activities.

Directive on Resettlement. The document deals with land acquisition and involuntary resettlement cases by recommending actions to mitigate social and economic impacts of the resettlement.

Resettlement information and records are kept by the involved business areas, with procedures varying according to project and local specificities. In some cases, depending on the resettlement dimension, audits are conducted and families are contacted in the post-displacement stage.

Between 2005 and 2007, resettlements occurred in ten Brazilian municipalities, 90% of which were achieved while fully meeting all practices as recommended by the World Bank. In 12 places resettlements involved up to 10 to 100 households, but mostly 10 to 40 households. Considering household groups and isolated cases, approximately 600 households were dislocated in Brazil over the period.

In 2008, we conducted only two resettlements, with displacement of 43 households. In Minas Gerais, Brazil, 40 households were displaced, through assisted indemnity to minimize the impacts of the mine operation on those residents. In Peru, three households were resettled.

Both processes were conducted according to the directives of the World Bank, including actions such as consultation with the communities and affected persons; availability of a communication channel for recording grievances and solutions on compensation and displacement; performance of socio-economic census to identify the persons to be displaced by the project; and informed participation of the communities at all stages.

MINE CLOSURE

Vale has developed a *Mine Decommissioning Guide*, which establishes a corporate position on mine closure. The guidelines are intended to assist professionals at operating units involved in these processes.

With the objective of enhancing management and plans for mine closure, a workgroup was created in 2008 consisting of representatives from several areas of the company. The group approaches technical, environmental and socio-economic aspects for decommissioning, considering areas such as legislation, technology, sustainability and financial provision.

Vale has a provision with mandatory actions for asset demobilization as required by the SEC - Securities and Exchange Commission (USA), involving all mining undertakings of the company. Amounts estimated for provision are revised on a yearly basis and reported in the financial statements. In 2008 the estimated amount was US$ 839 million for asset demobilization at Vale.

CASE

The spirit of relationship

The government license for Vale to develop mining activities in one of the world's largest coal reserves, in the Province of Tete, District of Moatize, northwestern Mozambique, was issued in 2007. The local community's faith in the Moatize Coal Project was reinforced when the company received religious blessings in a ceremony commanded by a kinglet, a guardian of sacred rites, respected as a traditional leader. The ritual, for which permission is asked to the spirits of ancestors of the current dwellers, was followed by rain. The sign was interpreted as an approval to the initiative that has potential to generate up to 3 thousand direct jobs during the implementation stage.

Ever since Vale started mineral research and feasibility studies in the coal reserve, the ability to speak the same Portuguese language has contributed to strengthened dialogue among the parties who discuss the implementation process for the Moatize Coal Project. Mutual understanding has also being reinforced by Vale's integration into the local culture, which includes over 30 dialects and languages.

The participative dialogue was considered to be fundamental to the negotiation of the resettlement of families in the province. Workshops with playful resources contributed to strengthening the atmosphere of understanding between residents and Vale representatives during the process for discussion of the enterprise, its impacts and perspectives.

VALUE CHAIN

Local partnerships. Global action

We guide our relations with suppliers and customers by the commitment to disseminate economic, social and environmental responsibility throughout our value chain

The global market in which we operate presents new challenges every day. We strive for continuous improvement and innovation to establish more productive partnerships.

Innovative capital

Finance via 'Inove' is offered through credit lines at competitive rates, including Supplier Direct Credit (CDF), intended to be used for short-term working capital. The greatest advantage is the payment in advance by partnering banks of invoices already approved through Vale's system.

Another initiative is the Fund for Financing Small and Medium Suppliers (FFF), a credit line extended by Vale in partnership with financial institutions, intended for small and medium suppliers participating in PDFs. The Fund amounts to renewable US$ 27 million, with a limit of US$ 1 million per supplier. Additional information on 'Inove' is available at www.vale.com, suppliers section.

SUPPLIERS

We invest in the development of our suppliers to strengthen ties and develop new business opportunities. In 2008 we announced the 'Inove' Program, focused on the strengthening of small and medium sized suppliers at our own units in Brazil, considered as potential agents for sustainable development in our operating areas.

In line with Vale's sustainability strategy, the program seeks to supply the demand for qualification and credit access, essential elements to boost the generation of competitive, long-lasting businesses. It is our understanding that the developed tools will contribute to enhancing the performance of our small and medium sized suppliers at regional level, and at the same time take advantage of opportunities in the global market.

'Inove' is one of a number of initiatives that make up Programs for Development of Suppliers (PDFs in the Portuguese acronym), implemented in the Brazilian states of Pará, Maranhão, Minas Gerais, and under implementation in Espírito Santo. To date, over 2 thousand companies have been mobilized, and the program will be expanded into another five states by 2010: Bahia, Piauí, Sergipe, Tocantins and Mato Grosso do Sul.

Shared knowledge

Through our Programs for Development of Suppliers, we disseminate the respect for human rights throughout our supply chain, reinforcing that Vale is a company globally engaged in the fight against reprehensible labor practices such as forced and compulsory labor and child labor.

Likewise, we seek to expand to suppliers issues related to sustainable use of natural resources.

Guided and supported by Valer – Vale Education, in Brazil, we will initiate education activities as part of 'Inove' throughout 2009, by means of technical seminars, meetings, and other training actions with employees and entrepreneurs.

We will also launch activities to propagate the program across Brazil for both internal and external stakeholders. The first planned action is the 'Inove' Forum, in April 2009, in Rio de Janeiro.

In recognition of the performance of our suppliers, in 2008 we announced a Sustainability Award in Minas Gerais. This is part of Program 'Tear' – Weaving Sustainable Networks, in which we act as an anchor-company for the mining sector in Brazil. 'Tear' (meaning 'loom' in Portuguese) is a successful articulation initiative consisting of a number of social actors, resulting from an agreement between the Ethos Institute of Social Responsibility and the IADB's Multilateral Investment Fund (Inter-American Development Bank).

CASE

Frank dialogue

In 2008, when the Bayóvar Project cornerstone was laid in Piura, northern Peru, Vale concluded another stage in the relationship process started in the region in 2005. The large expectation raised around the enterprise served as a basis for the development of actions that prepared both communities and the company for the activities to take place from 2010. The mine, one of the largest phosphate deposits in South America, is expected to produce around 3.9 million tons of phosphate compound ores per year.

The first step was a series of meetings with communities from 76 villages forming the area of influence of the project. In those meetings, the population was informed about details of the venture and could express their own views. Together, communities and the company created actions to make use of the project's potential to leverage activities in different points of the value chain, focused on education, environment, workforce qualification and social infrastructure.

A major action resulting from the dialogue process is the Program for Strengthening Local Suppliers, intended to offer free qualification for service providers and product suppliers.

The core objective is to guide local entrepreneurs to meet the demands arising from the Bayóvar Project as well as other businesses created around it. In order to structure the program, Vale has entered into an agreement with the Commerce and Production Chamber of Piura, the partner in charge of final certification of suppliers, recognizing achievements in management improvement. By December, four workshops had been held with the participation of over 2.7 thousand local companies.

CASE

New uniforms move the economy

As a result of the change to our brand, Vale, with the participation of employees who voted for the new design, recently introduced new uniforms. In Brazil, this change positively impacted both textile manufacturers that had to produce enough fabric for a 600 km long road and clothing manufacturers that had to hire additional labour to make 400,000 new uniforms.

Three clothing manufacturers – two from the State of Minas Gerais (Southeastern region) and one from the State of Bahia (Northeastern region) – invested US$ 1.3 million in personnel qualification, works and purchase of new equipment. In addition, they generated 340 direct and indirect jobs to match the unprecedented order.

The same mobilization was also felt by three major textile industries, which had their capacity fully committed for two months to fulfill the order.

In the interests of both conservation and entrepreneurship, Vale's old uniforms are being recycled. Material has been sent to dressmaker cooperatives where it will be used for training purposes and turned into bags and sacks, generating additional income for our communities.

DIAGNOSES AND SOLUTIONS

From regional diagnoses, we intend to enhance the understanding of offer and demand conditions of products and services in our industry. In Brazil, one such study was developed in the State of Pará, in 2008, serving also as basis for assessing the importance of Vale's procurement to the local economy. The future aim is to expand that kind of study into other regions.

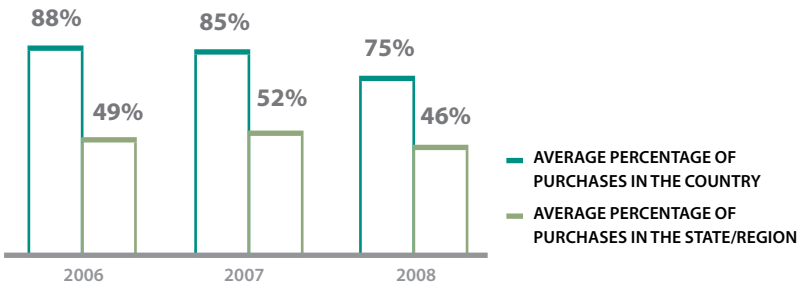
The diagnosis made in the State of Pará unveiled challenges such as the unqualified workforce and limited investment capacity to supply larger demands. By understanding that such elements might inhibit the participation of small and medium sized suppliers in bidding for procurement of products and services – both for Vale and other companies – we decided to focus on finding solutions for the challenge, which also affects other remote areas where we operate.

Therefore, we created the General Management for Regional Procurement, in Carajás, State of Pará, Brazil, to start the interaction with local suppliers to further increase the local procurement level. The measure assisted in structuring the 'Inove' Program as a toolset with long term transformation potential.

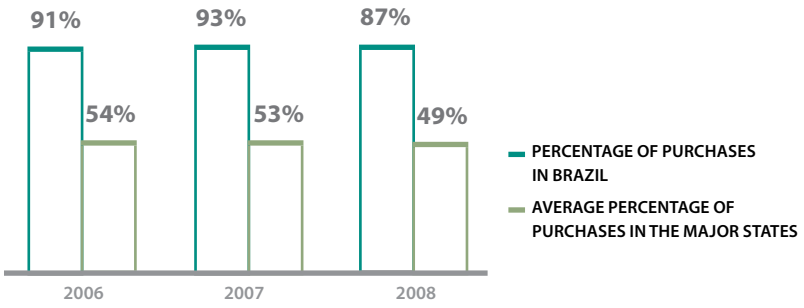
LOCAL PROCUREMENT

Hiring local suppliers is a key priority for Vale. Not only is it an important tool for invigorating the economy in remote areas, but it is also an opportunity to improve the qualifications of local companies so that they might succeed in increasingly competitive markets. Development actions directed to assist local suppliers are expected to generate positive impacts in the medium and long term.

Local procurement – Global scope

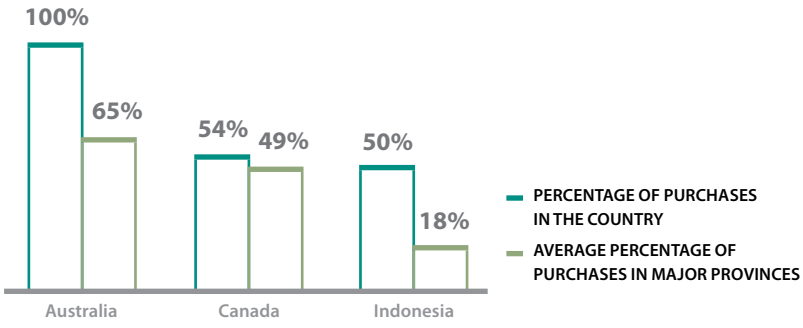


Local procurement - Brazil



* In 2006 and 2007, the percentage of purchases in Brazil considered only own units. In 2008, figures from controlled companies were incorporated.
* The average percentage of purchases in States considers acquisitions by our main operations in Espírito Santo, Maranhão, Minas Gerais and Pará – Brazil.

Local procurement – other countries 2008



We work in global markets and interface with peoples of different cultures. To better convey our messages, we seek to adapt our language to the reality of the regions where we are inserted.

PERMANENT SEARCH

Aimed at continuous improvement and contributing to advancements in the supply chain, the management of relations with our suppliers encompasses three stages: qualification based on our values, performance evaluation, and development.

The processes of selection and registration of our suppliers are guided by compliance with criteria involving legal, fiscal, tax, health, safety and environmental aspects. Our records are constantly updated with periodic review of their compliance with our requirements. Additionally, all suppliers in Brazil are monitored by periodically cross-checking them against the list of companies involved in forced and compulsory labor and other legal issues published by the Ministry of Labor and Employment. For additional information, please, refer to Human Rights, in We condemn child labor and forced labor on pages 95 and 96.

Before entering into business agreements, we verify whether the companies have pending issues with the National Institute of Social Security (INSS) and the Government Severance Indemnity Fund for Employees (FGTS), among others. Relationships may be terminated with companies where irregularities have been identified and they have proven to be unwilling to resolve them.

