

Sustainability  
Report  
2007



## Our Mission

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

# We have neighbors in many countries

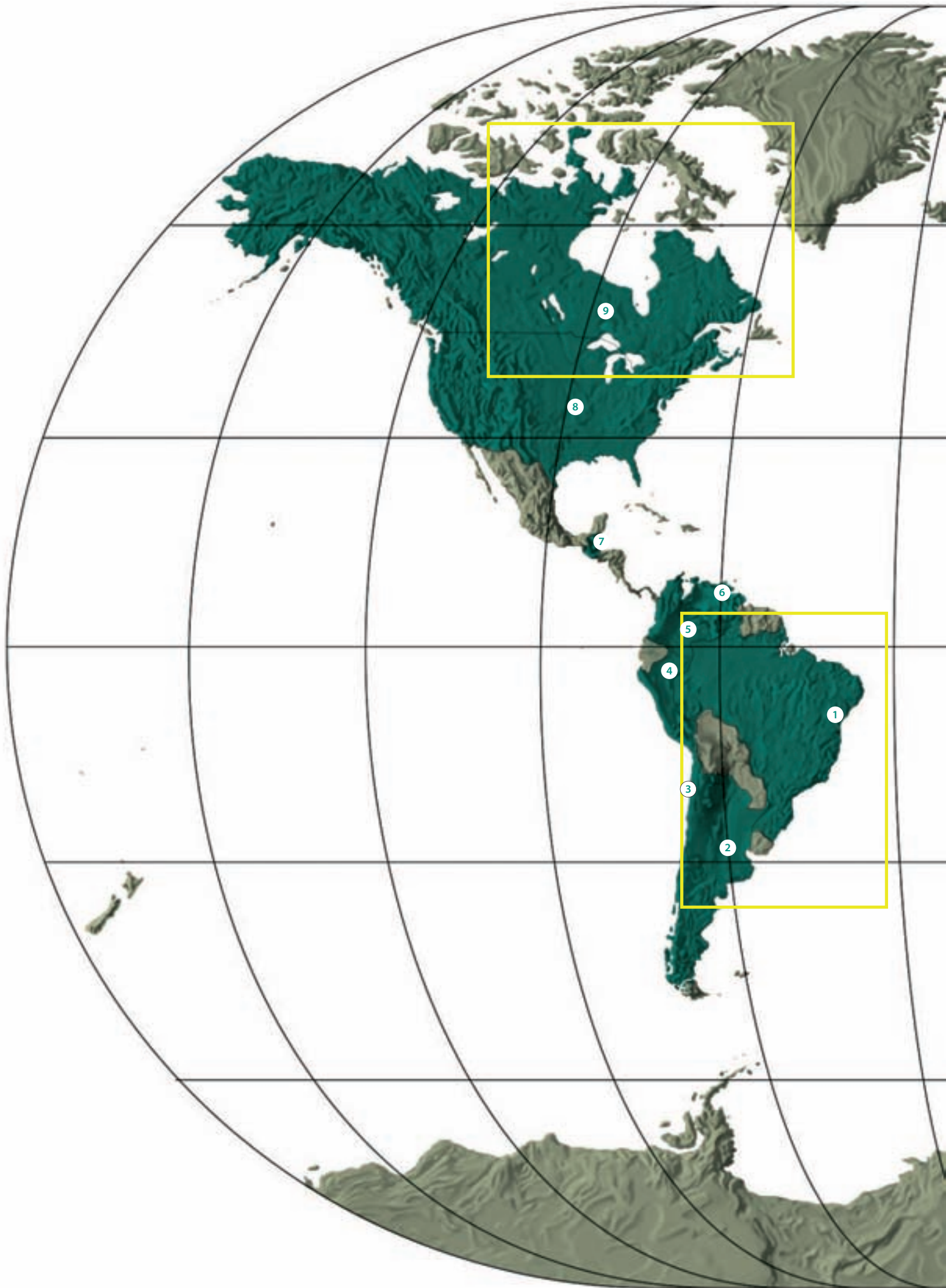
We are a Brazilian mining company and, today, we operate in the world. We work with passion, and the results of our dedication can be seen in basically everything around us; in the car, in the mobile phone, household appliances, construction – even in coins and components for tv sets or computers.

We speak different languages and live within different cultures, united by a common mission: to transform mineral resources into prosperity and sustainable development.

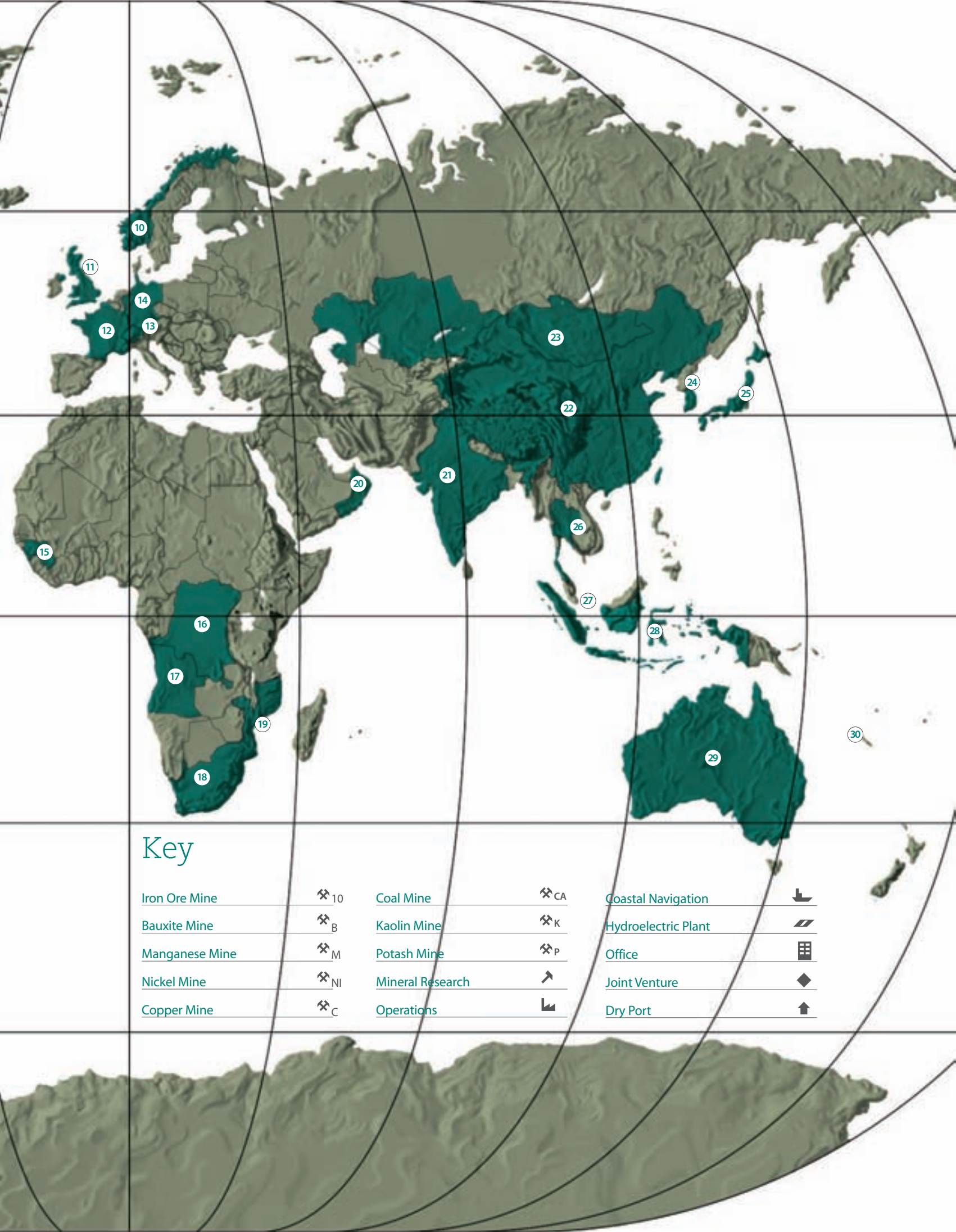
## world

1	Brazil	○
2	Argentina	↗
3	Chile	↗
4	Peru	↗
5	Colombia	🏠
6	Venezuela	◆
7	Guatemala	↗
8	United States of America	🏠
9	Canada	↙ ◆ 🏠
10	Norway	⚡ NI ↗ ↙ 🏠
11	United Kingdom	↙
12	France	🏠
13	Switzerland	◆
14	Germany	◆
15	Guinea	↙ 🏠
16	Congo	↗
17	Angola	◆
18	South Africa	↗ ↙ ◆ 🏠
19	Mozambique	🏠
20	Oman	◆ 🏠
21	India	◆ 🏠
22	China	◆ 🏠
23	Mongolia	⚡ NI ↗ ↙ 🏠
24	South Korea	⚡ NI ↗ ◆ 🏠
25	Japan	↗ ↙
26	Thailand	↗
27	Cingapura	↗
28	Indonesia	↗
29	Australia	↗
30	New Caledônia	↗









# Key

Iron Ore Mine



Coal Mine



Coastal Navigation



Bauxite Mine



Kaolin Mine



Hydroelectric Plant



Manganese Mine



Potash Mine



Office



Nickel Mine



Mineral Research



Joint Venture



Copper Mine



Operations



Dry Port

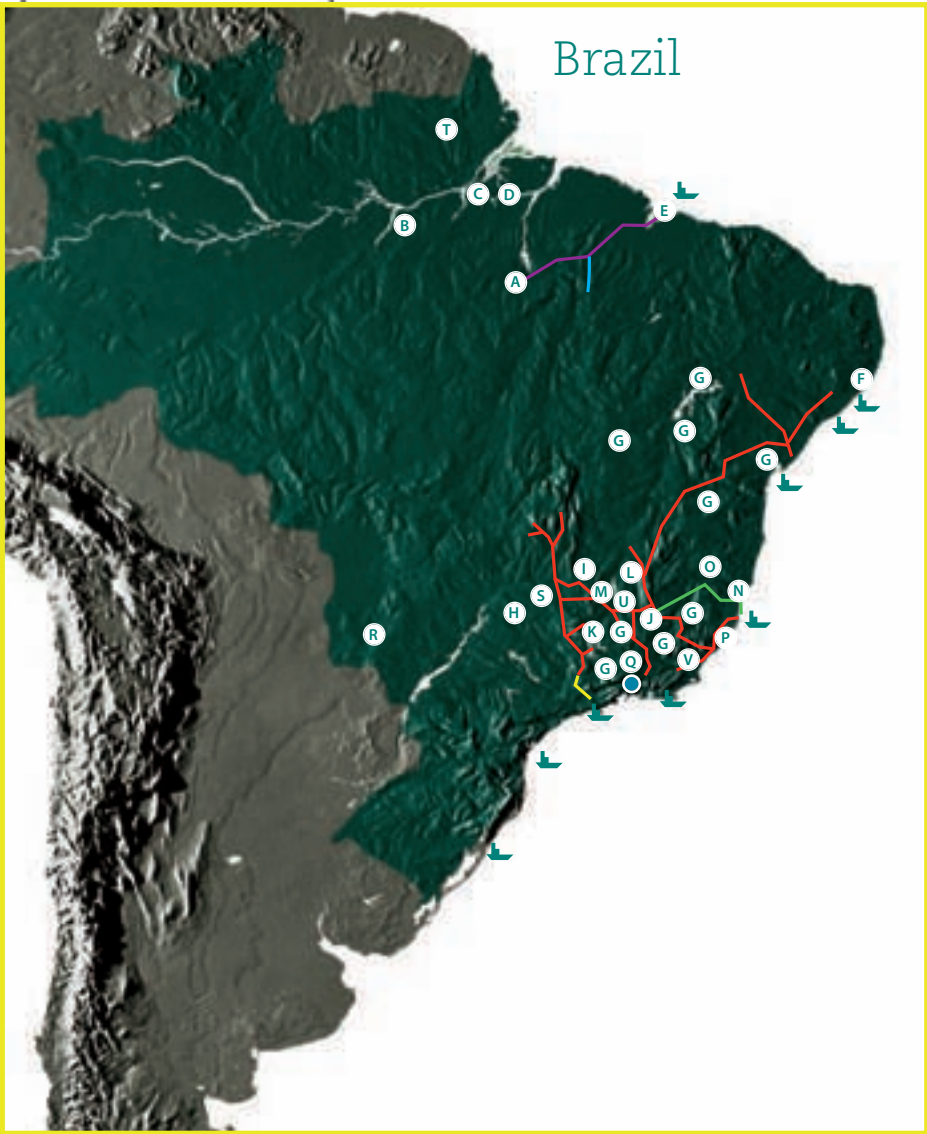




Canada



Brazil



Brazil

		Vale Headquarter
A	  	Northern System Rio Doce Manganês (RDM)
B		MRN
C		PPSA
D		Albras Alunorte
E	 	Ponta da Madeira Port Terminal São Luís Pelletization Plant
F	 	Inácio Barbosa Port Terminal
G		Rio Doce Manganês (RDM)
H		Igarapava Hydroelectric Plant
I		Usiminas
J	 	Southern System Fábrica Pelletization Plant
K		Funil Hydroelectric Plant
L		Porto Estrela Hydroelectric Plant
M		Candongá Hydroelectric Plant
N	 	Tubarão Port Complex Vila Velha Terminal Hispanobras Nibrasco Itabrasco Kobrasco Vale Pelletization Unit
O		Aimorés Hydroelectric Plant
P		Samarco
Q	 	Sepetiba Bay Port Company (CPBS) Guaíba Island Maritime Terminal (TIG) Valesul
R	  	Urucum Mining
S		Cerrado Dry Port
T		Cadam
U		Capim Branco Hydroelectric Plant
V		Mining Development Center (CDM)
		Carajás Railroad (EFC)
		Vitória-Minas Railroad (EFVM)
		Centro-Atlântica Railroad (FCA)
		Norte-Sul Railroad (FNS)
		Ferrobán (FCA) – Traffic Rights
		Coastal Navigation Services

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# Message from the Board of Directors

In 2007, we had new accomplishments and strengthened our global operation

Vale achieved outstanding results in 2007, including a return on shareholder investment of 123% and earnings of US\$ 2.42 per share. Our market capitalization on December 31, 2007 was US\$ 151.7 billion. Our results demonstrate the effectiveness of our strategy and management capability.

During this period, Vale overcame an additional challenge: the successful and smooth integration of large international operations, including Vale Inco and Vale Australia. These acquisitions added more than 13,000 employees to our workforce, at operations and projects in various countries around the world.

In 2006 and 2007, Vale achieved certification in the controls set forth by the Sarbanes-Oxley Act, as required of publicly traded companies with American Depositary Receipts (ADRs) listed on the New York Stock Exchange. This assures an international standard concerning our financial controls and processes in general.

One of the major indications of Vale's degree of maturity is our commitment to transparency. This is demonstrated not only through financial statements but also in the level of our socioenvironmental performance, as represented in this Sustainability Report for 2007, consistent with the internationally adopted Global Reporting Initiative (GRI) guidelines.

Publication of Vale's 2007 Sustainability Report, demonstrates Vale's quest for sustainable development, our commitment to socioenvironmental responsibility and describes the challenges faced, as well as our performance. The information contained in the report also highlights the best practices at Vale's operations together with the opportunities for improvement that will lead to a continuous process of improvement in management.

The commitment towards ethics and transparency, set forth in the values that guide our company, provides assurance to investors and guidance in their decisions according to the Principles for Responsible Investment, which seek to achieve the highest standards for return on investments to shareholders along with performance in sustainability.

We understand that sustainable development is a challenge to our greater society, to which Vale is a contributor. We are focusing attention on the evolution of critical issues such as human rights, socio-economic development, environmental conservation and climate change, among others. In this sense, we are committed to the company's sustainability vision and support Vale's engagement to the private and public sectors, as well as to civil society, to address the social and environmental challenges with which we are faced.

Finally, in the name of Vale's shareholders, I would like to thank the Executive Board and all employees and partners of the company, for the extraordinary results achieved by Vale in 2007, and to renew our confidence and hope for success to everyone in the years to come.



**Sérgio Rosa**

*President of the Board of Directors*

# Message from the CEO

Sustainability is essential for the feasibility of mining activities and for regional and community development where we operate

It is with great pleasure that I present to you Vale's 2007 Sustainability Report, prepared according to the GRI guidelines, in its updated version the G3. Communication of this information shows Vale's commitment to transparency in our activities and the improvement of internal sustainability management, in which we will continue to aggressively invest in the coming years.

The last three years were exceptional for Vale. We exceeded all our objectives in production, investment and value generation to our shareholders. During 2007, we consolidated the acquisition of Inco Limited, which occurred in October 2006, and acquired AMCI Holdings Australia Pty, in February 2007, two leading companies in the nickel and coal industries, respectively. With our expanded product portfolio, Vale became the second largest diversified mining company in the world, with operations in 34 countries on five continents. These results were only made possible through the work and dedication of our employees, to whom I extend my sincere gratitude.

In this period we also had great achievements towards Vale's sustainable development, highlighted by considerable social and environmental investments, which have grown year after year to reach US\$ 686 million in 2007.

In 2007 we defined our new Mission Statement: "To Transform Mineral Resources into Prosperity and Sustainable Development", and also our Vision and Values. This work culminated in the changing of our brand in order to reflect our new corporate reality and our commitment to the present and the future. From this year on, we will be known by the "Vale" brand name throughout the world.

Vale's Mission reflects our understanding that sustainability is instrumental to mining in the short, medium and long term. It also acknowledges the relevance of the company's contribution towards sustainable development in the regions and communities where we operate, through the engagement and involvement of our stakeholders. Meaningful engagement remains one of our greatest challenges and priorities, which we will continue to address in a way that is consistent with our role as a leading publicly traded company in the extractive and industrial sectors.

At Vale, sustainability begins with our relationship with employees, most notably in issues of health and safety. Our strategy involves training and leadership, raising awareness among employees and contractors, and the implementation of tools that can avoid or minimize incidents. Nevertheless, despite investments and advancements achieved in our operating processes, we deeply regret the loss of 14 valuable lives in 2007. We have re-doubled our efforts towards our goal of zero fatalities. This can only be achieved through perseverance, discipline, determination and coordinated actions in all locations.



With the intense growth of our operations over the last three years, we have created over 50,000 jobs (employees and contractors). Investments of US\$ 59 billion forecast for the period 2008-2012 are expected to create 62,000 additional jobs. As such, the training, hiring and retention of our employees are paramount to our corporate strategy. Vale has invested significantly in the education and training of our employees and also of community members in the areas where we operate, providing these individuals with greater opportunities for employment, whether at Vale or in other companies. Such investments are instrumental, as the increased income can improve local quality of life.

We have also increased our commitment to institutions and international sustainability principles. We became a signatory of the United Nations Global Compact, and of the Global Business Coalition (GBC) on HIV/Aids, Tuberculosis and Malaria. We are also an active participant in the International Council on Mining and Metals (ICMM), the mining industry's global forum on sustainability.

In recent years, the Amazon region has gained the attention of the world and become part of the sustainability agenda for many institutions. Vale has been developing, for many years, environmental conservation and preservation projects in several regions, particularly in the Amazon area, where we maintain important operating units in the southeastern region of the State of Pará. In that region, we support and foster the conservation of 8,000 km<sup>2</sup> of native forest in an area known as *Mosaico Carajás*. We have provided support for the implementation of technologies to monitor deforestation and fires in the Amazon Rain Forest, helping authorities fight predatory activities. Our most recent effort to reclaim the Amazon Biome and to promote sustainable practices in the region is the *Vale Florestar* Project, which aims to rehabilitate a depleted area of over 3,000 km<sup>2</sup> outside of our operations by 2015. Our objective is to contribute to the recovery of this area through a socially and environmentally sustainable model.

Vale has dedicated special attention to global sustainability issues, being alert to trends and concerns of the international community, especially in terms of the new reality imposed by climate changes. Vale has recently developed our corporate guidelines on the matter and established the Vale Carbon Program. Vale has been improving the quality of its green house gas inventory. Our company holds a unique position, as the electric power we consume is predominantly (89%) from hydroelectric sources. Vale seeks to find the necessary balance between energy supply, cost and sustainability with regard to greenhouse gas emissions. This is made clear by the increased use of biofuels in our operations, ongoing investments in clean and renewable energy technologies, and continued efforts to improve our energy efficiency.



We are dedicated to achieving our objectives of growth and adding value to shareholders while mitigating environmental impacts on a local and global scale, as well as effectively contributing to the development of society. We believe that the development of a sustainable future depends on cooperation among all stakeholders and that sustainability begins with the decisions we make today.

Once again I express my satisfaction in presenting this report to you. It is my hope that its contents will contribute to a greater knowledge of the effort that Vale is making towards sustainable development.

**Roger Agnelli**  
CEO

# Vale Executive Officers



**Tito Martins**  
Non-ferrous and Energy



**Eduardo Bartolomeo**  
Logistics



**Fábio Barbosa**  
Financial and Investor  
Relations



**Carla Grasso**  
Human Resources and  
Corporate Services



**Roger Agnelli**  
CEO



**José Carlos Martins**  
Ferrous Minerals



**Demian Fiocca**  
Management and  
Sustainability



**Murilo Ferreira**  
Nickel and Basic Metals  
Commercialization

**José Lancaster**  
Copper, Coal and Aluminium  
(retired in 2007)



**Gabriel Stoliar**  
Planning and Business  
Development  
(retired in 2007)



# Introduction

The elaboration of our 2007 sustainability report according to the GRI G3 guidelines, has posed both challenges and opportunities for Vale. This report, which addresses the company's economic, environmental, and social performance, covers the period 2005-2007 – a time of intense internal transformation for our company.

This period was characterized by the rapid expansion of production and the development and implementation of a broad range of projects, as well as by the ongoing integration of companies recently acquired, including MBR – Minerações Brasileiras Reunidas, Inco Limited, and also AMCI Holdings Australia Pty. These changes represented a challenge to the scope and the standardization of the information on sustainability.

The report includes a complete data set for MBR, incorporated in 2006, while data from Vale Inco is reflected only in the numbers for 2007. References to Vale in this document mean Vale and our subsidiaries, including Vale Inco and its operations. The performance of AMCI Holdings Australia Pty, acquired in 2007, and now named Vale Australia, will be included in future reports, according to the progressive approach detailed in the GRI guidelines<sup>1</sup>.

Given Vale Inco's long tradition of sustainability reporting and the relevance of its operations to Vale's performance, Vale Inco will be producing a supplementary report for 2007. This report is intended to address issues unique to the nickel business and will be of interest to stakeholders in the various countries where Vale Inco operates.

Additional challenges arise from the complexity and breadth of sustainability issues included in the GRI G3 guidelines. This report covers over 30 GRI aspects, from human rights issues to climate changes, thus creating the need to clearly define the report scope and boundaries. It would not be possible to report all practices, projects and actions which comprise the day-to-day handling of our businesses. These daily activities, in many cases, speak more of our position on sustainability than formal policies. The challenge associated with the description of business practices across such a broad range of issues is further increased when it comes to the description of policies and practices not only for one company, but for a group of companies performing globally, in different businesses and geographies, as it is Vale's case.

At the same time, however, we view the development of this report as a great opportunity for Vale, as it represents a detailed assessment of our policies, practices and performance in sustainability.

Throughout the reporting process, we have revisited our strategic vision on sustainability, identifying opportunities for improvement and the main courses of action to be adopted, keeping in mind the sustainability challenges placed before a company that holds a leading position in the mining industry.

We have also raised greater awareness concerning the issue of sustainability and its relevance to our businesses among a large number of managers and employees who have directly taken part in the reporting process or learned about it through structured communication activities. These activities have supported the establishment of an internal sustainability culture with the GRI principles being a permanent reference in our internal practices and management decisions.

In this first GRI G3 sustainability report, with a B+ application level, we have tried to portray the current status of our management practices and company performance. Our commitment to the future is to seek continuous improvement, using this assessment as a baseline to identify new and necessary policies, action plans and goals which promote excellence in sustainability.

<sup>1</sup> Information reported for the last three years was collected and consolidated in compliance with the GRI Boundary Protocol – that defines which companies should be included in the report. More details on our reporting approach are available in the Reporting Process chapter.



# Profile

## We are Vale

We started out as a Brazilian mining company and today, we are global. We speak different languages and belong to several cultures, but are united by a common goal: to transform mineral resources into prosperity and sustainable development



**V**ale is a global mining company with headquarters in Brazil. Created in 1942, in Brazil, the company expanded throughout our native country and crossed continental borders. In recent years, we have experienced outstanding and consistent growth, developing projects, establishing new partnerships, making acquisitions, investing in people, contributing to the development of communities and gaining international recognition.

Faced with this transformation, in 2007 we redefined our Mission, Vision, Values and our Brand. Though the company's legal name – Companhia Vale do Rio Doce – remains the same, Vale is how we want to be recognized around the world.

Our workforce is composed of 146,800 people<sup>1</sup> (56,400 employees and 90,400 contractors), who work towards a single mission: to transform mineral resources into prosperity and sustainable development.

Our business is mining; we produce and sell iron ore, pellets, nickel, copper, bauxite, alumina, aluminum, coal, potassium, kaolin, manganese, Ferroalloys, cobalt, platinum group metals (PGMs) and precious metals. In Brazil, we also operate a logistics infrastructure that includes railways and port terminals. This integrated mine-railway-port system is just one of our competencies and competitive advantages.

As such, we are also logistics operators, and we provide services to clients in the areas of agribusiness and the steel industry, among others. Additionally, we invest in power generation projects in countries such as Brazil and Indonesia, mainly through hydroelectric plants, with a focus on providing for our needs, and protecting against fluctuations in energy prices.

We work towards the improvement of our production of essential raw materials for a vast global production chain. Iron ore, pellets and manganese, for example, are essential ingredients for the construction of houses and buildings and for the production of automobiles, machinery, and equipment as well. Nickel and aluminum are inputs to airplane manufacturing, medical equipment, and packaging. Copper is used in electrical and electronic equipment. Kaolin is used in the paper industry, and potassium is an ingredient in fertilizers, used in the production of food. We serve society, and we are present in the lives of millions of people.