IDF, focused on performance

Our Supplier Performance Index (IDF in the Portuguese acronym) is an important tool to assess our suppliers of material and services in contracts worth over US$ 270 thousand. After assessment and classification, we prepare action plans for those with performance below 50%. Among other goals, IDF seeks to provide a basis for renewal of our database, establish a ranking of partners, and ensure increased transparency toward the market.

Through IDF Services, our managers perform quarterly assessments in a total of six dimensions: Technical-operational (43.5%), Health and Safety (20.5%), Environment (18%), as well as Labor, Civil and Tax Obligations (18%). Results are disclosed through an internal gateway for communication with suppliers.

Through IDF Materials, we generate monthly information on the supplier database from assessments based on the criteria: Punctuality (50%), Conformity (40%) and Competitiveness (10%). Results are also available at the internal gateway. Best performing companies were eligible for a total of 25 awards in 2008: Best Regional Supplier, Health and Safety Distinction, Environmental Distinction, PDF Distinction, Best National Material Supplier and Best National Service Supplier.

By adopting these monitoring mechanisms, we contributed to elevating management standards in our supply chain. This commitment is to be expanded with the creation of a Code of Ethics for Suppliers[1]. This document addresses, in a comprehensive way, topics such as human rights, safety, environment, competition, and diversity, among many others.

1 Published in July 2009.

CUSTOMERS

Communication of values

We endeavor to find solutions to meet the needs of our customers and their businesses, investing in the quality of our products and strengthening our long-term relationship.

Our business is predominantly conducted with other enterprises (*business to business*), not with end users (*business to consumer*). Therefore, our communication strategy assigns priority to specific actions intended for customers.

Activities turned to other links of the value chain, such as suppliers and other partners, follow the same line and are carried out through events such as technical visits, meetings, trade shows, exhibitions and customer satisfaction surveys.

The ongoing contact with our customers allows us to monitor and assess their perception of the quality of our products and services, and the technical assistance provided. Different tools also allow us to identify improvement opportunities for our products and services and monitor our compliance with the ISO 9001 international quality standard in our certified business units. The methodology, periodicity and comprehensiveness of our practices must be varied to meet the specific needs and characteristics of each market segment.

For the general cargo Logistics segment of our business, we conduct assessments aiming at monitoring the quality and performance of our services. Since 2006, the tool guides Logistics actions in their search for operational excellence.

For the passenger transportation segment in Brazil, satisfaction surveys were conducted in 2006 (Vitória-Minas Railway) and 2007 (Vitória-Minas Railway and Carajás Railway), and customer relationship channels are available for input and opinions from users.

We adopt a proactive approach, and seek to anticipate legal or regulatory trends, to ensure legislative compliance by our operations and businesses, in conjunction with delivering the efficiencies required by a competitive market, aiming at preserving the Vale's image.

Besides complying with all existing laws and directives concerning product supply and use in the areas where we operate, our advertising and promotion activities are controlled under our communication strategy, which is aligned with our Mission, Vision and Values, and adheres to our Code of Ethical Conduct. In 2008, we recorded no cases of non-conformity or fines related to sponsorship, advertising and promotion, and no cases related to supply and use of products and services[2].

Vale's institutional communication actions have the core objective of strengthening our Mission to transform mineral resources into prosperity and sustainable development.

In 2008, considering our global presence and the diversity of cultures with which we interact, we launched an advertising campaign that had been previously assessed by people from different countries. As a result, parts of the campaign material were adjusted and languages, images and values that were best suited to each local cultural environment were adopted in order to enhance the understanding of our message. For 2009, the target is to establish a process to expand the participation of local professionals in the campaigns.

2 Processes are considered relevant based on the following criteria: a) due to the monetary value, including indemnity claims and fines; b) due to topics of interest of the company or the public at large, regardless of monetary value.

Global sustainability agent

Aware of the challenges imposed by climate change to businesses, governments and society, we are a willing and active partner in the search for solutions to this important global issue.

Climate change may affect not only our activities but the daily lives of communities.

NEWFOUNDLAND AND LABRADOR, CANADA

CLIMATE CHANGE

Perspectives and challenges

Vale's climate change and carbon guidelines will direct our efforts to reduce greenhouse gas emissions

In 2008, we announced our Corporate Guidelines on Climate Change and Carbon, which will provide the basis for our initiatives to reduce greenhouse gas (GHG) emissions. In addition, they will help us identify environmental, economic and social vulnerabilities in the areas where we operate, as well as opportunities for developing cleaner energy sources.

Our contribution to reducing impacts on global climate systems is expressed in our efforts to protect forests and biodiversity, in embedding energy efficiency within our decision making processes and actions, and in reducing the consumption of water and other strategic natural resources in the countries where we operate.

The efforts of our employees in the areas where we operate will drive our contribution to delivering reduced GHG emissions, together with the search for partnerships and ongoing investments in innovative technologies and awareness-raising activities.

The Vale Carbon Program is an integral part of our Corporate Guidelines on Climate Change and Carbon and has established a wide-ranging set of globally coordinated measures. In 2008, we advanced in the implementation of material actions which are part of this Program aimed at attaining standards of excellence by 2012.

The next pages present our initiatives, some of which started in 2006, in addition to advancements materialized in 2008 for the five fundamental principles of the Vale Carbon Program.

We prepare our employees to identify eco-efficiency opportunities to meet climate change challenges.

Vale Soluções em Energia S.A. (VSE) aims to identify and develop innovative technologies, in addition to increasing energy efficiency in our processes.

Vale Carbon Program Fundamental Principles

1 - Strategic evaluation of the impact of climate change on business, and capacity-building of the company to operate in the new competitive environment.

- In 2008, a corporate group was created to debate climate change related topics in a workshop and interactive virtual environment. In addition to Vale employees, invited consultants and other experts were involved in discussions.

- In 2009, a project for strategic analysis of climate change related challenges and opportunities was joint developed with consultants and experts, especially focused on the global regulatory trends.

2 - Support for, and implementation of, initiatives for reducing GHG emissions and promoting sequestration of carbon dioxide.

- We implemented projects to replace fuel oil with (less carbon intensive) natural gas at Nibrasco and Kobrasco pellet plants, located in the Tubarão Complex, State of Espírito Santo, Brazil, and at the pellet plant in Fábrica, Minas Gerais, Brazil. The projects were implemented in 2006 (Fábrica) and 2007 (Nibrasco and Kobrasco), and achieved a total reduction of about 139 thousand tons of CO_2 equivalent in 2008 against 2007. As additional benefits, all regulated pollutant emissions (especially sulphur oxides and nitrogen oxides) also decreased.

- In January 2009, a project by our subsidiary Albras (State of Pará, Brazil), to reduce PFC (perfluorocarbon) emissions was recorded at the UN's Clean Development Mechanism (CDM) Executive Board. The initiative calls for reduction of as much as 80 thousand tons of CO_2 equivalent per year at full operation. During 2008, adjustments were applied in the implementation process.

- In June 2009, Vale joined a consortium with Biopalma da Amazônia S.A. to produce biodiesel from palm oil. The consortium will be the largest palm oil producer in the Americas. Estimated annual oil production is projected to be 500 thousand tons. Part of the production will be turned into 160 thousand tons of biodiesel for our company. This biodiesel volume represents a reduction of about 12 million tons of CO_2 equivalent in the atmosphere throughout the project, when compared to regular diesel emissions, not considering emissions related to the biodiesel productive chain.

- We also promoted methane capture for electricity generation at Vale Australia operations. The Integra underground mine is one of a few mines in the State of New South Wales to convert coal seam gas (grisu[1]) into electricity to supply the national interconnected network. The power plant, owned and operated by Envirogen, comprises conventional reciprocating engines fuelled by coal seam gas from the Integra underground mine. The plant was authorized to operate in November 2007. In addition to reducing greenhouse gases, the plant generates 10 megawatts of electricity, enough to supply 15 thousand of households. In 2008, about 5.25 thousand tons of methane (110 thousand tons of CO_2 equivalent) were captured for electricity production.

- At the Clydach Nickel Refinery, operated by Vale Inco in the UK, actions have also been implemented for energy efficiency and reduction of GHG emissions. (more on page 53).

- In 2008, we provided training to professionals from our business units in identification of projects with potential to reduce emissions of CO_2 and other GHGs. Gradually, Vale will provide additional training and implement projects to reduce emissions.

3 - Cooperation and partnership for research and development of technologies and implementation of mitigation and adaptation measures in the territories where we operate.

- In 2008, we entered into a protocol of intentions with the National Institute for Space Research (Inpe) to identify climate change vulnerabilities in the States of Pará and Maranhão, Brazil, through an 18-month detailed study on the Amazon (additional details in this chapter). Based on results of studies accomplished in 2008 and 2009, we will develop a detailed study on the Amazon (additional details in this chapter). Based on results of studies accomplished in 2008 and 2009, we will define strategies for action in this region. We intend to gradually expand this type of regional research to other areas where we operate.

- In partnership with the National Bank for Economic and Social Development (BNDES) we created Vale Soluções em Energia S.A. (VSE), in December 2007. In 2008, VSE advanced research and development of technologies, products and services focused on cleaner energy production (more on VSE on page 83).

1 Coal seam gas is a combustible gas given of by coal, chiefly methane.

4 - Engagement with governments and productive sectors to monitor and contribute to the preparation of regulatory frameworks necessary to tackle climate change.

- We are monitoring meetings for discussion of public policies on climate change in the countries where we operate. In Brazil, we supported the G8 + 5 Legislators Forum on Climate Change, held February 19-21, 2008, in Brasilia (Federal Capital, Brazil). The Forum is an initiative of the Global Legislators Organization for a Balanced Environment (Globe) and gathers the G8 countries (USA, Japan, Canada, Germany, UK, France, Italy and Russia) plus five major developing countries (China, Brazil, India, Mexico and South Africa).

- In November 2008 we participated as mediator of the panel Climate Change – Amazon, environmental problems and biomass protection, Seminar on Climate Change, Energy and Food Safety, held at the Convention Center of the Brazilian Stock, Mercantile & Futures Exchange (BMF - Bovespa) in Rio de Janeiro. The event was organized by the Brazilian Center for International Relations (Cebri), a non-governmental organization widely recognized for the study and debate of crucial themes in Brazilian foreign policy and international relations, including climate change regulatory challenges.

- Jointly with entities such as Brazilian Business Council for Sustainable Development (CEBDS) and the Ethos Institute, as well as with trade associations, such as Federation of Industries of the State of Sao Paulo (Fiesp) and National Confederation of Industry (CNI), and public forums such as Sustainable Amazon Forum and World Economic Forum, Vale participates in discussions on regulatory frameworks and development of carbon markets, among other mechanisms for tackling climate change. Vale is a founding member of International Emission Trading Association (Ieta) which began in 1999, and a member of the Nickel Institute and International Council on Mining and Metals (ICMM).

5 - Transparency and continuous improvement.

- We are part of the Carbon Disclosure Project (CDP) global annual report, prepared by institutional investors. The report discloses information on emissions, policies and strategies of companies to reduce environmental risks.

- In 2008, we became a part of the Carbon Leadership Index – which ranks companies on their relative transparency in climate change management – mentioned as a reference in Latin America. Vale was considered to be the mining company featuring the best index in emission intensity (additional details in CDP case, page 80).

Protection of forests and biodiversity is an integral part of Vale's Climate Change and Carbon Corporate Guidelines.

OUR EMISSIONS OF GREENHOUSE GASES

In 2008, Vale's inventory of greenhouse gases (GHG)[1] was based on guidelines as determined in the document Greenhouse Gas Protocol[2], in alignment with the inventory for previous years.

This inventory reflected the effort to further detail our emission sources, endeavoring to reduce uncertainties associated with our process to calculate emissions and select emission factors. The preparation of the inventory[3] incorporated the use of a new web-based system to collect and consolidate information, increasing reliability and ensuring traceability of data. In addition, there was the identification of new units and the inclusion of new sources of GHG emissions.

1 Significant greenhouse gases in terms of absolute emissions (tons/year) for the body of activities conducted by Vale: CO_2 (carbon dioxide), CH_4 (methane), N_2O (nitrous oxide), HFCs (hydrofluorocarbons), PFCs (perfluorocarbons CF_4 and C_2F_6) and SF_6 (sulphur hexafluoride).

2 Corporate Accounting and Reporting Standard – Revised Edition, World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), aligned with the inventory for previous years.

3 For preparation of calculation protocols, we adopted the methods described in the IPCC 2006 Guidelines for National Greenhouse Gas Inventories (GNGGI), and for some international business units, Vale sought to use the following methodologies based on domestic laws: "Metal Mining – Greenhouse Gas Quantification Guidance", Canada; "National Greenhouse Accounts (NGA) Factors", Australia; "U.S. Inventory of Greenhouse Gas Emissions and Sinks 1990-2004 (EPA 2006)", USA; "The Norwegian Emission Inventory 2008 - Documentation of methodologies for estimating emissions of greenhouse gases and long-range transboundary air pollutants", Norway; "National Greenhouse Gas Inventory Report of JAPAN, Ministry of the Environment, Japan Greenhouse Gas Inventory Office of Japan (GIO), CGER, NIES", Japan.