Our dynamic and persistent spirit contributes to our constant search for the best way to do things.  
Brucutu Mine  
(MG – Brazil)

<sup>1</sup> In accordance with the GRI Boundary Protocol, the employees and contractors of Vale Australia and Vale's affiliated companies have not been included in the workforce data. Consistent with our progressive reporting approach, data for Vale Australia will be included in the coming years. Considering Vale Australia employee statistics, the total number of Vale's employees reaches approximately 57,000. When employees and contractors of Vale Australia and affiliated companies are considered, the total number of direct employees reaches 153,000.

## Global Evolution

Our vision is to be the largest mining company in the world and to surpass the established standards of excellence in research and development, project implementation and business operation. In this quest, we have blazed a path of large-scale transformation in the last few years. In December 2007, Vale's market capitalization reached US\$ 151.7 billion, compared to the US\$ 11 billion registered in 2002 – making us the largest privately-owned company in Latin America and the second largest diversified mining company in the world.

Since 2005, we have made investments of US\$ 16.6 billion, not including acquisitions. An additional amount of US\$ 11 billion in investments is forecast for 2008, thus representing the largest annual organic growth investment program in Vale's history.

As a publicly traded company, our shares are traded on Bovespa (Vale3 and Vale5), on the New York Stock Exchange (RIO and RIOPR), on the Euronext Paris (Vale3 e Vale5, since July 18<sup>th</sup>, 2008) and on Latibex (XVALP and XVALO).

In 2005, we became the first Brazilian company to receive the investment grade rating. Today, we are considered investment-grade by the most important risk assessment agencies in the world, such as Standard & Poor's Ratings Services, Moody's Investors Service, Fitch Ratings and Dominion Bond Rating Service. This reflects the confidence of the market in our business model.





In 2006, we acquired the Canadian mining company Inco Limited (now called Vale Inco), a milestone in our global expansion. In 2007, we also acquired AMCI Holdings Australia Pty (now called Vale Australia). The challenge of harmonizing different organizational cultures drives us to strengthen bonds and to acquire valuable knowledge.

Our convictions have also led us to participate in global initiatives aligned with sustainable development. We are associated with the International Council on Mining and Metals (ICMM), whose mission is to provide best practices in sustainability. We became signatory of the Global Compact, an initiative by the United Nations to promote construction of a development model committed to the causes of human rights, labor rights, environmental protection and the fight against corruption.

## Our Legacy

In all locations where we operate, we seek to contribute to a long-term positive legacy promoting the quality of life among local residents as well as the conservation of ecosystems, even after terminating our operations. We strive to conduct our business in such a way that the economic, social and environmental dimensions are in balance, thus contributing towards sustainability. We work towards the integration with local cultures, respecting the differences and unique characteristics of each territory and each population.

To pursue sustainability represents both a challenge and a journey that engages our employees and partners in all our activities.

**“Vale is one of the most exciting business projects coming out from an emerging market. Vale is also – and this should be pledge – a worldwide company firmly committed to raise the standards and its policy towards achieving sustainable development is a stellar testimony of this”**

**Javier Santiso**, OECD Development Centre Director and OECD Emerging markets Network (EmNet) Chair. March, 2008.

Left side:  
Employee at RDME  
(France).

Right side:  
Coal analysis at Moatize  
(Mozambique).

# Business Performance

## Shared Results

We have been undergoing a decade of major changes and of significant growth, with new projects, new acquisitions and productivity gains, as a direct result of the effort and the dedication of our employees





Our business performance reflects a high-growth phase, which is a result of the transformation of the mineral industry and Vale itself. Thanks to the efforts of our employees, we have been able to build Vale. Our employees guide the company's day-to-day operations, identify and evaluate new opportunities, develop and implement projects, produce ore, metals and energy, transport cargo and are in constant search for new levels of operational excellence.

During the last few years, we have diversified our activities, expanded our product portfolio and globalized our operations. We are firmly anchored in values that guide us to sustainable development, in whatever area we may act. During 2007, activities related to social and environmental responsibility received investments of US\$ 686 million. These investments were made possible by our ability to continuously exceed our operational and financial performance goals.

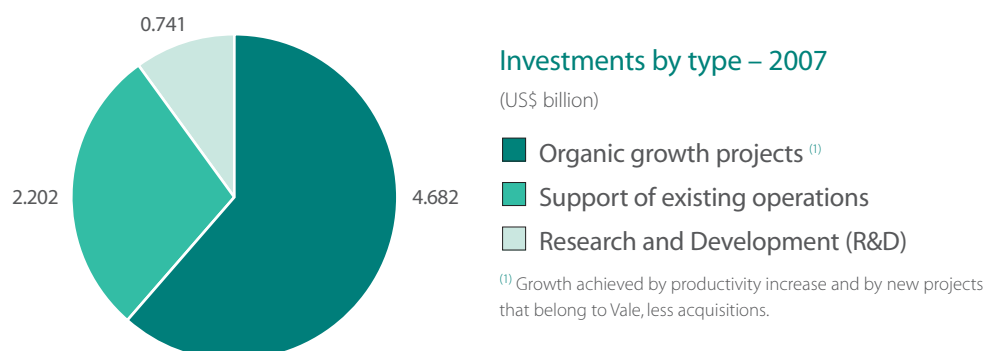
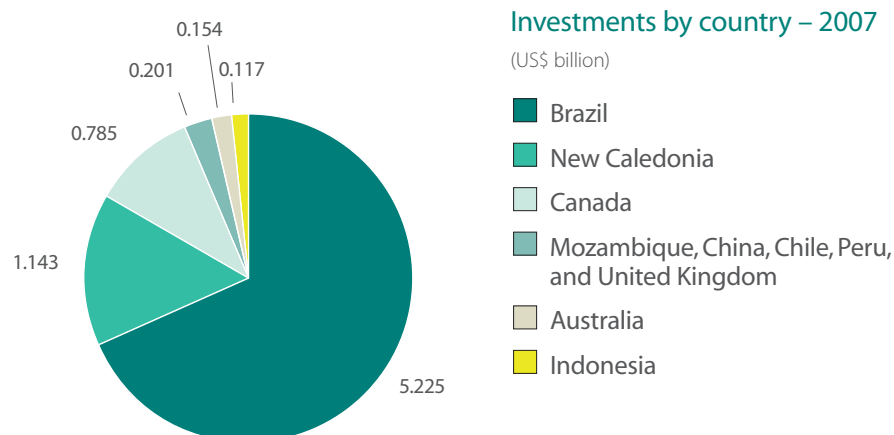
In the last three years, we have invested a total of US\$ 36.6 billion. Of this total, US\$ 16.6 billion was designated for operational maintenance, research and development (R&D), mineral exploration and project execution. The remaining US\$ 20 billion was invested in acquisitions.

Between 2005 and 2007, we concluded ten large projects, completed several successful acquisitions and achieved productivity gains that have increased our total production at an average annual rate of 9.3%. In addition to increasing production, we have also added copper, nickel, metallurgical and thermal coal, cobalt, and platinum-group metals to our portfolio.

One of our key strategies is to place our production in the world market, shortening distances and creating several export corridors.

Photos: EFVM Railroad and Tubarão Port at the Brazilian state of Espírito Santo.

Due to the geographic diversification of our operations and projects, we invested in more than ten countries in 2007. Without taking acquisitions into account, investments amounted to US\$ 7.6 billion in 2007, 58.1% more than in 2006.



In 2007, such significant investments allowed us to achieve new production records in nine product areas.

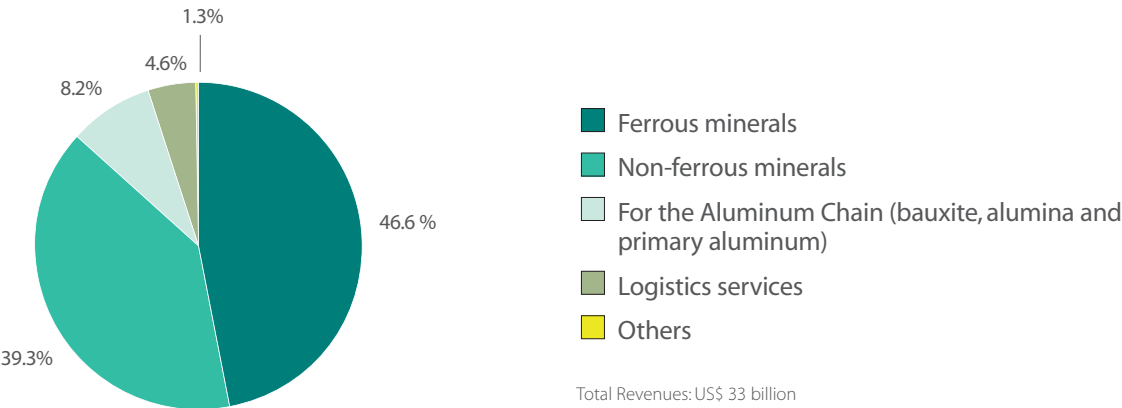
### Record Production – 2007

Annual Production (result in metric tons)	
Iron Ore	296 million
Pellets	17.6 million
Finished nickel	248,000
Copper	284,000
Bauxite	9.1 million <sup>(1)</sup>
Alumina	4.3 million
Aluminum	551,000
Kaolin	1.4 million
Cobalt	2,500

Note: <sup>(1)</sup> Figures refer to Vale's share in Paragominas and Trombetas (MRN).

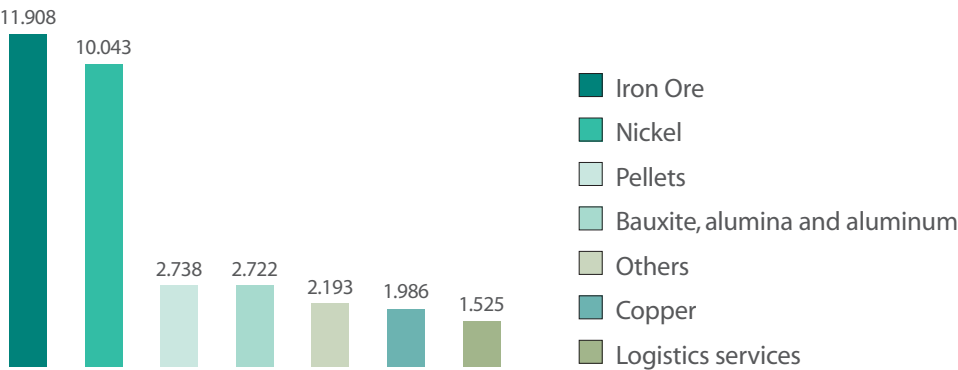
Sales by business area in 2007

Percentage share in gross revenues (%)



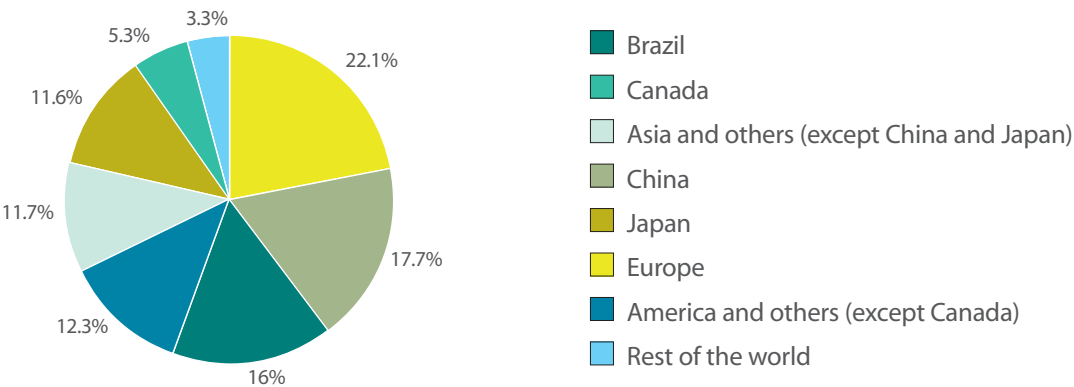
Revenues by product in 2007

(in US\$ billion)



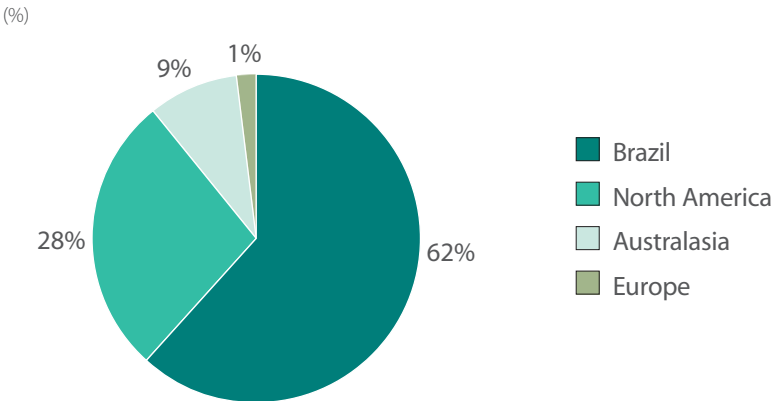
Revenue distribution by product destination in 2007

(%)





Revenue distribution  
by product origin in 2007



High production levels and prices, based on strong international demand, allowed us to significantly increase our revenues and our cash flow.

These results allowed for a swift recovery after the increase in indebtedness from the acquisition of Inco Limited during the last quarter of 2006. This is reinforced by the total debt/EBITDA ratio, which went from 2.0x on December 31, 2006 to 1.1x exactly one year later.



## Capital market

During the last three years, our shareholders received US\$ 4.5 billion in the form of dividend distribution. The total shareholder return (TSR) during this same period reached 69.1%. In 2007, the distribution amounted to US\$ 1.875 billion and the TSR reached 123% per year. With such performance, we can take pride in being among the 40 largest companies by market capitalization in the world.

### Selected Financial Results<sup>(1)</sup> – (US\$ million, unless otherwise stated)

Financial Indicators			
	2005	2006	2007
Gross Operating Revenues	13,405	20,363	33,115
Operating Profit (EBIT)	5,432	7,637	13,194
Adjusted EBITDA <sup>(2)</sup>	6,540	9,150	15,774
Net income for the year	4,841	6,528	11,825
Financial Data			
	2005	2006	2007
Total Assets	22,644	60,926	76,717
Fixed Assets	15,838	40,360	57,547
Net Assets	11,977	19,673	33,276
Gross Debt	5,009	22,581	19,030
Net Debt <sup>(3)</sup>	3,968	18,133	17,984
Investments <sup>(4)</sup>	4,998	20,628	11,004
Stock			
	2005	2006	2007
Number of Shares (million)	4,662.7	4,919.3	4,919.3
Market capitalization	45,923	69,801	151,711
Dividends per share (US\$) <sup>(5)</sup>	0.28	0.27	0.39

<sup>(1)</sup> Financial data considers the consolidation of Vale Inco starting from the 4Q06. Financial information is based on the consolidated figures in accordance with USGAAP. Vale's main consolidated subsidiaries are: Vale Inco, MBR, Cadam, PPSA, Alunorte, Albras, Valesul (in 2006), RDM, RDME, RDMN, Urucum Mineração, Ferrovia Centro-Atlântica (FCA), Vale Australia (in 2007), Vale International and Vale Overseas.

<sup>(2)</sup> EBITDA represents earnings (loss) before interest, tax, depreciation and amortization. Vale uses the term adjusted EBITDA to reflect the exclusion of: monetary variations; equity income from the profit or loss of affiliated companies and joint ventures, less the dividends received from them; provisions for losses on investments; adjustments for changes in accounting practices; minority interests; and non-recurrent expenses. However, our adjusted EBITDA is not the measure defined under US GAAP, and may not be comparable with indicators with the same title reported by other companies. Adjusted EBITDA should not be considered as a substitute for operational profit or as a better measure of liquidity than operational cash flow, which are calculated in accordance with GAAP.

<sup>(3)</sup> Net debt on cash flow and equivalents.

<sup>(4)</sup> Including acquisitions.

<sup>(5)</sup> Dividends and/or interest on shareholders equity.

### Operational Results<sup>1</sup>

Production (thousand of metric tons)			
	2005	2006	2007
Iron Ore	233,851	264,152	295,933
Pellets	16,369	14,182	17,570
Copper	237	267	284
Kaolin	1,218	1,352	1,354
Alumina	2,57	3,939	4,253
Aluminum	538	550	551
Nickel	221	235	248
Coal		2,204	
Logistics Services (millions of ntk)	26,885	26,714	27,500

ntk = net ton kilometer

<sup>1</sup> Operational results consider pro forma data for Vale Inco numbers, in order to facilitate comparisons with the previously reported statistics.

Our employees: without whom none of our successes would have been possible.  
(ES – Brazil)

Our corporate performance reflects the generation of value to society through the development of projects, research and technological innovation, knowledge development, employment opportunities, capacity building, stimulation of the local economy by the payment of taxes to public authorities, and support for social projects in the communities in which we operate.

### Economic value generated and distributed – US\$ millions \*

2007	North America excluding Canada	Canada	South America excluding Brazil	Brazil	Europe	Africa	Australasia	TOTAL
<b>Direct economic value generated</b>								
a) Revenues	73	9,203		21,685	359		2,867	34,187
<b>Economic value distributed</b>								
b) Operational Costs	56	3,744	54	9,622	239	58	893	14,666
c) Employee' salaries and benefits	9	985		1,396	56		131	2,577
d) Payments to capital providers	659			2,676				3,335
e) Payments to the government	27	1,215		2,872	18		531	4,663
f) Investments in the community		6		201		2	22	231
<b>Total</b>	<b>751</b>	<b>5,950</b>	<b>54</b>	<b>16,767</b>	<b>313</b>	<b>60</b>	<b>1,577</b>	<b>25,472</b>
<b>Accumulated/Accrual economic value</b>								
(economic value generated less economic value distributed)	(678)	3,253	(54)	4,918	46	(60)	1,290	8,715
2006	North America excluding Canada	Canada	South America excluding Brazil	Brazil	Europe	Africa	Australasia	TOTAL
<b>Direct economic value generated</b>								
a) Revenues	16	2,145		18,325	238		640	21,364
<b>Economic value distributed</b>								
b) Operational Costs	18	819	45	7,662	178	81	216	9,019
c) Employee' salaries and benefits	2	244		1,094	25		23	1,388
d) Payments to capital providers	438			2,059				2,497
e) Payments to the government	3	34		1,697	4		38	1,776
f) Investments in the community		6		128		4	12	150
<b>Total</b>	<b>461</b>	<b>1,103</b>	<b>45</b>	<b>12,640</b>	<b>207</b>	<b>85</b>	<b>289</b>	<b>14,830</b>
<b>Aggregated economic value</b>								
(economic value generated less economic value distributed)	(445)	1,042	(45)	5,685	31	(85)	351	6,534

### Economic value generated and distributed – US\$ millions \*

2005	North America excluding Canada	Canada	South America excluding Brazil	Brazil	Europe	Africa	Australasia	TOTAL
<b>Direct economic value generated</b>								
a) Revenues				13,621	237			13,858
<b>Economic value distributed</b>								
b) Operational Costs			22	5,914	195	51	12	6,194
c) Employee' salaries and benefits				786	10			796
d) Payments to capital providers	439			1,362				1,801
e) Payments to the government				1,348				1,348
f) Investments in the community				68		1		69
<b>Total</b>	<b>439</b>		<b>22</b>	<b>9,478</b>	<b>205</b>	<b>52</b>	<b>12</b>	<b>10,208</b>
<b>Aggregated economic value</b>								
(economic value generated less economic value distributed)	(439)		(22)	4,143	32	(52)	(12)	3.650

(\*) Financial data considers the consolidation of Vale Inco starting from the 4Q06. US GAAP is the accounting standard used, with some adjustments as required by GRI criteria, such as: Revenues, that includes Gross Operating Revenues, plus financial revenues and results from the sales of investments and is consolidated considering the source of the products sold.

Our performance leads to the creation  
of new job opportunities  
Brucutu Mine (MG – Brazil)



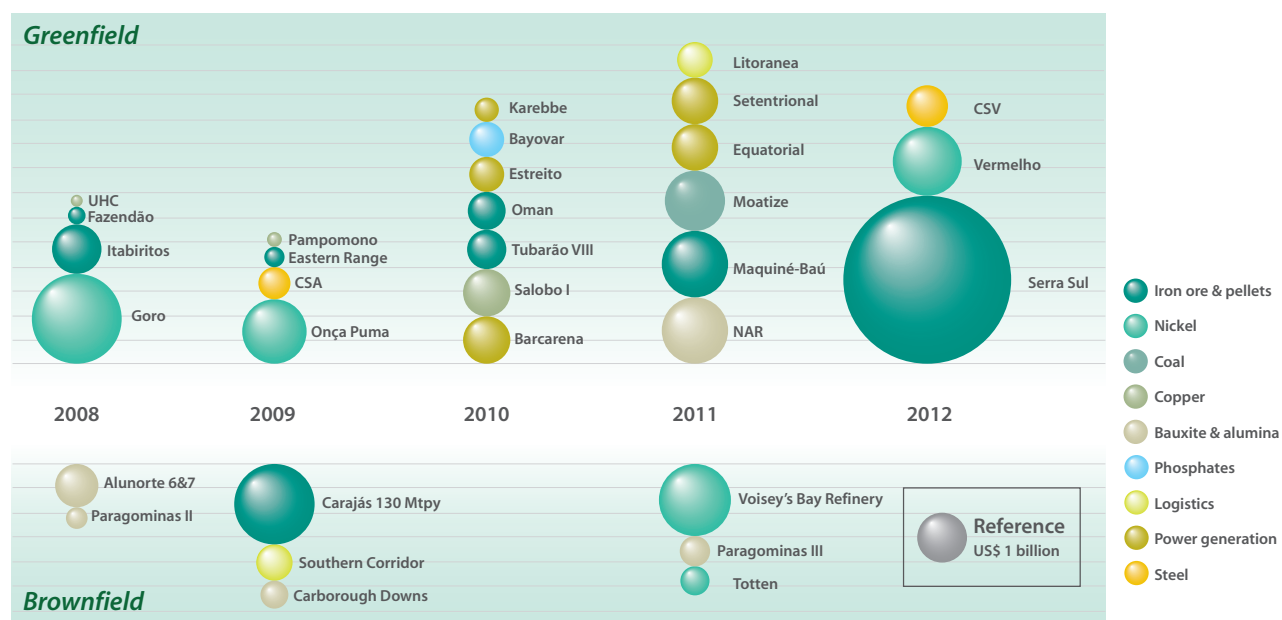


## Mineral Exploration

Vale has an extensive mineral exploration program, which operates in 21 countries and is an important part of our growth strategy. This initiative primarily covers copper, manganese ore, iron ore, nickel, bauxite, phosphate, potash, coal, uranium, diamond and PGM. In this area, we employ our own team as well as collaborating with selected companies.

### Future investments

In the next five years (2008-2012), Vale is planning to invest US\$ 59 billion in new projects.



Note: Greenfield – New Investments / Brownfield – expansion

“The support from Vale Inco is a demonstration of the company’s unwavering commitment to business growth and economic development in our community.”

**Darryl Lake, NORCAT** – Northern Centre for Advanced Technology Inc. CEO and Executive Director. Sudbury, Ontario Canada. September, 2007.

## Main acknowledgements

Vale has been recognized by society for its efforts to seek out opportunities for improvement, and to create a strong commitment to sustainability across the company.

### 2007

- Recognition from World Education & Development Fund (World Fund) by the commitment with education in Latin America.
- “Faz a Diferença” Award – Category Social Responsibility – O Globo newspaper.
- IABC Gold Quill Awards – Category Communication with Employees (Projeto Universo Vale) – International Association of Business Communicators – Vancouver, Canada.
- Transparency Trophy – XI Anefac Award– National Association of Finance, Administration and Accounting Executives – Fipecafi-Serasa.
- Citizenship Medal – BNP Paribas Social and Environmental Responsibility Award.
- Best Corporate Issuer, Best Corporate Bond, Best Cross Border M&A, Best Hostile Takeover, Best Syndicated Loan according to Latin Finance Magazine.
- Best Performer – Investor Magazine Award.
- Best Companies – Finance Asia Magazine.
- Highlight from Corporate Governance Watch – Asian Corporate Governance Association.
- Best Investor Relations program with Investors of IR Magazine Awards Brazil.
- Business of the Year: Inco Limited Acquisition – Highlight from Vale’s Legal Department support in the negotiation – Latin Lawyer Magazine.
- National Quality Award – PNQ to Albras.
- “Valor Econômico” Award The Best Companies in the Management of People, to Albras.
- John T. Ryan Award – Copper Cliff North was considered the safest metal mine of the year, in Canada for the second year in a row.
- PT Inco received a Gold Award from the Department of Energy and Mineral Resources for its reclamation efforts and work to promote the growth of native species in-field.
- Vale Inco was called one of the 50 Best Corporate Citizens of 2007 by Corporate Knights’ Magazine

### 2006

- Eco Award – Amcham (American Chamber of Commerce) to Alunorte, category Community, Category Corporate Social Responsibility.
- IABC Gold Quill Awards – Category Communication with Employees (Projeto Somos Vale) and Category Publication (Jornal da Vale) – International Association of Business Communicators – Vancouver, Canada.
- John T. Ryan Award – Copper Cliff North was considered the safest metal mine of the year, in Canada.
- Award from the Ontario Government, Canada, to Copper Cliff South for the innovative solutions and for the culture of preservation spread throughout the province.
- Green Enterprise – For the fifth consecutive year, according to the local government’s classification, for its operations in China.
- National Aberje Award – Category Communication with the Community.

### 2005

- Company of the Year Award – Largest and Best, Exame Magazine.
- Company of the Year in the Mineral Sector Award – Brazil Mineral Magazine.
- Best Company – Metals & Mining in Latin America category – Global Finance Magazine.
- National Aberje Award – Category Communication with the Community.
- Social Value Award, for Albras Healthy Life Program.