VALE CASE

Recognized commitment

In 2008, Vale became the only Latin American company listed in the Carbon Disclosure Leadership Index, and also the mining company better assessed in the indicator measuring carbon emissions per revenue. This recognition derives from a number of actions by the company throughout the years, especially the creation of the Corporate Guidelines on Climate Change and Carbon and the Carbon Vale Program.

Each year, The Carbon Disclosure Project (CDP) publishes a public report with the main responses from companies on their emissions as well as the Carbon Disclosure Leadership Index, an index of the companies listed in the New York Stock Exchange (USA) considered as models in transparency and in practices to reduce emissions of greenhouse gases.

Vale managed to be one of the 68 companies with the highest scores in the Carbon Disclosure Leadership Index for its management of risks and opportunities presented by climate change.

Emission sources

In 2008, we considered 100% of emissions within the scope of our GRI boundary relevant for our GHG inventory.

Scope 1: Emissions from direct sources - originating in equipment and installations operationally controlled by Vale

- Emissions associated with consumption of fossil fuels (coal, natural gas, fuel oil, diesel, biodiesel, LPG, propane, kerosene, among others).

- Emissions associated with non-fuel input, contained in:
  - Ferroalloy production process
  - Pig iron production process
  - Aluminum electrolytic reduction process
  - Burned pellet production process
  - Nickel production process
  - Coal mining process
  - Use of explosives

Scope 2: Emissions from indirect sources

- Consumption of electric power purchased from distribution networks and steam consumption obtained from contractors.

Renewable sources:

- Emissions associated with input from renewable sources: biodiesel, ethanol and charcoal consumption

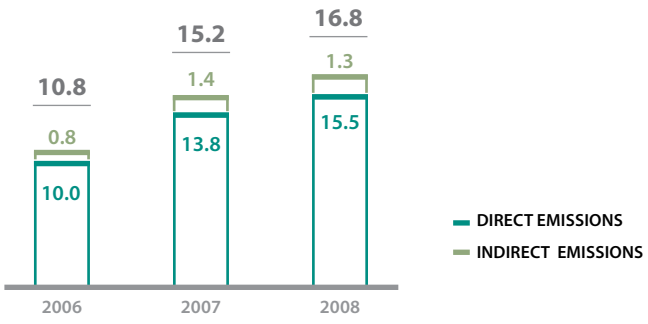
Emissions associated with contractors or companies in which Vale has ownership interest but not operational control (Scope 3) are not a part of the current inventory. In 2008, Vale requested information on greenhouse gas emissions and management from suppliers aiming at performing a preliminary diagnosis of risks associated with its supply chain.

Emissions from renewable sources – 0.49 million tons of CO_2 equivalent in 2008 – are not included in total Vale emissions, as recommended by GRI guidelines.

In general, the growth observed in 2008 emissions resulted from the incorporation of Vale Australia assets, and improved methodologies for calculation of emissions. Indirect emissions totaled 1.3 million tons of CO_2 equivalent, almost entirely from electricity and steam acquisition.

Evolution of consolidated direct and indirect emissions (scopes 1 and 2) of greenhouse gas

(million tons of CO_2 equivalent)

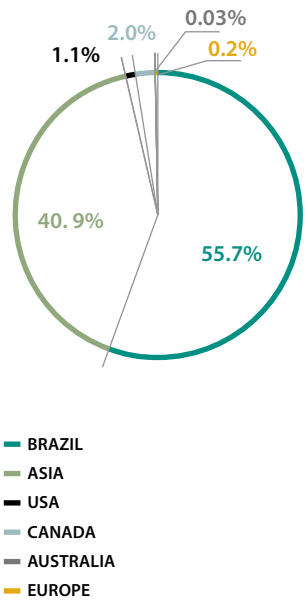


Effective 2008, the National System Operator (ONS) started to disclose separately the emission elements of the Brazilian interconnected network used for CDM projects (Clean Development Mechanism) and elements for inventory preparation. The adoption of a new element for inventories resulted in reduction of indirect emissions at Vale Units in Brazil, offsetting the indirect emissions referring to the inclusion of Vale Australia and increased nickel production.

Emissions in 2008 (million tons of CO_2 equivalent)

Scope 1	Direct emissions	Fuel input	9.6
		Non-fuel input	5.9
Scope 2	Indirect emissions	Electric power acquisition and steam consumption	1.3
Total			16.8

Total emissions
(Total: 0.35 ton of ODS)



OZONE LAYER

In 2008, we started collecting data on the quantity of ozone depleting substances (ODS) emitted (in tons). In total, Vale's operations emitted 0.35 metric ton of ODS, due to the consumption of hydrochlorofluorocarbons (HCFC).

In the last ten years, Brazil managed to significantly reduce its ODS emissions. Between 1997 and 2007, it reduced ODS emissions from CFC use from almost 10 thousand tons to 318 tons, according to the UN. Consistent with the trend, Vale units in Brazil currently use only HCFC, with emissions of only 0.19 ton of ODS in 2008.

In the Vale units in Australia, in USA, in Canada and in Europe, consumption of ozone depleting substances was insignificant (less than 12 kg of ODS). In Asian units, HCFC emissions reached 0.14 ton of ODS last year.

DIAGNOSES AND INITIATIVES

From the measurement of our direct and indirect greenhouse gas emissions, we seek to develop both short and long term actions – as part of our strategy to increase efficiency while reducing GHG emissions.

There are two sets of initiatives currently being implemented at Vale. The first – strategic in scope – includes measures for continuous improvement of the annual inventory of energy consumption, energy intensity, and resulting emissions, in terms of reduction of uncertainties, increasing the level of detail and mechanisms to control and ensure the quality of results. In these ways, we expect to identify, implement and monitor opportunities for improvements across our business.

The second initiative establishes specific measures focused on making use of opportunities already identified at our operational units. (projects in progress are detailed in the section Fundamental Principles of Vale Carbon Program on pages 77-79).

Other voluntary projects are also under assessment and implementation to increase our energy efficiency:

- initiatives to reduce fuel consumption in locomotives and vehicles;
- automation of processes;
- reduction of PFC emissions at aluminum units.

Among the actions implemented in compliance with legal requirements regarding the use of renewable sources, we highlight the progressive replacement of diesel with biodiesel in our operations. Brazilian legislation requires the use of biodiesel B2 from 2007, and biodiesel B3 as of 2008. As of 2014, Vale will use B20 mix (20% biodiesel and 80% regular diesel) at Carajás Railway and in some Northern System mining operations, acting in advance of the regulation which calls for B20 in 2020. The replacement promotes a direct reduction of GHG emissions in the final consumption stage.

RISKS AND OPPORTUNITIES

As part of the Vale Carbon Program actions in Brazil, we entered into a protocol of intentions with National Institute for Space Research (Inpe) to identify possible impacts of climate change on agriculture, biodiversity, vegetation and water supply, in the States of Pará and Maranhão. The identification of environmental vulnerabilities, and their consequences to our business, the economy and the quality of life in the regions, is a key element to guide our future actions. The findings from researchers will also contribute to direct public policies in the Northern and Northeastern regions, where we have a significant presence.

The work completed on our behalf by INPE, is a new initiative in Brazil. Through these activities, we will supply part of the need for reliable regional data on climate change impacts. This will assist us to both

Sustainable entrepreneurship

Established in 2007 in Brazil, in a partnership between Vale and BNDES (National Bank for Economic and Social Development), Vale Soluções em Energia S.A. (VSE) aims to identify and develop innovative technologies in the area of energy generation, in addition to expanding Vale's efforts to reduce energy costs and increase energy efficiency in its processes.

VSE has approximately about 200 employees, of whom 70% are university graduates, and at least 34 hold postgraduate degrees. The VSE project calls for investments of US$ 380 million in technological research and development of products in the area of energy generation. The company implemented an advanced Technological Center in Sao Jose dos Campos (SP), equipped with state-of-the-art laboratories and equipment for development of gas and multi-fuel engines and turbines with low CO_2, NOx and SOx emission levels.

Another initiative is the development of a new generation of gasifiers to produce fuel gas from materials such as coal, biomass or waste. These technologies are expected to gradually replace heavy fuel oil in our units, and generate electric energy adopting cleaner energy mechanisms.

The application of the technology will also contribute to reducing emissions of sulphur oxides (SOx), the main compound responsible for acid rain (acidic precipitation which can have harmful effects on agriculture, in ecosystems, in buildings and in public health), and nitrogen oxides (NOx), responsible for the formation of ozone and particulates that cause urban pollution. Although the technology may not provide substantial improvements in CO_2 emissions, subsequent CO_2 capture and removal will become easier and more cost efficient.

The establishment of VSE and the investments made in the company clearly show that Vale is concerned and endeavors to be a diversified mining company which adopts strict sustainability processes and standards throughout its operations.

implement our actions and disseminate the results to the entire society, as a way to encourage preventive actions.

The first report was published in September 2008, in Belém (State of Pará, Brazil), during a workshop that was promoted by Vale. The event gathered researchers, representatives from public agencies, students, and other guests interested in discussions on climate change.

The regional models created by Inpe, based on recent reports published by the Intergovernmental Panel on Climate Change (IPCC), indicated that the climate in the region under study will become warmer and drier during this century, similar to the Brazilian Northeastern semiarid region, with negative effects especially in relation to supply of water resources. We are concerned about the predictions and intend to take them into careful consideration during our long term action planning.

Another initiative implemented in 2008 was the Green Ore Project, conducted by the Technological Area of Simulations in Metallurgical Processes. The study made use of mathematical models developed at Vale to estimate CO_2 emissions resulting from the use of our iron ore in the production of pig iron in Chinese steel plants.

The research showed that the use of ore produced by Vale, or using a mix containing a high proportion of our products, promotes reduced energy usage and, consequently, reduced CO_2 emissions.

Every year we disclose physical and regulatory risks, as well as opportunities related to climate change, in the report by the Carbon Disclosure Project (available at www.cdproject.net). In general, possible financial impacts are identified, as presented below:

Risks and opportunities related to climate change

	Regulatory risks	Physical risks	Opportunities
Revenues	- Reduction in global economic activity; - Introduction of new technologies that promote the replacement of products in the long term; - Indirect impacts on market conditions, due to changes in the steel-making productive chain costs in the medium term.	- Changes (positive or negative) in volume and origin of production due to regional physical impacts of climate change on sector companies; - Potential impact (positive or negative) on logistics services due to changes in production in areas of influence.	- Development of projects within the precepts of the Clean Development Mechanism, in industrial and forestry processes; - Development of projects in the scope of volunteer carbon markets, in industrial and forestry processes; - Potential for mineral research in inhospitable areas, which might start having gentler climate in some regions where Vale operates; - Possible increase in the availability of water resources for energy generation in some regions where Vale operates; - Research and development for cleaner energy generation through VSE (Vale Soluções em Energia); - Development of risk analysis associated with climate change in the development of capital projects.
Investment	- Investment for adaptations of production processes because of regulation changes in the medium term.	- Additional investment for adaptation (infrastructure) in the medium and long term; - Deadline revision related to the implementation of projects due to increasing occurrence of extreme climate events.	
Costs	- Introduction of mandatory emission targets, and tax costs for GHG emissions; - Higher costs of supplies in metal and mining operations (coal, water, energy, for example).	- Potential demand for social and environmental actions in areas of influence; - Additional cost of insurance for production facilities.	- Energy efficiency projects and reduction of GHG emissions; - Potential government incentives for cleaner energy generation.

Financial implications were assessed in qualitative terms; a methodology for quantification is currently under development.

Knowing to conserve

We prioritize biodiversity conservation

In striving to deliver our objective of meeting current needs without compromising the ability of future generations to meet their own needs, we invest in actions that contribute to the sustainable use of natural resources. We are committed to the maintenance of ecosystems and the conservation of species. In addition to continually monitoring the impacts of our operations on natural environments, we develop technologies to improve the reclamation quality of mine sites, and areas otherwise altered by anthropic activities. We also make investments to protect ecosystems and endangered species.

We develop initiatives to protect biodiversity within areas that we manage, or those involved in covenants and agreements with environmental agencies. In the Amazon, for instance, where we operate the world's largest open-pit iron ore mine, Carajás, we have been working in partnership with environmental agencies to assist in the conservation of the Mosaic of Conservation Units in the region (State of Pará, Brazil). Similar activities are also under development in areas associated with our mining operations in the Iron Quadrangle region from State of Minas Gerais, Brazil, representing important remnants of the Atlantic Forest and Cerrado, the Brazilian Savanna.

We are preparing Vale Biodiversity Guidelines, which will determine our actions in all countries where we are present to implement sound practices in mining and biodiversity protection at the various stages in the life cycle of our operations. Through implementation of these Guidelines, we will endeavor to achieve excellence in biodiversity management practices and results, including actions intended for better knowledge of the ecosystems in which we operate, the disclosure of gathered information, and its application in future activities. The objective is to integrate the interests of all our business stakeholders in biodiversity conservation. For the smooth implementation of our guidelines, we are also preparing a Biodiversity Operating Guide.

Main actions developed in 2008

- Mapping of degraded areas along Vale railways in Brazil. The study provides for classification of the severity of degradation, directions on actions to be taken, priority, and estimated investments required for reclamation of each area.

- Development of an improved understanding of biodiversity issues between operational areas in Brazil, and Indonesia, New Caledonia and Australia. The objectives were to understand the processes used in each country, exchange experiences, propagate best practices and consolidate aligned management. The process involved visits, meetings and training.

- Execution of the Closure Plan for the Córrego do Meio Mine, including the creation of a Biodiversity Center. This is a center for knowledge dissemination, relying on a school for professional training, and a seedling nursery for species that occur in the ecosystems of State of Minas Gerais, Brazil. The project represents an advancement in management of mine closure.

- Start of activities for implementation of the Sustainable Development Plan for Ilha

Our contribution to protect biodiversity includes investments in research, ecosystem conservation and partnership with society.

Knowing deeply the biological diversity of the regions where we operate is part of our commitment to sustainability.

Grande, State of Rio de Janeiro, Brazil. The initiative involves Vale and government agencies, in addition to NGOs, in joint actions for Ilha Grande preservation and conservation, recognized by Unesco as a Biosphere Reserve of the Atlantic Forest.

- Conclusion of the study "Mapping and Characterization of Land Use in Vale Properties at the Iron Quadrangle region" (State of Minas Gerais, Brazil), which is considered to be an important instrument for strategic decision-making in the region. The study will guide Vale's activity planning, assisting in the direction of compensation and indicating areas which can be designated for conservation of regional flora and fauna.

- Native flora species in the Atlantic Forest that had not been previously described were recorded during botanical studies by the Vale Environmental Institute in partnerships with researchers from several institutions from Brazil and other countries. The discoveries included species collected at Vale Natural Reserve in Linhares (State of Espírito Santo, Brazil).

Table 1: **Quantity and position of Vale operational areas related to sensitive areas defined by local governments (protected areas or areas with high biodiversity value)**

Operational areas related to sensitive areas	Relative position	Area (sq km)
Protected area	Adjacent	783.7
	Within	243.3
	Total	**1,027.0**
Area with high biodiversity value	Adjacent	813.7
	Within	695.4
	Total	**1,509.1**

For calculation of the area adjacent to a sensitive area, a buffer zone was considered to be 10 km from the external boundaries of operational areas. When an operational unit is adjacent to more than one sensitive area, we chose to consider the accumulated value of that unit.

Management of sensitive areas

Location and size of land occupied by Vale

Vale owns approximately 2,713 sq km of land for its operations. Of this total area, 40% is occupied by extraction activities, and the remaining is used for processing, industrial production and transportation of products, including railways and ports. Approximately 9% of the total area is located within legally protected areas (conservation units) and 26% within areas of high biodiversity value (outside protected areas), as defined by local national governments. When neighboring areas are considered, we have 29% adjacent to protected areas, and 30% adjacent to governments' areas of high biodiversity value (Table 1).

Considering international standards of biological diversity, not only classification by local governments, we find that 2,307 sq km of vale operational areas are inserted in areas considered as hotspots or wilderness areas[1] (Table 2).

Vale has operations in the biomes Cerrado (Brazil), Atlantic Forest (Brazil), Wallacea (Indonesia) and others in Japan and New Caledonia, which are inserted in regions classified as Hotspots (46% of the considered area). Operations located in the biomes Amazon Rainforest (Brazil), Boreal Forest (Canada), and Pantanal (wetland area in Brazil) are inserted in areas classified as Wilderness Areas (54% of the considered area).

In many cases, Vale's operational units in hotspots and wilderness areas are located in areas that have been altered by previous anthropic activities (such as timber extraction and cattle raising) or were exclusively intended for industrial activities (for instance, municipal industrial districts). However, regardless of the conservation state of the sites at the start of our operations, our activities are planned and performed to cause the minimum alteration to natural environments. Environmental actions performed simultaneously to our operations contribute positively to local biodiversity conservation.

Impacts on biodiversity

Direct impacts

Significant direct impacts of Vale's activities in regard to biodiversity are mostly related to suppression of vegetation for implementation of undertakings or expansion of operational areas. This results in the loss of flora and displacement of fauna to other areas. Effects include loss and/or reduction of habitats, and alteration of the structure of vegetal and animal communities.

The intensity of the consequences of such alterations on biodiversity varies according to local environmental conditions and the conservation status of remnants. Consequences for biodiversity can occur both to the area directly affected, and to the area around the activities when they are being carried out. Vale adopts a comprehensive set of actions to prevent, control and minimize such impacts, which can be observed in our operations.

Indirect impacts

Most significant indirect impacts on biodiversity from Vale's activities are related to alterations in physical components of the landscape, which support the elements of a biotic environment (group of organisms living in an ecosystem). These impacts are due to:

- emission of gases and particulates, which can affect air quality;
- generation of liquid effluents, which can affect water quality;
- generation of noise, vibration and light, which can affect some fauna;
- generation of solid residues, which can cause aggradations/sedimentation in water bodies;
- landscape changes.

If not controlled, these alterations can go beyond the boundaries of our activities, causing environmental degradation and reducing local biodiversity values, especially for highly sensitive land and water species and habitats.

Table 2: **Vale operational activities and their location regarding world areas with high biodiversity value - hotspots and wilderness areas**

Type of operation	Area (sq km)	Percentage (%)
Total areas (hotspots + wilderness areas)	**2,306.8**	
Extraction	792.3	34
Processing/Production/ Transportation	1,514.5	66
Hotspots - Subtotal	**1,052.7**	
Extraction	184.5	18
Processing/Production/ Transportation	868.2	82
Wilderness areas - Subtotal	**1,254.1**	
Extraction	607.8	48
Processing/Production/ Transportation	646.3	52

1 Hotspots and Wilderness Areas - are large geographical areas considered to be material for world fauna and flora conservation, acting as complementary categories in biodiversity importance, and officially recognized by a number of international organizations. Hotspots are endangered areas with high biological value for the planet, having a large number of endemic vascular plants that have been actually reduced to no more than 30% of its original vegetal coverage. Wilderness Areas, in turn, are large areas of land (over a million hectares each) with representative biodiversity that has not been substantially changed (wild areas), having over 70% of relatively pristine original coverage and human density lower than or equal to five people per sq km.

All our activities throughout the life cycle of our operations are part of the Basic Plan for Biodiversity Management which identifies demands and specific conditions at each location.

Table 3: **Endangered species appearing in national official lists and recorded in the region where Vale's operations are located**

	Extinct*	Critically endangered	Endangered	Vulnerable	Total
Fungi	-	-	1	-	1
Flora	-	3	46	3	52
Mollusks	-	2	-	-	2
Arthropods	-	4	4	2	10
Fish Fauna	-	1	5	3	9
Herpetofauna	-	1	1	4	6
Bird fauna	1	6	18	16	41
Mammalian fauna	-	-	5	15	20
Total	1	17	80	43	141

* Species with historical record for the insertion area in one of Vale's operational units.

Conservation of species

Environmental impact studies carried out for Vale projects (implemented or under implementation), identified the existence of approximately 2,850 vegetal species and 3,400 animal species (including invertebrates and vertebrates – fish, amphibians, reptiles, birds and mammals), considering land and fresh water environments associated with our activities. Of these species, 141 are part of official national lists of endangered species (Table 3) and 110 are classified as internationally endangered, according to the International Union for Conservation of Nature (IUCN) Red List (Table 4).

Strategies for impact management

The actions adopted by Vale to manage impacts on biodiversity – and aimed at their minimization – comply with local government regulations, particularly the very strict laws of Brazil. We adopt some requirements of the Brazilian law in other countries where national regulations are not as severe, therefore normalizing the procedures adopted worldwide.

The main actions adopted to manage biodiversity impacts are related to:

- installation of systems to control air emissions and equipment to measure and control emission parameters;
- monitoring of fossil fuel usage and identification of opportunities to reduce greenhouse gas emissions;
- control of particulate emissions in storage, handling and transportation of materials, as well as watering roads and implementing green belts to reduce particulate dispersion (wind dragging);
- collection of residues for temporary storage in suitable locations for later reuse (or recycling) or sending to specialized companies for proper disposal of hazardous waste;
- frequent monitoring of dams for solid or reject containment (visual inspection);
- implementation of liquid effluent treatment systems (domestic and industrial sewage);
- implementation of surface drainage and devices to reduce water velocity, in order to prevent soil erosion and sediment transportation;

Tabela 4: **Endangered species appearing in the international official list** (IUCN) recorded in the region where Vale's operations are located**

	Extinct*	Critically endangered	Endangered	Vulnerable	Low risk	Near threatened	Total
Flora	-	2	15	27	23	-	67
Herpetofauna	-	-	-	1	-	-	1
Bird fauna	1	1	3	4	-	14	23
Mammalian fauna	-	2	3	6	-	8	19
Total	1	5	21	38	23	22	110

* Species with historical record for the insertion area in one of Vale's operational units.
** The same species can occur in both lists (National and IUCN).

- reshaping of disturbed land to stabilize slopes, followed by planting vegetal species for protection against soil erosion, and installation of artificial surface protection measures where needed;

- preparation of operating plans for vegetal suppression, which consider aspects related to flora and fauna, avoiding the need to remove protected tree species (endangered) whenever possible;

- performance of flora rescue activities (collection of epiphytes and seeds) and rescue of fauna specimens;

- development and implementation of projects for ecosystem reclamation.

The actions carried out include monitoring the impacts of our activities on the environment, including possibly affected vegetal and animal species, in the different regions where we operate. Initiatives include development and monitoring of procedures, implementation of planned actions and development of technical solutions to mitigate the impacts of our activities on biodiversity.

These actions are being implemented in all our activities, according to their applicability in each stage of project development and type of operation.

Biodiversity management plans

Biodiversity protection actions identified for each operational area are an integral part of Vale's Basic Plan for Biodiversity Management, which is made for each activity of the company, and adapted according to the demands and specific conditions at each location, from project implementation through decommissioning.

We maintain specific programs for operations located in areas of special importance for biodiversity, such as Protected Areas or sites with high biodiversity value. An example is the Carajás National Forest, in the Brazilian Amazon, with a Specific Biodiversity Management Plan. The scope of this Plan, in addition to complying with legal requirements related to the mining activity, follows the Conservation Unit Management Plan in which they are inserted. Likewise, we are implementing specific plans for project activities in the Tapirapé-Aquiri National Forest, neighboring the Carajás National Forest, and for activities located in the Iron Quadrangle region from State of Minas Gerais, in Southeastern Brazil.

Protected areas

Vale protects approximately 10,201 sq km of natural areas, including owned sites (4%), leased areas (3%) and official conservation units protected in partnership with local governments (93%). The areas protected by Vale include regions in the biomes Amazon Rainforest (82%), Boreal Forests (<1%), Atlantic Forest (5%) and Wallacea (12%), as well as areas in New Caledonia, and properties located in the transition region between the Atlantic Forest and Cerrado (1%) (Table 5 on page 90).

Vale manages some protected areas within land owned by the company, as well as areas included in partnerships, that are not related to our operations. Among these are the Vale Natural Reserve and the Sooretama Biological Reserve, in Southeastern Brazil.

For the Vale Florestar Project, owned and leased pieces of land associated with eucalyptus plantation areas have been reserved for reclamation and natural vegetal protection.