# Governance, Ethics and Transparency

## Corporate Governance

Transparency is the foundation on which our relationship with shareholders and other stakeholders is based

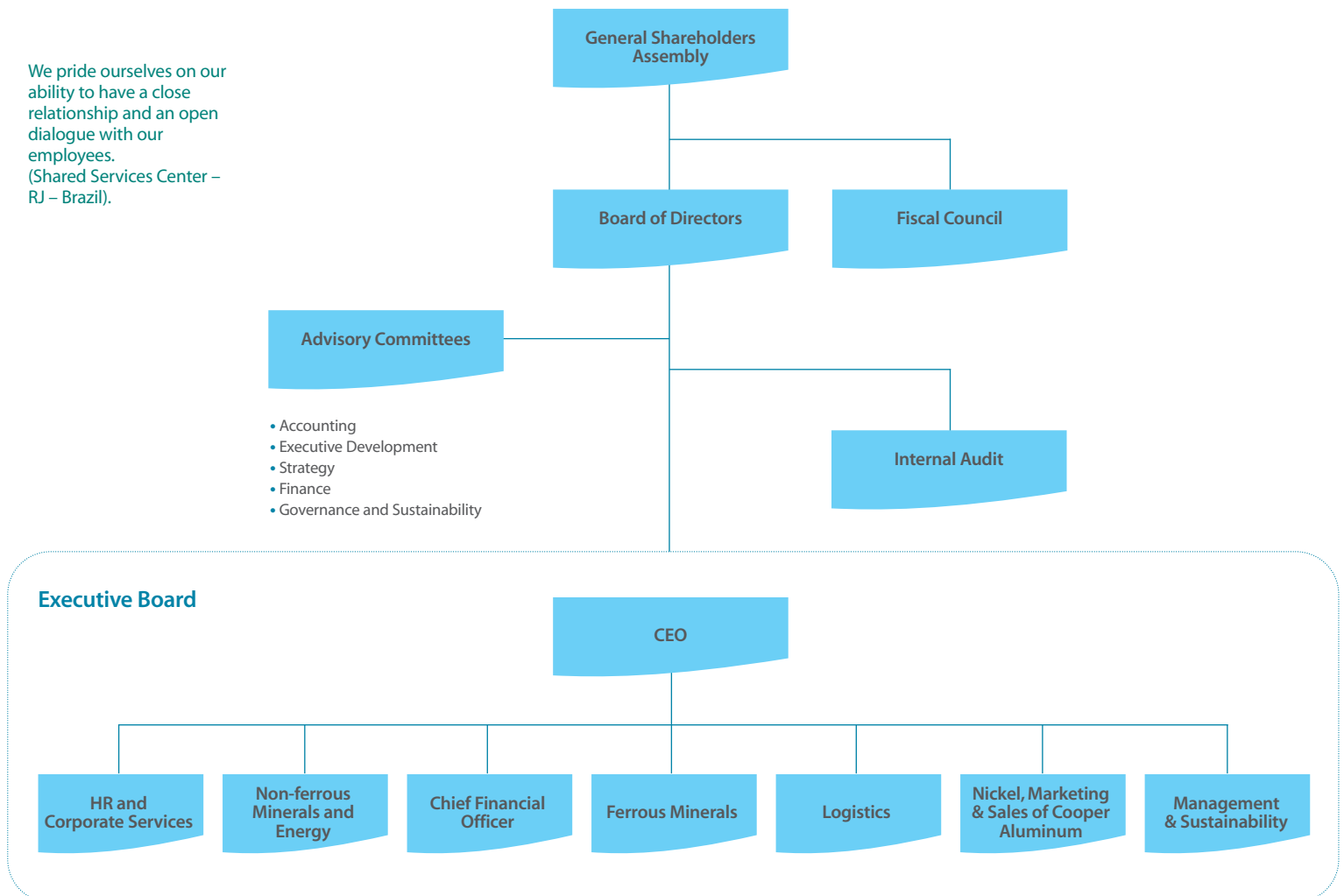


**T**ransparency, stability and clearly defined roles and responsibilities are the core principles underlying our corporate governance model. They guide the way Vale manages our growth process and creates the value that is in turn shared with our shareholders and other stakeholders.

With these principles in mind, Vale's corporate governance structure was revised in 2006 in order to better meet the global management needs of the company.

## Governance Structure (Status on 04/30/08)

We pride ourselves on our ability to have a close relationship and an open dialogue with our employees. (Shared Services Center – RJ – Brazil).





## Board of Directors

- Vale's Board of Directors (The Board) has 11 members and their respective alternates, appointed in a General Shareholders Meeting, serving a two-year term.
- The members of the Board, nine of whom are appointed by majority shareholder, have significant expertise and professional experience, particularly in the areas of finance and capital markets, corporate governance, mining and commodity sales and marketing. Some members of the Board have also received specific training related to sustainability issues.
- The Board of Directors defines the company's general policies and guidelines, analyzes plans and projects proposed by the Executive Board, and evaluates results. In addition, it tracks and checks the company's performance and it may, if necessary, request reports with specific indicators from the Executive Board.
- The Board has the support of five advisory committees: Governance and Sustainability; Executive Development; Strategic; Financial; and Accounting.

## Executive Board

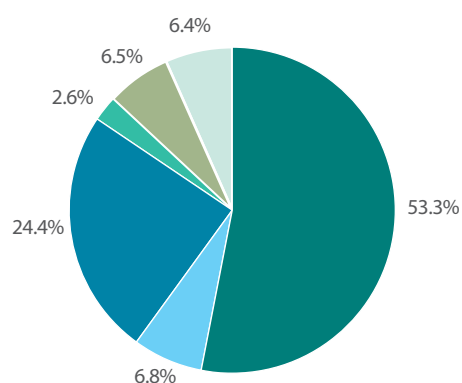
- Executes the business strategy established by the Board of Directors. It is responsible for the development of plans and projects and for the company's operational and financial performance.
- Its members are appointed by the Chief Executive Officer, subject to the approval of the Board of Directors.
- In addition to fixed remuneration, Executive Directors and other company executives receive bonus and incentive payments, based on achievement of individual and collective goals related to operational, financial, and sustainability performance.
- Sustainability topics linked to performance bonuses include: health and safety – measured through injury rates (including lost- time injury rate and total injury rate); and environmental performance – in areas such as waste management and water resources management. These performance metrics apply not only to Vale's Executive Officers, but also other executives, and employees, both operational and corporate and they are frequently reviewed and communicated to all operational levels.

For more information about Vale's governance model, visit our website [www.vale.com](http://www.vale.com).

## Company's Shareholders' Structure

(Status as on 04/30/08)

### Ordinary Shares (ON)



Valepar **53.3%**

Brazilian Federal Government **6.8%**

BNDESPar

**Free-float \*** **39.9%**

Non-Brazilian Investors **27.0%**

NYSE ADR

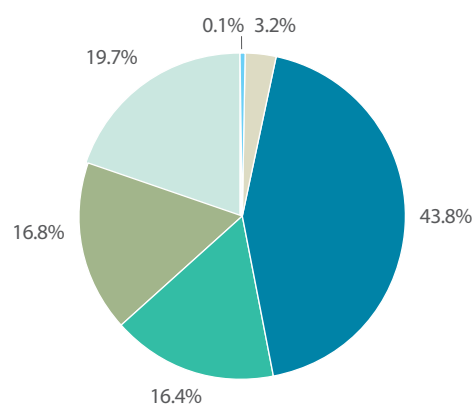
Bovespa

Brazilian Investors **12.9%**

Institutional

Retail

### Preferred Shares (PN)



Brazilian Federal Government **3.3%**

BNDESPar

National Treasury

Golden share – 12 shares

**Free-float \*** **96.7%**

Non-Brazilian Investors **60.2%**

NYSE ADR

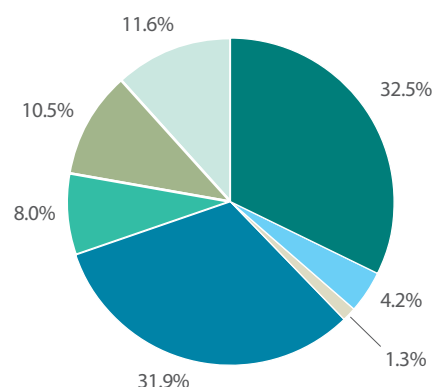
Bovespa

Brazilian Investors **36.5%**

Institutional

Retail

### Total Shares



Valepar **32.5%**

Brazilian Federal Government **5.5%**

BNDESPar

National Treasury

Golden Share – 12 shares

**Free-float \*** **62.0%**

Non-Brazilian Investors **39.9%**

NYSE ADR

Bovespa

Brazilian Investors **22.1%**

Institutional

Retail

\*Free float: Shares that are available to trade at the BOVESPA, NYSE, EURONEXT PARIS and LATIBEX stock exchanges, over the total shares outstanding (Total shares minus Vale's shares treasury holds).

For more information about Vale's shareholding structure, refer to our Annual Report or Form 20-F, available on our website at [www.vale.com](http://www.vale.com).

## Sarbanes-Oxley

In mid-2004, Vale started the process of implementing the requirements of the *Sarbanes-Oxley Act* (SOX), which establishes a series of parameters for transparency and good governance. Vale obtained the certification for the years 2006 and 2007.

Consistent with the Act, there is a Reporting Channel described on Vale's website ([www.vale.com](http://www.vale.com)) and directed to the Chairman of the Board. The purpose of this initiative is to receive reports and information regarding possible irregularities or inappropriateness concerning accounting records, as well as other accounting and auditing issues.

The annual renewal process for SOX certification reinforces our commitment to continuously seek out best practices in corporate governance, consistent with our position as a leading international publicly traded company.

## Code of Ethical Conduct

Our Code of Ethical Conduct restates our commitment to responsible action. This code is available at [www.vale.com](http://www.vale.com).

The Code of Ethical Conduct establishes good governance and corporate social responsibility as essential principles for valuing employees, preserving the environment and contributing to development of the communities in which Vale operates.

To protect the company's strategic interests, we also created a Code of Ethical Conduct specific to professionals in the Executive Financial Department, who work with classified information and data. This document is also available at [www.vale.com](http://www.vale.com).



## Our Vision

Our vision is to be the largest mining company in the world, and to surpass the 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.

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

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

To 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.

To 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 market for quality goods and services at a competitive cost.

For the **communities** and countries in which we operate, through our ethical and socially and environmentally respectful operations, Vale aims to ensure that our presence makes a positive contribution towards sustainable development.

In all **countries** where the company operates, we aim to assist in improving the standard of living and promoting development through the generation of employment opportunities.

## Corporate Values

It is through the example of our leaders and the behavior of our employees that our principles are assured. It is the daily expression of our values that distinguishes us in a global business scenario that is in constant transformation and undergoing rapid growth.

During 2007, we formalized and articulated the values that are an integral part of who we are and how we operate around the world.



## Our Values

**Prioritizing Life and Safety:** Safety is always on our minds. For Vale, the lives, safety and health of our employees, customers and communities always come first.

**Economic, Social and Environmental Responsibility:** We acknowledge the need for promoting development while ensuring sustainability and environmental responsibility.

**Entrepreneurship:** Our determined mindset is at 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.

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

**Respect for Diversity:** We acknowledge one another as equals, and respect our differences. We recognize diversity as an opportunity for learning and growth and consider it one of our competitive advantages.

**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.

**Proud to "Be Vale":** The pride we take in our company stems, in large part, from the importance we place on all of these 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. That is why we are proud to be Vale.



## Dialogue with Stakeholders

We continually seek a closer relationship with stakeholders, engaging them through several communication channels and encouraging the exchange of information. We are aware that long-term relationships are built on mutual respect, the ability to listen and take into account diverging opinions.

The process of identifying our stakeholders is part of the company's standard practices and is based on analysis of the public interested in or significantly affected by, Vale's operations and performance. In 2007, the development of our new Mission, Vision, and Values our Sustainability Report and the development of our Institutional Relationship Guide have further strengthened our commitment towards our stakeholders.

Vale maintains several contact channels for ongoing communication with stakeholders. These main channels are presented in the table below.

Public	Contact Channel	Available at <a href="http://www.vale.com">www.vale.com</a>
General	Vale's electronic address <a href="http://www.vale.com">www.vale.com</a> Sustainability Report Reputation, Image/Opinion Survey Reporting Channel (described on Vale's website)	- yes no yes
Shareholders	General Shareholders Assembly (notice and minutes) Press releases Meetings with investors Quarterly financial report (ITR) Annual information report (IAN) ( <a href="http://www.cvm.gov.br">www.cvm.gov.br</a> ) Annual Report or Form 20-F Email for shareholders and investors ( <a href="mailto:rio@vale.com">rio@vale.com</a> ) Telephone number for the Investor Relations Department (+55-21-3814-4540)	yes yes yes yes no yes yes yes
Clients	Advertisements Campaigns Clients' visits to the operations Vale's visits to clients	no yes n/a n/a
Employees	Internal publications (Vale's newspaper, newsletter, etc.) Vale's Intranet Organizational Climate Survey Reputation, image/opinion Survey	no n/a no no
Suppliers	Structured meetings Suppliers' visits to operations Vale's visits to suppliers Interchange programs	n/a n/a n/a n/a

Public	Contact Channel	Available at <a href="http://www.vale.com">www.vale.com</a>
Communities	Meetings for previous consultations Interviews and focal groups Public audiences Socio-economic diagnostics Atitude Magazine	n/a n/a n/a no yes
Governments and Civil Society	Industry Associations (ICMM, MAC, IBRAM, FIRJAN, CNI)* Economic and Social Development Council (CDES – Brazil) Brazilian Business Council for Sustainable Development Meetings about socio-economic diagnostic	n/a n/a n/a n/a

N/A = non applicable

\* Note: ICMM -International Council on Mining and Metals, MAC – Mining Association of Canada, IBRAM – Instituto Brasileiro de Mineração (Brazilian Mining Institute), FIRJAN – Federação das Indústrias do Estado do Rio de Janeiro (Industry Federation of the state of

Rio de Janeiro), CNI – Confederação Nacional da Indústria (National Industry Confederation)

We believe that the communication process in our company may and must be expanded and improved, incorporating new tools and practices that permit constant evolution of our dialogue and our relationship with our varied stakeholders.