Areas impacted and under reclamation

In the period 2006-2008, activities under our accountability impacted on a total area of 82.8 sq km, and reclamation activities

Table 5: **Areas which Vale either protects (own areas) or helps protect (third-party areas)**

Protected area	Location	Biome	Ownership	Area (sq km)
Tubarão Botanical Park	Brazil (Espírito Santo)	Atlantic Forest	Own	0.3
Tubarão Green Belt	Brazil (Espírito Santo)	Atlantic Forest	Own	5.5
Vale Natural Reserve	Brazil (Espírito Santo)	Atlantic Forest	Own	217.9
Sooretama Biological Reserve	Brazil (Espírito Santo)	Atlantic Forest	Partnership / ICMBio*	242.0
Convento da Penha	Brazil (Espírito Santo)	Atlantic Forest	Partnership/ State Government	0.5
São Luis Botanical Park	Brazil (Maranhão)	Amazon Rainforest	Own	1.1
Ponta da Madeira Green Belt	Brazil (Maranhão)	Amazon Rainforest	Own	1.2
12 Private Reserves of Natural Heritage in Minas Gerais	Brazil (Minas Gerais)	Atlantic Forest / Cerrado	Own	70.4
Protection Areas for 4 HPPs (Small Hydro)	Brazil (Minas Gerais)	Atlantic Forest	Own	3.3
Carajás National Forest	Brazil (Pará)	Amazon Rainforest	Partnership / ICMBio*	4,119.5
Tapirapé-Aquiri National Forest	Brazil (Pará)	Amazon Rainforest	Partnership / ICMBio*	1,925.5
Itacaiúnas National Forest	Brazil (Pará)	Amazon Rainforest	Partnership / ICMBio*	824.5
Tapirapé Biological Reserve	Brazil (Pará)	Amazon Rainforest	Partnership / ICMBio*	997.0
Igarapé do Gelado Environmental Protection Area	Brazil (Pará)	Amazon Rainforest	Partnership / ICMBio*	206.4
Albras/Alunorte Buffer Zone	Brazil (Pará)	Amazon Rainforest	Own	25.3
Protected Areas by Vale Florestar Project	Brazil (Pará)	Amazon Rainforest	Leased (third parties)	323.0
Valesul Green Belt	Brazil (Rio de Janeiro)	Atlantic Forest	Own	0.7
Sergipe Green Belt	Brazil (Sergipe)	Atlantic Forest	Own	0.5
Canada Boreal Forests	Canada	Boreal Forests	Own	56.1
Sorowako Tropical Forest	Indonesia	Wallacea	Partnership / Indonesian Government	1,180.0
Forêt Nord Nature Reserve	New Caledonia	Maquis Shrubland**	Partnership/ New Caledonian Government	0.01***
Total				10,200.6

If areas protected by affiliated companies (not in the GRI scope) and forest fragments were included, the total would reach over 18,000 sq km of areas which we protect or help protect.

* Source: ICMBio – Chico Mendes Institute for Biodiversity Conservation – Ministry of the Environment.

** Natural vegetation occurring in the hotspot called New Caledonia.

*** Additional biodiversity measures, including protection of areas, are under development aiming at the Vale Inco Nouvelle Calédonie start of operations.

were started on 44.2 sq km, with 63% under permanent reclamation and 37% under temporary reclamation.

In the same period, the total area intended for reclamation (permanent or temporary) was smaller than the size of the impacted area in every year. This was due to the expansion of the company's activities. However, there is an increasing annual trend in the total areas under reclamation processes (Table 6).

Analyzing per type of vegetation that have been impacted and under reclamation, we have noted an increasing area of disturbed land in the Amazon Rainforest (Table 7).

For this biome, most impacted areas are due to projects under implementation and in expansion. On the other hand, in the Atlantic Forest and Cerrado, sites under permanent and temporary reclamation processes exceed the total impacted area. This is due to the presence of older project areas which are now being decommissioned. The largest site under permanent reclamation was recorded in the Atlantic Forest.

Impact balance

The amount of area impacted per year by mineral exploration activities is higher than the area under permanent reclamation processes. This is due to the fact that most operational areas at Vale are in the production stage, relative to sites in expansion and new projects under implementation. In the period 2006-2008, 78 sq km were impacted, and permanent reclamation efforts started in 27 sq km, resulting in a final balance of 525 sq km for 2008 (Table 8).

The final balance for 2006 was lower than the opening balance for 2007 due to the acquisition of new operating assets in 2007, having been incorporated into the opening balance for 2007 the Vale Inco's impacted areas, acquired at the end of 2006. Likewise, for 2007 we notice a lower final balance

than the opening balance for 2008, due to the incorporation of Vale Australia sites, acquired in 2007.

In every operational unit, reclamation efforts are based on the Mine Decommissioning Plan, specific for each project, which is proposed in the activity planning stage.

If we take into consideration our reclamation and planting activities voluntarily performed in third party and leased lands, our balance is totally offset, in Brazil. This is because Vale has already reclaimed 1.4 hectare per impacted hectare. By the end of 2009, that balance will be reached in all our operations, with the proportion of 1 hectare reclaimed/planted for each suppressed hectare in the world.

As an example of reclamation and planting in leased areas, Vale develops the Vale-Florestar Project in the State of Pará, Brazil, reaching 444 sq km in 2008. Regarding reclamation in third-party areas, by 2008, Vale had voluntarily reclaimed native vegetation in 5.5 sq km in different states of Brazil. In 2008 at the Sudbury operation, Vale Inco also treated an additional 1.9 sq km outside its property. This activity is part of the continuous efforts to reclaim vegetation in barren areas resulting from historic nickel production and timber cutting. These remediation efforts have been undertaken by nickel companies in the area (including Vale Inco) as well as local governments and communities since the 1970s. Over the period, many species of flora and fauna have again begun to flourish in many regions.

The impacts of legacy environmental issues resulting from more than 100 years of nickel production in the area have been the subject of the Sudbury Soils Study (more on www.sudburysoilsstudy.com) conducted over the course of seven years. These findings will be central to Vale Inco's continued reclamation efforts. These efforts are not insignificant in a company with a long history.

Table 6: **Areas impacted and under reclamation processes (permanent and temporary) by Vale in the period 2006-2008 (Unit: sq km)**

Year	Impacted area	Area under permanent reclamation	Area under temporary reclamation	Total area under reclamation
2006	32.5	7.4	3.2	10.5
2007	17.7	7.5	6.2	13.7
2008	32.6	12.8	7.2	20.0
Total	82.8	27.7	16.6	44.2

* Reclamation of degraded areas is a gradual process, demanding medium and long term actions. The term "under reclamation" denotes areas in which the activities have been implemented and are in progress. "Under permanent reclamation" means areas that will no longer be affected by the company's activities, and "under temporary reclamation" means those areas subject to possible new operational activities. In 2008, an improved management tool allowed for increased precision in collecting data for this indicator.

Table 7: **Areas impacted and under reclamation processes (permanent and temporary) by Vale per biome in the period 2006-2008 (Unit: sq km)**

		Reclamation area		
Biome	Impacted area	Area under permanent reclamation	Area under temporary reclamation	Total area under reclamation
	57.5	5.4	2.8	8.2
Amazon Rainforest	7.9	10.7	10.5	21.2
Atlantic Forest	1.7	1.7	2.8	4.5
Savanna	2.0	3.6	0.0	3.6
Wetlands	0.4	0.04	0.0	0.04
New Caledonia	0.0	2.2	0.3	2.4
Boreal Forests	13.5	4.1	0.2	4.2
Others	82.8	27.7	16.6	44.2

Table 8: **Opening and final balances of mineral extraction activities performed by Vale in the period 2006-2008 (Unit: sq km)**

Year	Impacted areas (opening balance)	Impacted areas in the referred year	Areas under permanent reclamation in the referred year	Impacted areas (final balance)
2006	281.9	31.2	7.4	305.7
2007	488.9	16.5	7.4	498.0
2008	506.3	30.1	11.9	524.6

Annual opening balance represents the position at the beginning of the year regarding the total land yet to be reclaimed.

Final balance represents the position at the year end, regarding the total land yet to be reclaimed.

Logistics operations are not considered. Considered operations include tillage, processing and mineral transformation. Temporary reclamation is not computed, only permanent.

Preserve and multiply

Recognized by Unesco as a World Heritage Site of the Discovery Coast, the Vale Natural Reserve, in the State of Espírito Santo, Southeastern Brazil, is considered to be an open-air laboratory. In its 22 thousand hectares, scientists from different specialties and researchers from the Vale Environmental Institute study the complexity of this Brazilian biome and work in the conservation and multiplication of its diversity. Studies focus on sustainable use and conservation of natural resources and on creation of technology to recover degraded areas in Brazil and around the world.

The largest seedling nursery in Latin America, the Reserve can produce about 55 million units of over 800 different Atlantic Forest tropical species every year. The production is especially intended for ecosystem restoration in areas of this same biome, for planting trees in urban areas and for landscape planning.

The Vale Natural Reserve is also internationally recognized as a genetic database and research center in tropical forestry. Since the 1950's, when the Reserve was acquired by Vale, scientists have recorded over 2.6 thousand flora species, 1 thousand species of insects, and almost 100 mammal species. In the Reserve area, the largest Atlantic Forest flatland terrain in Brazil, 367 bird species have already been identified, a number that accounts for 25% of total Brazilian birds and 5% of total species on the planet.

Another significant activity being conducted at Vale Natural Reserve is the flora research that has already discovered 96 new botanical species.

For additional information on the Vale Natural Reserve: www.vale.com

Global strategies

From information interchange and diagnosis of local biodiversity conditions, the teams responsible for reclamation of degraded areas in the mines of Sorowako, Sulawesi Island, Indonesia, have improved the procedures applied in their areas for ecosystem reclamation. The improvement became possible with the incorporation of techniques developed in Brazilian projects, including handling of native species and control of invasive weeds.

The greatest challenge was to broaden the knowledge of local species, and to define the best available reclamation strategies, considering operational feasibility and the company's commitments to biodiversity conservation.

A matter of engagement

We respect and promote human rights in our activities and along our value chain

At Vale, we operate our business in a manner that respects human dignity and seeks to achieve management excellence. We have a Code of Ethical Conduct whose principles guide our actions in relation to the diverse society groups impacted by our activities.

While we know that it is mainly a responsibility of the State to protect and promote human rights, in addition to guaranteeing fundamental freedoms, we believe it is the duty of the private sector to respect and promote them to the extent of our activities.

Vale promotes human rights within its sphere of influence in the following ways:

- For employees, we endeavor to maintain a work environment that promotes professional and personal growth, encouraging them to respect the rights of other stakeholders.
- In the value chain, we seek to establish relationships with suppliers, partners and customers under which they share our principles and values, promoting awareness and application of human rights protection, and continuously monitoring violation risks.
- With local communities, indigenous and quilombolas, we maintain a relationship of continuous engagement, based on dialogue and mutual respect, supporting initiatives that contribute to socio-economic and environmental development of the regions in which we operate, throughout the life cycle of our activities.
- We recognize the national sovereignty of the government of each country and voluntarily contribute to the promotion of human rights wherever we are present.
- Our commitment to society is expressed in multiple ways. We are a signatory of the United Nations (UN) Global Compact, which is a voluntary commitment to guarantee fundamental human rights in compliance with the UN's Universal Declaration of Human Rights. We are also a member of the International Council on Mining & Metals (ICMM) and partners of the International Labor Organization (ILO) and its inspiring general guidelines.

Furthermore, we are developing Corporate Guidelines on Human Rights, reflecting the importance of this issue for our company.

Vale's spheres of influence
(for purposes of human rights respect and promotion)

Pact for Sustainable Development

A climate of uncertainty dominated the southern region of New Caledonia, located in the South Pacific, before Vale began implementation of the Vale Inco Nouvelle Calédonie Project. There were clear reasons for this uncertainty: a complex, socio-political and cultural legacy, next to an environmental area declared a Unesco World Heritage Site, inhabited by several Kanak tribes with contrary interests. This was a challenging background in which to implement one of the world's largest operations for nickel mining and processing.

On several occasions, communities and environmental organizations gathered to protest against possible impacts of the project. The main concerns were the need to respect the interests, positions and traditions of local people, and the preservation of the New Caledonian Lagoons, formed by coral reefs, which shelter a large marine diversity, including some endemic species. Environmental studies carried out by Vale Inco, before starting the project, indicated that investments in impact controls would allow the mine to operate with the least possible impact to the environment.

Vale Inco knew that dialogue and engagement would be fundamental factors in the process. "The first step was to understand their standpoints, by putting us in their place and listening to their doubts and concerns", says Rafael Benke, Vice-President, Corporate Relations, Vale Inco, and top negotiator of the committee created by the company to talk with over 150 representatives of stakeholders directly involved in the process.

The result was the signature, in September, of the Pact for Great South Sustainable Development, entered into by the company and the local communities, assisted by community, indigenous and public authorities. The agreement ranges from investments in volunteer environmental programs, such as reforestation, to a plan for monitoring potential impacts in partnership with the local communities, assuring wide transparency and participation by indigenous institutions and society. In addition, the agreement establishes a Foundation aimed at fostering local sustainable development.

The comprehensiveness of the approached topics, the transparency of the dialogues, and the joint development of solutions are factors that led to a successful negotiation. For the UN Human Rights Committee – that has included the Pact for Great South Sustainable Development in its global list of best practices in relationship with traditional communities – the initiative is distinguished by an intense consultation process and respect for the opinions of stakeholders shown by the company throughout the negotiation process and at its conclusion.

WE FIGHT AGAINST CHILD LABOR AND FORCED LABOR

The eradication of child labor and forced and compulsory labor requires a common effort of governments, enterprises and society at large.

We act preventively to the extent of our value chain. In Brazil, regarding suppliers to our own units, we have a mechanism in place to monitor the list published by the Ministry of Labor (MTE), identifying cases of companies accused of possible occurrences of forced labor.

We cross check the MTE's list with our register of suppliers. If any Vale suppliers appear in the database, we demand corrective measures and consider the possibility of contract termination on a case by case basis.

We have also adopted other preventive measures, including audits of contracts and sub-contracts, application of social assessment questionnaires to suppliers, in addition to professional training and qualification programs. Since 2006, we have participated in the 'Tear' Program developed by the Ethos Institute, by performing the role of a mining sector anchor company and helping our suppliers to incorporate social responsibility into their business strategies.

Albras and Valesul, Vale's controlled companies, have been certified by the international SA8000 standard, and Alunorte is under certification process. The purpose is to incorporate human rights' laws and conventions into our supply chain and the working environment.

In addition, our standard contract model includes clauses addressing labor, social security, tax, health & safety and quality aspects.

At PT Inco, Vale's operation in Indonesia, our contracts incorporate human rights clauses. Additionally, performance on human rights items defined in such contracts, as well as compliance audits, are closely and regularly monitored by Vale's qualified personnel.

Regarding our clients, pig iron producers, we identify the risk of their using charcoal from non-certified wood, possibly involving forced and/or child labor in its supply chain.

Likewise, we include clauses allowing for termination of mineral supply contracts should any irregularities occur in the supply chain of our customers. The clauses refer to environmental protection, socio-economic development, and prohibiting child labor and/or compulsory or forced labor and any other sort of irregular labor practices.

In 2008, iron ore supply to a customer located in the State of Maranhão, Brazil, was suspended for as long as the company appears in the list published by MTE. In the previous year, we discontinued sales to another seven customers in the States of Pará, Maranhão and Minas Gerais.

We maintain a Reporting Channel (described in www.vale.com) that is available for use by any person for reporting complaints including issues related to human rights. Our internet site offers a communication channel, Talk to Us, which includes a Sustainability category for questions to be raised in regard to issues.

In 2008 there were no reports of human rights violation at significant suppliers in any of Vale units.

We are a signatory to global initiatives intended to strengthen citizenship and promote human rights.

Our relationship with the communities is based on dialogue and mutual respect.

ACTING PROACTIVELY

Vale Foundation develops social programs for children, teenagers and adults in regions where communities are more vulnerable to risks of child labor and forced and compulsory labor.

Among our actions aligned with the objectives of disseminating human rights, we developed the video '*Que trabalho é esse?*' [What job is this?], to raise society's awareness of the risks of compulsory labor. The video was aired 122 times in Brazil during 2008 (average ten times per month), on Futura TV Channel, a partner of the initiative. The playful content, focused on puppetry, was also broadcast by the program '*Educação nos Trilhos*' [Education on Tracks], on the closed circuit television network of trains operated by Vale and at Brazilian railway stations. In 2008, the Program's mobilization actions involved over 200 thousand people.

SECURITY, STRATEGIC MATTER

In addition to fully complying with the normative requirement of the Brazilian Ministry of Justice for training security agents, in 2008 we delivered customized training focused on human rights to 100% of the security personnel of outsourced companies in our own units in the country. The promotion of training in Brazil was among the targets in the *Sustainability Report 2007*.

The pioneering training activity in Brazil was jointly developed with the organization Equity International and resulted in approximately 3 thousand people trained (2% of direct employees and 98% of contractors). The training contents will be turned into a didactic material for replication to affiliates in Brazil and other countries where we operate.

Our challenge for 2009 will be to adapt the Safety and Human Rights training to our international teams, considering the particulars of each location. We are planning the first applications of the training program in Peru, Colombia, Indonesia, New Caledonia, and Mozambique. Regarding other countries, as we expand our activities we commit to continue the development of policies and training.

In addition to training, we promoted other awareness-raising events in Brazil in 2008 involving the discussion of topics such as fraud, security processes, risk analysis, interview techniques, scenario building, and economic management applied to security.

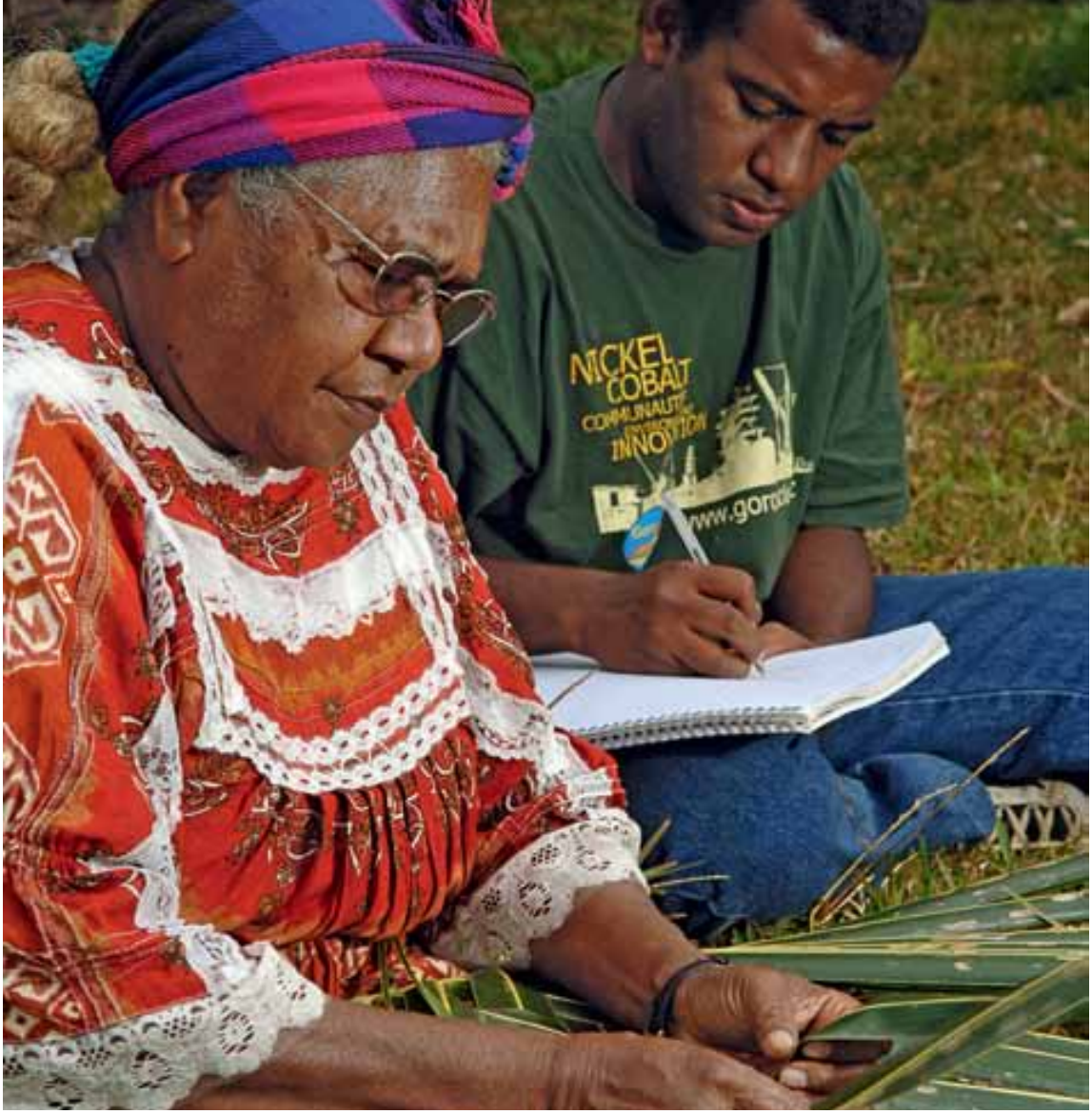
Among other preventive measures adopted was encouragement for our security personnel not to use firearms during their routine work. Our new global corporate security policy – to be approved in second half 2009 – determines that our security teams shall only use firearms when they are compulsory – for legal or government requirement – or when, in the absence of a viable alternative to prevent risks, their duly authorized use becomes necessary. Since 2007, the number of armed security guards at Vale in Brazil was reduced by 55%.

We also offer training on Security Practices to all professionals recruited by Vale.

Recognized activity

As part of our effort to fight for decent work, in September 2008 we attended the Seminar on Initiatives of the Private Sector to Combat Forced Labor. The event was held in Washington, DC by the Brazilian Embassy in the USA and the U.S. Department of State.

The invitation resulted from our activities to combat reprehensible labor practices, in partnership with the Brazilian government and other sections of the society. There was widespread domestic and international recognition of Vale's suspension of mineral supply to companies involved in labor and environmental irregularities in 2007. Internationally, the experience was considered important in encouraging other supply chains to change their positioning.



Our management practices strengthen dialogue, respect local culture and support the socioeconomic development of indigenous communities and quilombolas.

Indigenous communities and quilombolas

We promote relationships with indigenous communities and quilombolas[1] impacted by our operations by fostering mutual understanding and respecting individual cultures

We believe that strengthening dialogue and respecting the culture of indigenous communities and quilombolas are fundamental elements in our search for mutual understanding.

We are creating a Relationship Policy with Indigenous Communities and Quilombolas. The policy will be based on the historical relationship with indigenous communities near our activities, the laws of the countries where we operate, international conventions and United Nations (UN) directives on indigenous rights.

Internal discussions on development of the Policy started in 2008. This reinforced the need to improve the qualifications of our teams for ongoing dialogue. It is our understanding that our activities should involve the employees of our contractors and service suppliers who interact with the indigenous communities. Based on our future policy and supported by Valer, we intend to strengthen the knowledge of our value chain on adapting their professional routines to the culture of indigenous peoples.

CULTURAL REVIVAL AND COMMUNITY DEVELOPMENT

In 2008 we promoted activities for cultural revival and incentive to local development benefiting more than 3.7 thousand indigenous people in the Brazilian states of Pará, Maranhão and Minas Gerais. In this process, we relied on the support of the Indian National Foundation (Funai), the official indigenous agency in Brazil.

1 Communities originally founded by runaway slaves.

CASE

Preserving the language. Strengthening the culture

The Project for Appreciation of Kanak Languages and Traditions of the Great South, launched in 2008 by Vale Inco in New Caledonia, was structured from the standpoint that language is an important factor to transmit cultural values and, therefore, should be preserved. The initiative aims at creating pedagogical tools to support schools in the region in their process of teaching the three main languages spoken by the peoples of the New Caledonia's Great South: *nââ numèè, nââ drubéa* and *nââ kwênyii*.

Previously the languages had only been used orally. The project's first step was to collect data to prepare a writing system, together with dwellers of villages who still keep the knowledge, and with the University of New Caledonia.

After the proposals were validated by the Kanak Languages Academy, the third stage was started: the development of teaching tools. The materials – with playful and interactive contents – will support the learning process of traditional languages at schools in the region, as well as serve as the basis for multiplying the language knowledge throughout the entire population.

The first published material is a series of five posters with visual and written information on the subjects: Marine Fauna, Birds, Plants, Food and Trees.

Vale Inco is active as a catalyst in the process of language preservation, but relies on the support of partners such as the Kanak Languages Academy, University of New Caledonia, Kanak Culture Development Agency, and local schools, including those in Yaté and Ilê des Pins.

In other countries where there is strong presence of indigenous communities, we also developed cultural revival activities. Among these we highlight the production of textbooks to register the native language of the Kanak tribe in New Caledonia, a Southern Pacific island, characterized by the influence of French colonization.

In 2008 we welcomed members of Kanak indigenous communities to tour our operating areas and see the way we work in partnership with Funai, the official agency representing the indigenous people of Brazil.

We have been gradually improving the dialogue with traditional communities and, in 2007, we conducted the first indigenous tour of our facilities in Carajás, State of Pará, Brazil. After that first group of 70 visitors, another two groups toured the Carajás Iron Ore Mine, in 2008.

In addition to the opportunity to introduce our activities and productive process to our indigenous communities, they engaged in cultural and sports activities with our employees and their families. The exchange of experiences has contributed to strengthening the relationship between the parties.

DIALOGUE AND RESPECT FOR TRADITIONS, THE BASIS FOR UNDERSTANDING

The importance of the dialogue of different stakeholders with indigenous communities was the tone of internal debates in November 2008, at a Forum on Indigenous Communities. Promoted by Vale, in Brazil, the forum was designed to engage employees involved, directly or indirectly, in actions held by the company with those communities. Previously, in August, we had sponsored Fibea, International Forum on Indigenous Entrepreneurship, held in Manaus, capital of Amazonas State, Brazil, which also debated mutual issues and shared potential solutions.