For stakeholder and material issues identification in this first year of GRI Reporting at Vale, we used the knowledge acquired through several dialogue channels and discussions with various stakeholders. We also conducted a series of internal workshops, as described in the chapter “Reporting Process”.



## Relationship with Investors

Vale maintains a close relationship with our shareholders and investors. Every year, we organize a General Shareholders Assembly, in which the minority stockholders express their opinion about various issues. Moreover, we conduct quarterly conference calls to communicate results, organize periodic meetings with market analysts' associations, and participate actively in conferences for investors in Brazil and abroad.

Our Investor Relations Department has a dedicated area on Vale's website, where relevant operational and financial information is available. This site also has an electronic contact channel for shareholders and investors. We have implemented a clear policy for the communication of relevant facts that might affect our securities or influence investors' decisions, while prioritizing fairness and timely transmission of feedback.

## Institutional Relationship

Vale participates in several organizations that contribute directly to the development of public policies. Active participation in (local and international) sector and non-sector specific organizations assists us in contributing to the development of appropriate guidelines, regulations, and standards for developing industry activities. Such involvements also aims to contribute to awareness of business best practices.

Worldwide, mining has become an industry that is strongly regulated, encouraging Vale to maintain constant dialogue with public authorities in various levels of government. We seek to represent the interests of our shareholders and employees ensuring that, to the extent possible, our point of view is understood and taken into account in the development of public policies.

The Institutional Relationship Guide, based on the Code of Ethical Conduct (whose development included the participation of several company departments), defines the guidelines for Vale's corporate relationships, and directs the behavior of our employees, suppliers, consultants and other service providers that interact with Vale's various stakeholders.



## Global Commitments

We believe it is important to reinforce our relationship with entities, associations and organizations geared towards the dissemination of knowledge and best practices in mining, as well as in the discussion of global issues. To this end, we participate in several initiatives including councils, organizations, pacts and Business Associations that seek international cooperation for socio-economic progress and sustainable development.

Participation in associations, forums and/or various entities	Participates in groups responsible for governance	Integrates projects or committees	Contributes with significant resources besides the basic fee of associated organization	Considers its operation as associated strategic
International Council on Mining and Minerals (ICMM)	YES	YES	NO	YES
United Nations Global Compact	YES	YES	NO	YES
Council of Latin American Employees - CEAL	NO	YES	NO	YES
Public Affairs Council – PAC	NO	NO	NO	YES
International Crisis Group	YES	YES	NO	YES
Brookings Institution	YES	YES	NO	YES
Council of the Americas	NO	YES	NO	YES
Emerging Markets Network/OCDE	YES	YES	NO	YES
Chamber of Commerce Brazil – Canada	NO	NO	NO	YES
Chamber of Commerce and Industry Brazil – Germany	NO	NO	NO	YES
Brazil Information Center	YES	YES	NO	YES
American Chamber of Commerce (Amcham)	NO	YES	NO	YES
Business Council Brazil – China	YES	YES	YES	YES
Business Council Brazil – Japan	NO	YES	NO	YES
Brazilian Center of Foreign Relations (Cebri)	YES	YES	NO	YES
Foundation Center of Foreign Trade Studies (Funcex)	YES	YES	NO	YES
Carbon Disclosure Project (CDP)	NO	NO	NO	YES
Mining Association of Canada	YES	NO	NO	YES
World Wildlife Fund – WWF – Canada	NO	YES	NO	YES
The Nickel Institute – Canada	YES	YES	NO	YES

Participation in associations, forums and/or various entities	Participates in groups responsible for governance	Integrates projects or committees	Contributes with significant resources besides the basic fee of associated organization	Considers its operation as associated strategic
International Emissions Trading Association – IETA	NO	YES	NO	YES
Brazilian Mining Institute (IBRAM) – Brazil	YES	YES	YES	YES
Confederation of National Industry (CNI) – Brazil	NO	YES	NO	YES
Sustainable Amazon Forum	N/A	YES	YES	YES
Group of Institutes, Foundations and Enterprises (GIFE)	YES	YES	NO	YES
Ethos Institute	NO	YES	YES	YES
Brazilian Business Council for Sustainable Development (CEBDS)	YES	YES	NO	YES
World Business Council for Sustainable Development (WBCSD)	NO	YES	NO	YES
n/a = not applicable.				

Among these associations are a number where our active participation is particularly significant. These organizations include the International Council on Mining and Metals (ICMM), of which the company has been a member since 2006; the United Nations Global Compact, initiated in 2007 as a voluntary commitment by Vale to assure basic human rights, in compliance with UN's Universal Declaration of Human Rights; 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.

“It is very pleasing to see Vale making such significant advances in strengthening its transparency and engagement with stakeholders. By meeting all GRI requirements Vale considerably improves its non-financial reporting. When these efforts are combined, in coming years, with ICMM's new independent assurance procedure, Vale will be meeting the highest international standards in public sustainability reporting.”

**Paul Mitchell, ICMM** – International Council on Mining and Metals – President, April 2008

# Sustainability Strategy

Our legacy for future generations

We regard mining as an activity that promotes sustainable development





Our strategies must respect local priorities. Children in Mozambique.

## Business Context

**V**ale operates in several countries, each with unique socio-economic characteristics and priorities. For that reason, we frequently face diverse and complex business environments.

In developed countries, where employment opportunities tend to be greater and basic social needs have historically been met, demands and concerns are primarily directed towards environmental and global issues such as new energy requirements and global warming. In developing countries, where unfulfilled social demands are generally significant, priorities are typically related to infrastructure, access to basic services, professional qualification for workers, and human rights issues. It is important to mention that most of our operations and investment projects are located in developing countries.

Quite often, within the same country, different socio-economic realities co-exist as demands and priorities vary from one region to another – creating unique combinations of physical, environmental, institutional, and regulatory needs. We operate in a range of these complex business environments, where global strategies have to be developed in a manner that respects local needs and priorities.



We are aware that mining involves the temporary use of land and resources, and that, as a company our interference in a certain area begins before the implementation of new projects and continues until after the closing of our operations.

We understand that the implications of sustainability in our business go beyond the land from which we extract and process ores, and that our influence – and to a certain extent, our responsibility – extends to suppliers and clients, along with other partners in the value chain.

We acknowledge that our capacity to generate wealth for our shareholders in the long-term is effective only if aligned with and based on the generation of value shared with other stakeholders with whom we interact.

We believe that when mining is undertaken responsibly, with a commitment to sustainable development, it represents one of the best opportunities for specific communities, especially in developing countries, to achieve their full socio-economic development potential, and that it is possible to do so in an environmentally responsible fashion.

Finally, we understand that a large, globally significant company like Vale must contribute in many ways to sustainable development, operating at the local, state and national level, and through global themes that impact the entire international community.

Vale's Mission is "To transform mineral resources into prosperity and sustainable development." We seek to create a positive legacy of social development, economic prosperity, and environmental sustainability both during and after the mining cycle.

In order to accomplish such a challenging mission, we have established our sustainability strategy described below.



We seek to create a positive legacy of social development, economic prosperity, and environmental sustainability both during and after the mining cycle

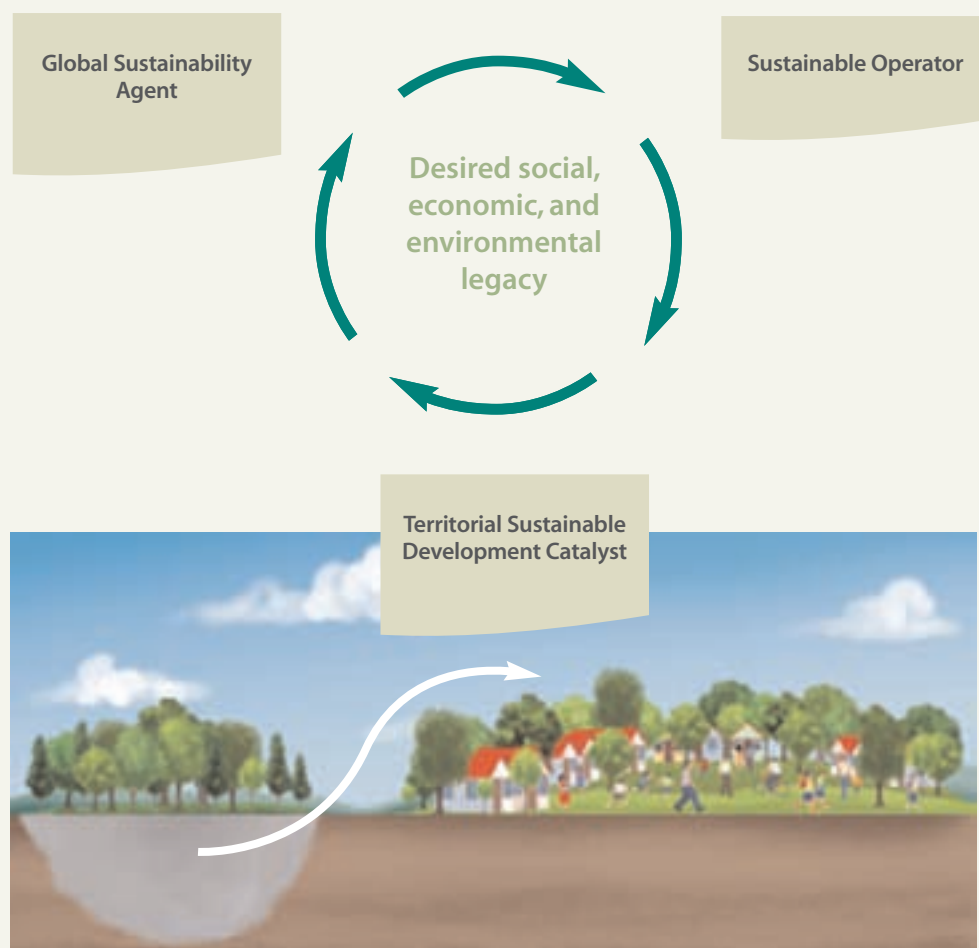
## The path to sustainability

For Vale, Sustainable Development is reached when an economic activity adds value to our shareholders, contributes to the well being of society and to the conservation of ecosystems territorially and globally, through the transformation of mineral resources into social development, economic prosperity, and environmental sustainability and the establishment of partnerships with governments, private sector and civil society.

We relate sustainable development to four dimensions that are applicable throughout the life cycle of mineral developments: economic, social and environmental as well as stakeholder engagement. We believe that it is only through continuous engagement of stakeholders concerning constructive agendas that it will be possible to achieve long-term strategies and maximize concrete results in the other three dimensions.

With that in mind, we seek to maintain continuous dialogue with our stakeholders aimed at maximizing our contribution to the socio-economic development of the regions where we operate, to conserve the environment, and to leave behind a positive legacy of social, economic, and environmental development.

In order to achieve these goals, our sustainability strategy is based on three pillars:



- **Sustainable operator** – To work in a conscientious and socio-economic and environmentally responsible manner during the mineral research phase, conception and implementation of mineral projects, operational cycle of the project and the closing of mines. To seek continuous improvements in our operations and products to achieve and surpass international standards of health and safety, environmental management, labor relations, and respect for human rights, by investing and using technologies that allow us to maximize the eco-efficiency and sustainability of our processes and products. Consistent with this process, we seek to minimize our ecological footprint (*see case “Conversation is the key to understanding” on page 139*).
- **Territorial sustainable development catalyst** – To adopt a territorial vision, based on the socio-economic, environmental and institutional characteristics of each region, in order to address sustainability issues in operations and projects. To contribute to the strengthening of local institutions, the development of infrastructure and the economy. This includes collaborating for economic diversity and fostering, for the long-term, non-mining related economic activities in a joint effort with all members of society. In the realm of mineral chain activities, we aim to encourage the development of local suppliers and the attraction of suppliers to the region, and encourage qualification of the labor force and promotion of local employment. To value traditional communities. To invest in development of human resources, especially through promotion of cultural, educational, and professional qualifications, which we regard as the essential levers for socio-economic development, improvement in quality of life and citizenship. Vale has already undertaken several initiatives in this regard, such as the “Escola que Vale” (Vale School) Program and other programs from Vale Foundation (*see box on Territorial Development on page 147*).
- **Global sustainability agent** – to work internationally in support of global initiatives such as the United Nations Global Compact, the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria, and the International Council on Mining and Metal (ICMM), in order to collaborate on the search for solutions to urgent global issues such as global warming, research on renewable energy and conservation of the Amazon rainforest. Through initiatives such as *Vale Florestar* program (*read more about this program on the Case “Forest protecting forests” on page 94*), among others, we aim to go beyond the mitigation of negative impacts in our operations, moving instead to provide a positive contribution to global sustainability.