Our Canadian operations have also adopted an increasingly active approach to engagement. In Ontario, engagement with local indigenous communities is led by our Aboriginal Working Group. This group is composed of members from a range of operational backgrounds including environment, exploration and human resources. The group meets regularly with Aboriginal leaders to provide updates on sustainability and business issues which are relevant to our operations.

We endeavor to maintain interaction with the communities where we operate, but in a multicultural society, it is understandable that controversies and litigation may arise between the parties. In 2008 there were no reports of indigenous rights violations. However, in Brazil, there are two lawsuits in progress related to traditional communities involving Vale, and another two lawsuits have been settled.

One of the lawsuits in progress discusses the obligation to support the indigenous community *XIKRIN da Terra Indígena Cateté*, in Pará. The other lawsuit was filed by the Indian National Foundation (Funai) against Pará Pigmentos S.A., which is controlled by Vale, and discusses financial funding to the *Tembé* indigenous people, State of Pará, Brazil, for alleged impacts.

In the State of Minas Gerais, Brazil, a lawsuit filed by the indigenous community *Krenak* was settled with agreement. The community will benefit from support to its economic activities due to the construction of the Aimorés Hydroelectric Plant.

In Pará, another lawsuit was settled through an agreement. This lawsuit was filed by Vale against Quilombolas of Moju, to remedy alleged damage they caused to energy transmission line towers at the Paragominas bauxite mine during a demonstration against the construction of a pipeline.

CASE

Investments that make a difference

In 2008, in an effort to help build the knowledge and skill set of youth in the Aboriginal communities where we work and enhance job prospects in these communities, Vale Inco focused its long-term Community Investment Strategy on education in these areas.

Among the initiatives developed in support of this new approach is a partnership with the National Aboriginal Achievement Foundation (NAAF) to help develop curriculum on mining to be used in secondary schools across Canada, where they will learn more about mining's role in the economy, career options, required skills for employment and how to build a career in mining.

We have also created a partnership with Junior Achievement (JA), a recognized leader in the delivery of business education programs for young people. Through a three-year commitment by Vale Inco, JA will be able to expand their Aboriginal outreach program into five provinces. Their work will include educating more than 3,000 students about the importance of staying in school and encouraging greater Aboriginal participation in the work force.

Completeness of the report

The methodology for defining this report's boundary is the same as that adopted in the *Sustainability Report 2007*. However, the scope of companies for the report was updated with the inclusion of some companies, especially Vale Australia, acquired in 2007.

The chart below presents the way our major companies were considered in this report in terms of sustainability.

Business	Performance indicators	Management approach	Issues and dilemmas
Iron ore and pellets	Vale [1] Companhia Ítalo-Brasileira de Pelotização - Itabrasco [2] Companhia Coreano-Brasileira de Pelotização - Kobrasco [2] Companhia Nipo-Brasileira de Pelotização - Nibrasco [2] Companhia Hispano-Brasileira de Pelotização - Hispanobras [2] Urucum Mineração S.A. [3] [4] Vale Oma Pelletizing LLC	• Samarco Mineração S.A. • Zhuhai YPM Pellet Co., Ltd.	
Manganese and ferroalloys	Vale Manganês S.A. Vale Manganèse France Vale Manganese Norway A S Urucum Mineração S.A. [3] [4]		
Logistics	Vale [5] Ferrovia Centro-Atlântica S.A. - FCA Companhia Portuária Baía de Sepetiba - CPBS [3] Seamar Shipping	• Log-in Logística Intermodal S.A. • Consórcio de Rebocadores da Barra dos Coqueiros • Consórcio de Rebocadores da Baía de São Marcos	MRS Logística S.A.
Potassium, kaolin and phosphate	Vale Cadam S.A. Pará Pigmentos S.A. - PPSA Compañía Minera Miski Mayo S.A.C. (Bayovar Project)		
Copper	Vale Salobo Metais S.A.[3]		
Aluminum	Vale Alumina do Norte do Brasil S.A. - Alunorte Alumínio Brasileiro S.A. - Albras Valesul Alumínio S.A. [3] Companhia de Alumina do Pará - CAP	• Mineração Rio do Norte S.A. - MRN	
Steel	Vale	• California Steel Industries - CSI	• ThyssenKrupp-CSA – Siderúrgica do Atlântico Ltda – CSA • Usinas Siderúrgicas de Minas Gerais S.A. - Usiminas [6]
Coal	Vale Moçambique Limitada (Moatize Project) Vale Australia (Carborough Downs, Broadlea and Integra Coal)	• Shandong Yankuang Int. Coking Co. Ltd • Henan Longyu Energy Resources Co. Ltd. • Vale Australia (Isaac Plains)	
Energy		• Energy Consortia: Igarapava, Porto Estrela, Candonga, Capim Branco I and II, Funil, Aimorés, Estreito and Gesai – Geração Santa Isabel [7] • Vale Soluções em Energia S.A. - VSE	
Nickel	Vale Vale Inco Limited Vale Inco Newfoundland & Labrador Limited Vale Inco Metals (Shanghai) Co., Ltd Inmetco (International Metals Reclamation Company, Inc.) Novamet (Novamet Specialty Products Corporation) Vale Inco Europe Limited (Clydach Refinery and Acton Refinery) PT International Nickel Indonesia Tbk (PT Inco) Vale Inco Nouvelle-Calédonie S.A.S Jinco Nonferrous Metals Co., Ltd Inco Advanced Technology Materials (IATM Shenyang) Co., Ltd. Inco Advanced Technology Materials (IATM Dalian) Co., Ltd Vale Inco New Nickel Materials (Dalian) Co. Ltd. Vale Inco Japan Limited Taiwan Nickel Refining Corporation Exide Group Incorporated	Korea Nickel Corporation	

[1]Includes operations of the companies Minerações Brasileiras Reunidas S.A. - MBR, Minas da Serra Geral S.A. - MSG and Baovale Mineração S.A. - Baovale; [2]Assets are operated by Vale; [3]As of November 2007, those companies adopted Vale's brand, although the companies' corporate names are not altered as yet. Corporate names as of June 2009; [4]Includes CPFL (Companhia Paulista Ferro-Ligas) operations; [5]Includes EFC (Estrada de Ferro Carajás), EFVM (Estrada de Ferro Vitória a Minas) and FNS (Ferrovia Norte-Sul) operations; [6] Vale sold its equity interest in Usiminas in April 2009.; [7] We maintain efforts to obtain the required environmental licenses to build Santa Isabel hydroelectric power plant.

COMPANIES WERE CLASSIFIED IN THE TABLE PAGE 100 ACCORDING TO THE FOLLOWING CRITERIA:

Performance indicators

Include Vale[1] subsidiaries and companies we operate. Performance indicators are presented along the report.

1 Due to low impact on sustainability, data on mineral research companies were not included in the calculation of most performance indicators.

Management approach

Companies over which Vale has significant influence, including affiliates with Vale ownership, direct or indirect, between 20% and 50% of voting capital and shared control. Vale has positions in different governance bodies at such entities, and might participate in committees dealing with issues related to environment, health and safety, human resources, finances, among other topics. Through that action, Vale participates in strategic decision-making and influences the creation of norms and policies at such companies, including sustainability issues.

Issues and dilemmas

Companies over which Vale has influence, including affiliates with Vale ownership up to 20% of voting capital.

Company	Products and/or services	Vale ownership interest	Material issues
Usiminas*	Steel products	5.9% common shares and 2.9% of total capital	Strategy to drive production expansion, leveraging sales of Vale products/ services, contributing to job and income generation for country development
CSA	Steel slabs	10% joint venture capital stock	
MRS	Railroad transportation	Direct and indirect interest (37.9% of voting capital** and 41.5% of total capital)	Traffic in urban community areas

*Vale sold its equity interest in Usiminas in April 2009.

** Vale renounced the right to vote inherent to ordinary stock connected to the MRS Logística S.A. Shareholders' Agreement.

Independent Auditors' Limited Assurance Report

To
The Board of Directors, Shareholders and
Other Stakeholders of Vale S.A.
Rio de Janeiro - RJ

Introduction

We have been engaged for the purpose of applying procedures of limited assurance on Vale S.A.'s sustainability report related to the year ended December 31, 2008, which was prepared under the responsibility of Vale. Our responsibility is to issue a Report of Limited Assurance on this sustainability report.

Procedures applied

The limited assurance procedures were performed in accordance with Rule NPO 1, issued by the Brazilian Institute of Independent Auditors (Ibracon) and with International Standard on Assurance Engagements Isae (3000), issued by the International Auditing and Assurance Standards Board, both related to assurance engagements other than audits or reviews of historical financial information. The procedures comprised: (a) the planning of the work, considering the materiality, consistency, volume of quantitative and qualitative information and operational and internal control systems that served as a base for the preparation of *Vale 2008 Sustainability Report*; (b) the understanding of the calculation methodology and the consolidation of the indicators through interviews with the personnel responsible for the preparation of information; (c) the comparison, on a sample basis, of the quantitative and qualitative information with the performance indicators disclosed in *Vale 2008 Sustainability Report*; and (d) the comparison of the financial indicators with the financial statements and/or accounting records.

Reporting criteria

The information of *Vale 2008 Sustainability Report* was prepared according to Global Reporting Initiative guidelines (GRI-G3) for sustainability reporting.

Scope and limitations

The objective of our work was to issue a Report of Limited Assurance of the information on profile and governance items as well as on the management approach and the sustainability performance indicators at Vale. This does not include any evaluation of its policies, practices and performance in sustainability. The applied procedures do not represent an examination in accordance with the audit rules for financial statements. In addition, our report does not provide limited assurance on the achievability of future information (such as targets, expectations and ambitions) nor on qualitative information that is under subjective evaluation.

GRI – G3 Application Level

According to the GRI-G3 guidelines, Vale declares an Application Level B+ for its sustainability report related to the year ended December 31, 2008.

The *Vale 2008 Sustainability Report* has provided response to all items regarding its structure – 73 indicators –, including core, additional and those of the Draft Mining and Metal Sector Supplement. Therefore, we considered the applied procedures sufficient to agree that the application level declared by Vale complies with the GRI-G3 guidelines.

Conclusion

Based on our review, we have not identified any relevant modification that should be performed on Vale's sustainability report related to the year ended December 31, 2008, to agree with the GRI-G3 guidelines and with the records and files prepared by Vale and made available to KPMG.

July 24, 2009

KPMG Assurance Services
CRC 2SP023228/O-4-F-RJ

Alexandre Heinermann
CRC 1SP228175/O–0-SRJ
Partner

GRI APPLICATION LEVEL

Application of guidelines

This report maintains GRI application level B+ which means that we have reported on all profile disclosures, management approach and a minimum of 20 performance indicators.

		2002 "In accordance"	C	C+	B	B +	A	A+
Mandatory	Self declared			Report Externally Assured		GRI REPORT SELF DECLARED	Report Externally Assured	Report Externally Assured
Optional	Third party checked					GRI REPORT 3rd PARTY CHECKED		
	GRI checked					GRI REPORT GRI CHECKED		

		C	C+	B	B+	A	A+
Standard Disclosures	G3 Profile Disclosures	Report on: 1.1; 2.1 – 2.10; 3.1 – 3.8, 3.10 – 3.12; 4.1 – 4.4, 4.14 – 4.15;	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2; 3.9, 3.13; 4.5 – 4.13, 4.16 – 4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
	G3 Management Approach Disclosures	Not required		Management Approach Disclosures for each Indicator Category		Management Approach disclosed for each Indicator Category	
	G3 Performance Indicators & Sector Supplement Performance Indicators	Report on a minimum of 10 Performance Indicators, including at least one from each of: social, economic, and environment.		Report on a minimum of 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.		Respond on each core G3 and Sector Supplement indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission.	

Global Compact

As part of the group of companies that signed on to the Global Compact, Vale is committed to adopt in its business practices the ten basic principles, in the areas of human rights, labor relations, environment, and anti-corruption.

Throughout our report, we present cases which illustrate our practices and whose relations with the Global Compact are indicated in the chart below.

The 10 Principles and related cases	
Human Rights	
	**1.** Businesses should support and respect the protection of internationally proclaimed human rights
	Related cases: In search of excellence - page 42 Reader friendly - page 60 The spirit of relationship - page 67 Pact for sustainable development - page 94
	**2.** Make sure that they are not complicit in human rights abuses
	Related case: Pact for sustainable development - page 94
Labor Standards	
	**3.** Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining
	**4.** Uphold the elimination of all forms of forced and compulsory labor
	**5.** Uphold the effective abolition of child labor
	**6.** Uphold the elimination of discrimination in respect of employment and occupation
Environment	
	**7.** Businesses should support a precautionary approach to environmental challenges
	Related cases: Spotlight on efficiency - page 53 Recognized commitment - page 80
	**8.** Undertake initiatives to promote greater environmental responsibility
	Related cases: Incentive to selective collection - page 50 Efficiency at the spotlight - page 53
	**9.** Encourage the development and diffusion of environmentally friendly technologies
	Related cases: Green train, more gas to locomotives - page 57 Sustainable entrepreneurship - page 83 Preserve and multiply - page 92
Anti-Corruption	
	**10.** Work against corruption in all its forms, including extortion and bribery

Sustainability in the sector

Our activity is in line with the principles of the International Council on Mining & Metals, an international initiative to which we have been a signatory since 2006.

ICMM
International Council on Mining & Metals

ICMM Principles
Principle 1 Implement and maintain ethical business practices and sound systems of corporate governance.
Principle 2 Integrate sustainable development considerations within the corporate decision-making process.
Principle 3 Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.
Principle 4 Implement risk management strategies based on valid data and sound science.
Principle 5 Seek continual improvement of our health and safety performance.
Principle 6 Seek continual improvement of our environmental performance.
Principle 7 Contribute to conservation of biodiversity and integrated approaches to land use planning.
Principle 8 Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.
Principle 9 Contribute to the social, economic and institutional development of the communities in which we operate.
Principle 10 Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.

GRI summary and correlation with Global Compact and ICMM

Summary	Global Compact Principle	ICMM Principle	Pages
Strategy and analysis			
1.1. Statement from the most senior decision maker.		2 and 10	4-7 ●
1.2. Description of key impacts, risks, and opportunities.		4	12 and 13 ●
Organizational profile			
2.1. Name of the organization.		10	3 ●
2.2. Primary brands, products, and/or services.		10	2 ●
2.3. Operational structure.		10	2 and 3 ●
2.4. Location of organization's headquarters.		10	2 and 3 ●
2.5. Countries where the organization operates.		10	2 and 3 ●
2.6. Nature of ownership and legal form.		10	3 ●
2.7. Markets served.		10	2 and 3 ●
2.8. Scale of the reporting organization.		10	2, 17 and 18 ●
2.9. Significant changes during the reporting period.		2 and 10	9 ●
2.10. Awards received in the reporting period.		10	3 ●
Report parameters			
Report profile			
3.1. Reporting period for information provided.			9 ●
3.2. Date of most recent previous report.			9 ●
3.3. Reporting cycle.			9 ●
3.4. Contact point for questions.			9 ●
Report scope and boundary			
3.5. Process for defining report content.			9 ●
3.6. Boundary of the report.			9 ●
3.7. Specific limitations on the scope.			100 and 101 ●
3.8. Basis for reporting.			9 ●
3.9. Data measurement techniques and the bases of calculations.			Pages 9 and 100 and along the report. ●
3.10. Explanation of the effect of any re-statements.			9, 100 and 101 and along the report. ●
3.11. Significant changes from previous reporting periods.		2	9, 100 and 101 and along the report. ●
GRI content index			
3.12. Location of standard disclosures.			106-108 ●
Assurance			
3.13. External assurance.			102 ●
Governance, commitments and engagement			
Governance			
4.1. Governance structure.		1	19 and 20 ●
4.2 Indication whether the Chair of the highest governance body is also an executive officer.		1	20 ●
4.3. Statement of the number of members of the highest governance body that are independent and/or non-executive members.		1	20 ●
4.4. Mechanisms for recommendations to the highest governance body.		1	20 and 25 ●
4.5. Linkage between compensation / economic and environmental performance.		1	20 ●
4.6. Processes to ensure conflicts of interest are avoided.		1	19 ●
4.7. Qualifications and expertise of the members.		1	19 and 20 ●
4.8. Internally developed statements of values, codes, and principles.		1	10 and 22 ●
4.9. Procedures of the highest governance body.		1,4	19 ●
4.10. Processes for evaluating the highest governance body's own performance.		1	20 ●
Commitments to external initiatives			
4.11. Precautionary approach.		2	25 ●
4.12. Social charters, principles, or other initiatives.		1	23 and 24 ●
4.13. Memberships in associations.			23 and 24 ●
Stakeholder engagement			
4.14. List of stakeholder groups.		10	12 ●
4.15. Basis for identification and selection of stakeholders.		10	10 ●
4.16. Stakeholder engagement.		10	12 ●
4.17. Key topics and concerns raised through stakeholder engagement.		10	13 ●
Economic performance			
Economic management approach (goals and performance, policy, additional contextual information).			16-18 ●
Economic performance			
EC1. Economic value generated and distributed.		9	17 ●
EC2. Risks and opportunities due to climate change.	7	9	84 ●
EC3. Defined benefit plan.			33 and 34 ●

● Indicators fully reported
○ Indicators partially reported

GRI summary and correlation with Global Compact and ICMM

Summary	Global Compact Principle	ICMM Principle	Pages
Market presence			
EC5. Standard entry level wage compared to local minimum wage.	1	9	32 ○
EC6. Spending on locally-based suppliers.		9	71 ●
EC7. Local hiring.	6	9	65 ●
Indirect economic impacts			
EC8. Development and impact of infrastructure investments.		9	64 ●
EC9. Indirect economic impacts.			61 ●
Environmental performance			
Environmental aspects management approach (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information).			45-57, 76-92 ●
Materials			
EN1. Materials used.	8	6	52 ●
EN3. Direct energy consumption.	8 and 9	6	54 ●
EN4. Indirect energy consumption.	8	6	55 ●
EN6. Eco-efficient products and services.	8 and 9	6	53 ○
Water			
EN8. Total water withdrawal by source.	8	6	46 and 47 ●
EN10. Water recycled and reused.	8 and 9		46 and 47 ●
Biodiversity			
EN11. Location in, or adjacent to, protected areas or areas of high biodiversity value.	8	7	86 and 87 ●
EN12. Impacts on biodiversity.	8	7	87 ●
EN13. Habitats protected or restored.	8		89 and 91 ●
EN14. Strategies for managing impacts on biodiversity.	8		85 and 88 ●
EN15. IUCN Red List species.	8		88 and 89 ●
Emissions, effluents, and waste			
EN16. Direct and indirect greenhouse gas emissions.	8	6	80 and 81 ●
EN18. Initiatives to reduce greenhouse gas emissions.	7, 8 and 9		82 ●
EN19. Emissions of ozone-depleting substances.	8	6	82 ●
EN21. Water discharge.	8	6	47 ○
EN22. Total weight of waste.	8	6	48 and 49 ●
EN23. Significant spills.	8	6	52 ●
EN24. Transported waste deemed hazardous.	8		50 ●
Products and services			
EN27. Products and packaging materials that are reclaimed.	8 and 9		51 ●
Compliance			
EN28. Monetary value of significant fines.	8	6 and 8	52 and 53 ●
Overall			
EN30. Environmental protection expenditures.	7, 8 and 9		45 ●
Social performance – Labor practices and decent work			
Labor aspects management approach (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information).			29-44 ●
Employment			
LA1. Total workforce by employment type and region.		3	29 ●
LA2. Rate of employee turnover.	6	9	35 ●
LA3. Benefits provided to employees.			32 and 33 ●
Labor/Management relations			
LA4. Collective bargaining agreements.	1 and 3	3	34 ●
Occupational health and safety			
LA6. Workforce represented in formal health and safety committees.	1 and 3	3 and 5	43 ●
LA7. Occupational diseases, lost days, and work related fatalities.	1	5	39 and 40 ○
LA8. Education, counseling and prevention programs regarding serious diseases.	1	5	41 ●
LA9. Health and safety topics covered in formal agreements with trade unions.	1	3	43 ●
Training and education			
LA10. Average hours of training.	6	2	35 and 36 ●
LA11. Programs for skills management and lifelong learning.		3	33 and 36 ●
LA12. Performance and career development reviews.			32 ●
Diversity and equal opportunity			
LA13. Composition of governance bodies.	1 and 6	3	30-32 ○
LA14. Ratio of basic salary of men to women.	1 and 6		31 ●
Social performance – Human rights			
Human rights aspects management approach (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information).			93-99 ●
Investment and procurement practices			
HR2. Percentage of suppliers that have undergone screening and actions taken.	1, 2, 3, 4, 5 and 6	3	95 ●

● Indicators fully reported
○ Indicators partially reported

GRI summary and correlation with Global Compact and ICMM

Summary	Global Compact Principle	ICMM Principle	Pages
Freedom of association and collective bargaining			
HR5. Operations in which the right to exercise freedom of association and collective bargaining may be at risk.	1, 2 and 3	3	34 ●
Child labor			
HR6. Operations identified as having risk of child labor.	1, 2 and 5	3	95 ●
Forced and compulsory labor			
HR7. Operations identified as having risk of forced or compulsory labor.	1, 2 and 4	3	95 ●
Security practices			
HR8. Security personnel trained in aspects of human rights.	1 and 2	3	96 ●
Indigenous rights			
HR9. Violations involving rights of indigenous people.	1 and 2		97-99 ●
Social performance - Society			
Social aspects management approach (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information).			60-67 ●
Community			
SO1. Management of impacts of operations on communities.		4	61 and 62 ●
Anti-corruption			
SO2. Units analyzed for risks related to corruption.	10	1	25 and 27 ●
SO3. Employees trained in anti-corruption policies.	10	1	27 ●
SO4. Actions taken in response to incidents of corruption.	10	1	25 and 27 ●
Public policy			
SO5. Participation in public policy development and lobbying.	1-10		23 and 24 ●
SO6. Contributions to political parties.	10		24 ○
Anti-competitive behavior			
SO7. Legal actions for anticompetitive behavior, anti-trust, and monopoly practices.			28 ●
Compliance			
SO8. Fines and total number of non-monetary sanctions for noncompliance with laws and regulations.			28 ●
Social performance – Product responsibility			
Product responsibility aspects management approach (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information).			44 and 73 ●
Customer health and safety			
PR1. Impacts assessed.	1	8	44 ●
Product and service labeling			
PR3. Product and service information required by procedures.	8	8	44 ●
PR5. Practices related to customer satisfaction.			73 ●
Marketing communications			
PR6. Adherence to laws.			73 ●
PR7. Non-compliance with laws and regulations.			73 ●
Compliance			
PR9. Fines concerning the provision and use of products and services.			73 ●
Sector indicators – mining and metals			
MM1. Identify those sites where the local economic contribution and development impact is of particular significance and interest to stakeholders (e.g. remote sites) and outline policies with respect to assessing this contribution.		9	64, 65 and 71 ●
MM2. Value-added disaggregated to country level.			17 ●
MM3. The number/percentage of site identified and requiring biodiversity management plans, and the number/percentage of sites with plans in place.		7 and 9	88 and 89 ●
MM4. Percentage of products derived from secondary materials.			51 ●
MM6. Describe approach to management of overburden, rock, tailings, and sludges/residues.		6 and 8	50 ●
MM7. Describe significant incidents affecting communities during the reporting period, and grievance mechanisms used to resolve the incidents and their outcomes.		9	65 and 66 ●
MM8. Describe programs in which the reporting organization has been involved that addresses artisanal and small-scale mining (ASM) within company areas of operation.		9	65 ●
MM9. Describe resettlement policies and activities.		3	66 and 67 ●
MM10. Number or percentage of operations with closure plans, covering social, including labor transition, environmental and economic aspects.		2	67 ○
MM12. Describe approach to identifying, preparing for, and responding to emergency situations affecting employees, communities, or the environment.		4	40 and 41 ●
EN23 MM. Total amount of land owned, leased, and managed for production or extractive use.		7	90 and 91 ●

● Indicators fully reported
○ Indicators partially reported

Corporate Information

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For information on other Vale locations, please refer to **www.vale.com**

Credits

General Coordination
Department of Environment and Sustainable Development

Editorial Support
Department of Corporate Communication and Press

Text
Report Comunicação

Graphic Design
Report Design

Illustration
Felix Reiners

Photography
Anna Carolina Negri / Valor / Folha Imagem page 4;
Daniel Rosa / Vale / photos of Executive Officers page 8;
GettyImages page 6;
Leonardo Silva Tavares / Vale page 67;
Lucas Lenci / Vale
pages 17, 20, 28, 39, 41, 57, 70, 80, 85, 88;
Luis Carlos Soares / Ponto de Vista / photo Roger Agnelli page 8;
Maurilo Clareto / Editora Globo page 6;
Ricardo Corrêa / Vale pages 76 and 77;
Vale collection pages 14, 36, 44, 58, 61, 95, 96;
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An evaluation form for this Report is available at www.vale.com

We seek to create a social, economic and environmental legacy in all locations where we operate.

Cover:

photo 1 – Valmir Oliveira Pereira Filho, railroad transportation programmer, Carajás Railway (photographer Lucas Lenci).

photo 2 – Vale Natural Reserve, in Linhares – Espírito Santo, Brazil (photographer Lucas Lenci).

photo – Vitor Gomes Leite, attending 'Vale Música' Program in Corumbá – Mato Grosso do Sul, Brazil (photographer Luciana Tancredo).

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