Promoting social, environmental, and economic development in a balanced manner and ensuring ongoing involvement with stakeholders in the mining sector is not a quick or easy task. Significant perseverance, discipline and effort are required. The challenges faced are equally substantial.

“Vale has had significant success in associating its globalization strategy and diversification of its mineral portfolio with sustainable development, which includes the environmental and social dimensions. Special reforestation programs deserve special attention. These programs have received large investments and priority has been assigned to its energy matrix, with special focus on renewable energy and, more specifically, biofuels. From a social standpoint, the company’s rapid growth has leveraged employment and qualification opportunities in those relatively poor regions of Brazil, in addition to an active participation in the improvement of urban infrastructure, most notably in the areas of health and sanitation. The challenges are many, but more importantly, sustainability has become an integral part of Vale’s strategic actions in its future development project.”

**Carlos Geraldo Langoni**, Carlos Geraldo Langoni, Former president of Brazilian Central Bank; Director of the Global Economics Center, at FGV and President of Projeta Consultoria Econômica Ltda. April, 2008.









## Mineral exploration:

- Interference in the use of the land
- Respect for local culture
- Security of employees and the local population
- Minimization of environmental impact

## Project development:

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

## Mining operations and mill:

- 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





## Mine closure

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

## Energy

- Environmental support capability
- Energy efficiency
- Energy matrix balance (energy demand X climate change impacts)

## 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





## Employees

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

7

## Suppliers

- Development of local suppliers
- Employment of local suppliers
- Respect for Human Rights in the production chain

8

## Customers

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

9





## Communities

- Coexistence with communities near company operations (noise, dust, traffic)
- Education and qualification of the local workforce
- Employment of local workforce
- Economic enhancements
- 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

## Traditional communities

### (Indigenous communities)

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

## Final Consumers

- Sustainability in the production chain
- Product quality



# Impacts, challenges and opportunities in sustainability

To reach a well-balanced social, environmental, and economic development, as well as to cultivate the permanent involvement with the mining industry stakeholders, are deeds that cannot be expected to be easily or fastly accomplished. A great deal of determination, constant efforts, and a strong will are essential to cope with the equally great challenges to be faced to that end.

The sustainability challenges discussed in this Report are represented in a diagram, so that they can be more easily identified. We do know, however, that they have highly complex systemic implications. The simplified illustration is a way to present the sustainability themes under a more didactic approach, both for Vale itself and its stakeholders.





# Transformation needed

Southeastern Pará is preparing to transform economic growth into territorial development

In the coming years, the Southeastern region of the state of Pará will need significant investment to offset existing social deficiencies and prepare the territory for the projected economic growth of 18% per year. The good news is that, in order to prepare for this growth, cities will rely increasingly on self-investment, which should generate current savings of US\$ 504 million<sup>1</sup> between 2006 and 2010.

This forecast is one of the important conclusions reached by the Socio-economic Integrated Diagnostic for the Southeastern Region of the State of Pará, a study carried out between 2006 and 2007 by Vale and the Vale Foundation. Despite its significant

infrastructure deficit, the Southeastern region of the state offers a world of opportunities for sustainable development. The region is one of the richest in the world in terms of natural resources. It is one of the globe's largest mineral areas.

Since the beginning of its operations in the 80's, Vale has been supporting the development of the municipalities within its area of influence, including by helping to conserve 8,000 km<sup>2</sup> of native forest in the Carajás Mosaic. Moreover, Vale's investments in infrastructure, urban sanitation, education and culture preservation have made a noticeable contribution to regional development. Vale's growth in the last years has also brought



educational and job opportunities to local suppliers and a significant increase in tax revenues to the public sector, contributing to local socio-economic development.

We have 15 new developments in the region and we intend to make new investments. The total forecast to be invested between 2003 and 2010 is expected to reach US\$13 billion<sup>2</sup>. To increase its presence and to have an even more effective and socially responsible performance, Vale and the Vale Foundation decided that, first of all, it was important to get to know the region, understanding the present moment and planning the future.

The Diagnostic laid the groundwork for the Integrated Management Plan in Socio-economics for Southeastern Pará. Based on these results, planning, which was initiated in 2007, determined what needed to be done in terms of investment and how each stakeholder might participate. Execution actions will include efforts to seek financing for identified initiatives. "It's a powerful tool which enables Vale to contribute to the sustainable development of the regions in which we operate," explains Silvio Vaz, Director of the Vale Foundation. The plan encompasses six municipalities (Parauapebas,



*We want local agents to share our strategies.*  
Deputy General, Marabá, Miguel Gomes Filho.  
(PA – Brazil)

Canaã dos Carajás, Curionópolis, Marabá, Ourilândia do Norte and Tucumã). It will also influence the community of Eldorado dos Carajás.

## Rising to the challenge

Such diagnostics create new paradigms in the structuring of developments for the mining sector. Traditionally, companies have planned their investments taking only operational aspects into account. This is changing. "Vale includes in the feasibility account of the business, certain non-operational requirements such as social infrastructure, development in the cities and potential local businesses throughout the territory," explains the architect and urbanist Jaime Almeida, of Diagonal Urbana, the

<sup>2</sup>Original value in Real: R\$ 25.8 billion. Currency rate used – 2007 average (Real/Dollar)= 1.9843



independent Brazilian consulting company specializing in integrated social management that developed the diagnostic.

Another characteristic which marks the pioneering nature of this work is that the company communicated to the public our investment strategy for the region. In Marabá, the findings of the Diagnostic have already mobilized public authorities, businessmen and NGOs. "Our case is urgent, especially concerning basic sanitation," explains the vice mayor, Ítalo Ipojucan. "In three decades, the population of the city grew from 60,000 to 250,000 and will continue to grow. We must join forces and work fast." The president of the House of Representatives in the city of Marabá, Miguel Gomes Filho, explains that education is a particular priority. "Our population needs to be prepared to meet the demand for qualified labor," he points out.

"The study left me happily concerned," explains the Mayor of Parauapebas, Darci Lermen, summarizing the feeling of various representatives of the population, who have had access to the study. "I was proud of the

development perspective and excited because Vale disclosed its strategic plan in a very transparent way. The Diagnostic contains precious information. However, I became concerned with the huge demand that the projected population growth will bring. We have quite a challenge ahead of us."

For the economist Tânia Bacelar, Director of Ceplan, a consulting company responsible for the economic projections in the Diagnostic, the concern is valid. However, she points out that available data offers an optimistic view. "There is a lot that needs to be done," she says. "But the study shows there will be sufficient additional income. And the project is strengthened by the commitment made by Vale to contribute to this development."

In Canaã dos Carajás, a city that is only 13 years old and located between Marabá and Parauapebas, it is possible to see some of the benefits possible through integrated development. "When Vale came to Canaã, it brought with it a new way of performing,"

First of all, it is necessary to know the region well.

recalls Lourdes Follmann, who co-ordinates the Economic and Social Development Agency in the city. "The company was established within the urban area. This helped transform the city and gave it a new orientation to urban growth." The Agency is one of the factors supporting this difference. Says Agency Executive Director Leonardo de Moura Filho, "We have active participation from everyone. Vale does its part, but it is not the only agent. We work together."

The expectation of sharing experiences with other cities excites school teacher, Iranina Maria da Silva, coordinator of the local *Programa Escola que Vale* (Vale School Program), developed in the municipalities of the southeast of Pará by the Vale Foundation in a partnership with the Documentation and Education

Center for the Community Action (Cedac) and municipal authorities. "We have been able to share results and experiences with the neighboring cities, especially Parauapebas," explains the teacher. "As educators, we have the obligation to seek joint development, which will bring benefits to all and will strengthen the territory's cultural feeling"

## A driver of development

"Local agents have to share strategies and work together," recommends Francisco Costa, who holds a Doctorate in economics from Frei Universität, in Berlin, and who coordinated the portion of the Diagnostic which deals with the dynamics of the regional economy and integration of the various segments. His work revealed a surprising finding: the power of Vale's participation in the dynamics of the regional economy. "I was surprised with the results, as were many of the researchers in this area," explains Costa, who has been working as a professor and researcher in the Center for High Studies of the Amazon (NAEA), at the Pará Federal University (UFPA).

"Initially we saw Vale as a closed entity in the regional economy. In other words, we thought its presence did not generate economic development in the cities. The diagnostic showed something different. The company has had a vigorous impact. Vale purchases products and services in the region in order to supply its operational and administrative units. The same is true for its employees, partners and suppliers. The result is a positive driver for regional development, which we had not considered before."

In order to streamline decision-making and initiate the first socio-economic investments, Vale and the Foundation are eager to put the Action Plan into effect. "The Diagnostic represented only the first step," explains







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**"Escola que Vale" (Vale School)  
Program in Canaã dos Carajás  
(PA-Brazil).**

Silvio Vaz, from the Vale Foundation. "It enabled us to identify, in great detail, the forces and the challenges that the region faces in the sustainable development process. Now, we will initiate joint actions with other partners in the region."

Challenges and opportunities have been identified on housing, sanitation, urbanization, health and safety, education, culture, and business opportunities fronts. Specific housing and urbanization demands were mapped in the socio-economic diagnostic. This mapping exercise enabled the Vale Foundation to assist the local governments of Canaã dos Carajás, Curionópolis, Eldorado dos Carajás, Marabá, Parauapebas, Ourilândia do Norte and Tucumã municipalities in designing projects to reduce infrastructure and housing deficits. On May 7th 2008, the mayors of the seven municipalities included in this initiative presented the projects to the Brazilian Ministry of Cities requesting federal investments in the economic growth acceleration plan (PAC) in order to benefit 80 thousand people in the southeast region."

Concurrent with the process in Southeast Pará, Vale is taking the concept of this initiative to other territories in which it operates. "The project as a whole can be replicated and we are doing just that," explains the engineer Kátia Mello, Director of Diagonal Urbana. "We use the same methodology, but include differentiated tools according to the circumstances and history of each location." Diagnostics have since been performed in the regions of the Bayvoar project in Peru, Moatize project in Mozambique and also *Quadrilátero Ferrífero* in the State of Minas Gerais; Greater Vitória in Espírito Santo and in the Central Southern region of Rio de Janeiro, where the Valesul plant and maritime terminals for the shipping of minerals are located.



# Risk Management and Sustainability

## Prior Action

Identifying and evaluating uncertainties and then acting in an appropriate and organized way is the foundation of effective risk management





In order to reduce risks, we are implementing the Systemic Requirements.

**W**e strive to establish an efficient and modern risk management framework, which is able to not only meet our expectations but to address the interests of our stakeholders. Our approach toward risk focuses on three levels within the organization: corporate, business units and operational.

**Corporate** – The Risk Management Department is responsible for the Risk Management Model, which is designed to assess four key areas of risks: market, credit, operational and strategic as follows:

- **Market risk** – the impact of market risk factors (interest rates, currency exchange rates, and commodity prices) in the company's cash flow.
- **Credit risk** – the probability of nonpayment or default by clients or financial institutions.
- **Operational risk** – the probability and the impact of losses caused by deficient or inadequate internal processes, personnel, and external systems or events, including sustainability issues.
- **Strategic risk** – the impact of Vale strategic operations, such as mergers and acquisitions and sustainability trends.



Based on assessments in these key areas, appropriate action is taken to mitigate identified risks. These actions may include insurance and hedging operations (i.e. financial operations that protect against variation in assets and product prices) when necessary. The risk assessment is also done within the Corporate Strategic Planning, which is developed based on information collected from the strategic plans of our business units.

**Business Units** – Risk management is also done during our annual Strategic Planning and, for new capital projects, through the projects development methodology, Front-End-Loading (FEL).

The FEL methodology is developed by Independent Projects Analysis (IPA), a company specializing in project management. FEL consists of a process for the development of competitive projects based on the gradual and comprehensive consideration of all project aspects. The methodology, for example, requires identification of human resources and materials needed, and the integration of subjects such as engineering, environment, health and safety in an effort to gain the commitment of our stakeholders before construction of the project is authorized. This methodology is used for all significant projects, with corporate supervision whose investment is above US\$100 million.

During the FEL phases, sustainability issues are also analyzed in order to allow the continuous improvement of projects during the design and planning phase.



## Precautionary Approach

While development of natural resources is clearly an essential part of our mining business, we consider it crucial to balance economic development with respect for the environment, our employees and local communities. For this reason, in economic and financial feasibility, environmental studies, labor safety and employees' health analyses, we seek to identify all imminent and future risks. This is an essential step to taking action to avoid such risks.

**Operational** – the ongoing monitoring of risks and opportunities is conducted by on-site health, safety, environment, and social teams. In addition to periodic auditing in environment, health and safety areas, two mechanisms have been employed since 2007: the Operational Risk Management (GRO) methodology and our Sustainability Committees.

The Operational Risk Management methodology aims to evaluate and mitigate risks that may have financial impacts on health and safety, environment, society or the company's reputation.

## Sustainability Risks

### Health and Safety

The mining sector involves skilled activities, such as operating motor vehicles, load displacement, working in confined spaces, handling and detonating explosives and working at elevated heights. In order to avoid accidents, Vale is implementing, among other initiatives, the Systemic Requirements and procedures to ensure that those working in critical activities are aware of the risks and qualified to carry out their activities.

### Environment

In many cases, our businesses involve the use, storage, handling, processing, transportation and disposal of minerals and chemical substances, some of which are potentially dangerous. In order to perform these activities, we use technical procedures and qualified personnel, as well as specialized consulting companies and periodic auditing to avoid or minimize associated risks. We also organize specific technical groups to share best practices.

In 2007, we decided to create a specific team for the evaluation of the potential risks resulting from global warming to our operations and the territories in which we operate. This study, based on the evaluation and the recommendations of the UN's Intergovernmental Panel on Climate Change (IPCC), is under development.



## Social

As most of our operations are in developing countries, we consider social risks as important as those in the areas of environment, operations and finance.

The identification and analysis of risks based on the Social Risk Matrix involves specialists in human resources, environment, health and safety, and community relations. These specialists carry out risk assessment activities with the assistance of data gathered in Territorial Socio-Economic Diagnostics conducted at the locations where we operate.

Because of our high visibility, we are occasionally targeted by demonstrations and protests whose objectives and aims are not always directly related to our company's business. We respect freedom of expression and are open to dialogue with all groups. However we repudiate demonstrations that result in invasion of private property, interruption of lawfully productive activities, violence against employees and other members of the community, and destruction of public and private assets. These are risks that have been addressed with the assistance of law enforcement authorities.

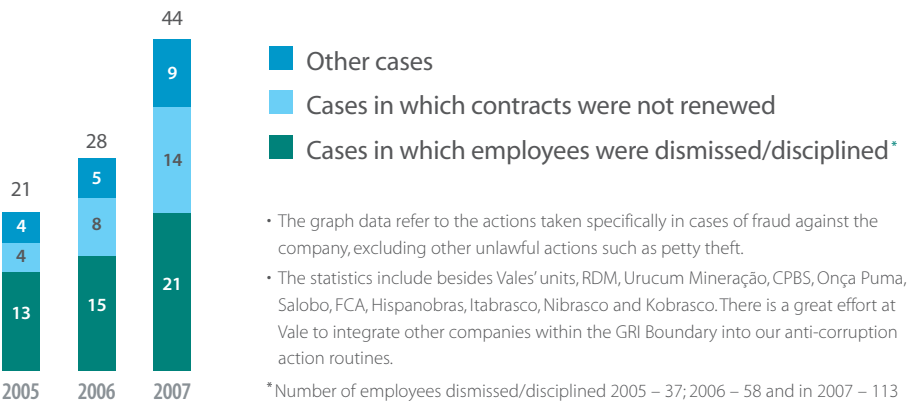


## Corporate risks

Vale's risk management system also includes a Corporate Security Policy, in addition to the Code of Ethical Conduct and the Reporting Channel. In 2007, our Corporate Security area in Brazil added a new management area in its structure to improve the prevention of fraud and corruption.

Efforts in this area include the development of an intelligence system that will allow the strict management of data and information for the monitoring and evaluation of suppliers. In association with our fraud detection system, the evaluation of suppliers' operations to detect corruption and ethical violation will help with decision making.

### Actions taken in response to corruption cases



None of these cases refer to irregularities or improprieties in our company's accounting records or internal controls. The increase in the number of actions taken is a result of the evolution of the monitoring mechanisms adopted by Vale in the last three years.

No bribery or corruption (either active or passive) of public servants or of government representatives by our employees was registered in this period.

The complete Code of Ethical Conduct is available at [www.vale.com](http://www.vale.com).

To us, social risks are as important as operational risks. On the left, a view of the town of Tapagem, (PA-Brazil).

## Compliance

### Legal Proceedings

As a large multinational company, Vale seeks leadership in the markets where we operate – and, as such, we are naturally subject to periodic questioning of our procedures. We are committed to compliance with local legislation in every jurisdiction where we operate and are also entitled to bring legal proceedings to the proper Courts and Administrative Agencies, whenever necessary, to defend our rights.

Significant and relevant<sup>1</sup> lawsuits and administrative processes that were ongoing during the 2005-2007 reporting period totaled 92 in the year 2007. These figures include 89 administrative processes and three lawsuits. The total amount involved is estimated at US\$ 2.49 billion<sup>2</sup>. There are also 71 ongoing lawsuits with no defined economic value<sup>3</sup>, all of them under Brazilian jurisdiction.

The following is a brief report on all Vale's judicial and administrative proceedings, divided into four categories: tax, labor, civil, and regulatory.

#### Tax

On the *tax category*, Vale challenges the incidence of Income Tax and Social Contribution on Net Profit over profits of associated and controlled companies abroad. To that end, the company has filed both a lawsuit and an administrative process. The company also challenges what it considers to be an improper collection of CFEM (Financial Compensation for Mineral Exploration) in 86 administrative process and two lawsuits.

#### Labor

In the *labor category*, the company presently challenges the collection of a FGTS (Brazilian Labor's Guarantee Fund) deposit through a Debt Invoice, which resulted in two administrative notifications on Vale. We believe we have a substantial argument to challenge such notifications and to discuss the matter in the sphere. The company also faces a lawsuit of no defined economic value, involving our potassium exploration underground mine, located in the Brazilian state of Sergipe. Vale is making all efforts to fulfill all legal requirements and is working diligently to develop a healthy work environment, in compliance with all safety standards and with total respect for the mine's workers.

<sup>1</sup>Reporting criteria:

a) Lawsuits: amounts equal or above 10% of the company's current assets;  
b) Administrative and labor claims: SOX criteria - R\$ 1,0 million;  
c) Relevance/public knowledge of the theme. Due to the adoption of these criteria, none of Vale Inco's claims were included in the indicator's final consolidation. Values in US\$ billion refer to the sum of all claims' individual monetary values.

<sup>2</sup>Actions with a defined value – Evolution 2005-2007 (cumulative values)

- 2005: 11 actions (administrative, 8; judicial, 3), totaling US\$ 1,2 billion  
- 2006: 52 actions (administrative, 49; judicial, 3), totaling US\$ 2,1 billion  
- 2007: 92 actions (administrative, 89; judicial, 3) totaling US\$ 2,4 billion

<sup>3</sup>Actions with no defined value – Evolution 2005-2007

- The number of actions with no defined value (71) remains the same since 2005.

## Civil

In the *civil category*, Vale is cited on 69 lawsuits of no defined economic value. Such actions challenge the legality of the company's privatization process, which took place in 1997. All actions await final judicial decision. The company does not believe that such actions, either individually or collectively, will come to affect the privatization process or produce any negative effect whatsoever on the company itself.

## Regulatory

In the *regulatory category*, there is one lawsuit, of undefined economic value, 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. In November 2007, 10 years after the action was filed, the company obtained a judicial decision in our favor, although the issue has yet to receive confirmation by a superior court.

## Anti-Competitive Behavior

Vale is currently subject to three lawsuits on anti-competitive behavior, of no defined value.

In the first, the Conselho Administrativo de Defesa Econômica – CADE (the Administrative Council of Economic Defense), the Brazilian anti-trust authority has ruled on Vale's acquisition of the following 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., as well as the process involving the "uncrossing" of stock shares between Vale and Companhia Siderúrgica Nacional. CADE has approved such operations under restriction. The Council's President exerted the right to vote twice. Vale has not agreed with this double vote and, for this reason, the decision is already being discussed in the judicial circles. As of June 2008, no final decision on the case was reached. For more information please refer to Vale's 20-F Form.

The two remaining administrative processes, still awaiting final decision, allege Vale's anti-competitive behavior on business involving Logistics. One of the processes involves the Companhia Portuária da Baía de Sepetiba (CBPS), one of Vale's 100% subsidiary companies and in charge of Vale's operations at the Port of Sepetiba, which allegedly refused to ship third parties' iron ore cargoes. The second process involves the railway operation rights owned directly by Vale (Estrada de Ferro Vitória a Minas and Estrada de Ferro Carajás) and our controlled company FCA, for allegedly abusive rising of prices charged to our users. We believe that neither allegation is justified.



# People

Prioritizing life and safety

A company under constant transformation  
needs people who are engaged and  
committed to what they do





We strive to assure that our growth potentializes, the development of our people (ES-Brazil).

**O**ur Company is on an ongoing process of global expansion. Such path can only be maintained by highly qualified personnel. That's why we value and invest on our employees' potential.

## Commitments to our people

- Clearly articulate Vale's business strategy to our staff;
- Promote those with expertise and potential;
- Promote from within whenever possible;
- Consider every candidate, both internally and externally;
- Fairly compensate employees based on rank and personal performance;
- Offer competitive benefits packages consistent regional compensation levels;
- Offer corporate training programs;
- Guarantee that our employment practices will meet or exceed the policies stated in the Work International Organization (WIO) conventions;
- Provide a safe and healthy work environment with ample opportunities for professional development;
- Maintain a strong relationship between management and labor that is consistent with our Code of Ethical Conduct

Left: employees at the Capitão do Mato Mine (MG-Brazil).

# Health and Safety

For a safe and healthy behavior

Vale regards “prioritizing life and safety” as an essential value. In July 2006, with the creation of our Health and Safety Department, we started the implementation of a global strategy focused on achieving excellence in practices and results.

The strategic goal that guides our actions is to reach excellence in Health and safety in all our operations, by 2012. For Vale, however, excellence is more than seeking the elimination of fatalities, reducing injuries, and implementing a management system. It also means promoting a cultural transformation, changing attitudes and creating a culture of prevention.

Nevertheless, in spite of our position and our actions, there were 14 fatalities involving Vale’s employees and contractors in 2007. The loss of these valuable lives is tragic. The distress we feel at these losses, however, drives us further in the process of intense transformation, as we make every effort to prevent fatalities and reduce injuries as dramatically as possible.

## Our Health and Safety Strategy

**People Dimension** – educational and behavioral measures that promote prevention and discipline.

**Tools Dimension** – methodologies that help people to understand the risks associated with their activities and the root causes of incidents and to prioritize corrective measures.

**Facilities Dimension** – improvements in facilities that will eliminate or reduce risk scenarios.

**Systemic Dimension** – standardized requirements to reinforce the integrated health and safety management system for the entire Vale organization.

Employees at Vale’s facilities in Australia.





## Main actions in 2007

In 2007, we continued the implementation of our Health and Safety strategy through several initiatives, including:

- **Health and Safety Policy Review**
- **Development of Systemic Requirements for Health and Safety** – The Requirements define what should be undertaken to ensure the appropriate evolution of Vale’s organizational processes in terms of health and safety.
- **Development of the Requirements for Critical Activities (RACs)** – We established the requirements for execution of critical operational activities aimed at preserving people’s lives, ensuring physical safety and protecting health in all areas of the company, as well as select subsidiaries and affiliated companies. The 10 activities for which RACs have been developed are: 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.
- **Implementation of Health and Safety Information System**
- **Association with the Global Business Coalition (GBC) on HIV/Aids, Tuberculosis and Malaria**
- **“Construction” Event** – In June and July 2007, approximately 2,500 Vale leaders worked together to establish a foundation for health and safety.
- **Completion of the Health and Safety culture survey in Brazilian Vale’s pilot-units (Itabira, MG; São Luís, MA and Taquari-Vassouras, SE).**
- **Execution of the Program “Living Good Practices in Health and Safety”** – The objectives of this program are:
  1. To develop and reinforce a culture of evolving best practices in support of excellence.
  2. To identify and disseminate knowledge and positive experiences.
  3. To acknowledge the good practices adopted and their creators.
  4. To create a good practices information database and make it available to all employees of the company.

In the first phase of this program, 20 potential projects were identified among participating companies that included Samarco, Albras, Alunorte, all Vale units in Australia, and Vale Inco.



## Our Health and Safety Policy

The new Vale Health and Safety Policy, launched in March 2008, 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 and;
- 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.

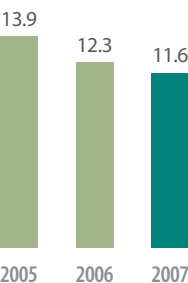
## Our Health and Safety management

Since 2006, our safety performance goal (reducing lost-time injuries and development of internal corporate standards) has been linked to our employees' variable compensation. In 2007, the links between performance and incentives were expanded to include performance in occupational health as a criterion. Actions implemented to date and the beginning of our cultural transformation process have already yielded significant results.

### Main results

#### Total Injury Rate

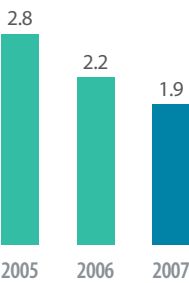
Number of total injuries, per 1.000.000 hours worked



• Data on the above graph consider both Vale's employees and contractors and also include First-Aid cases, except for Vale Inco's data, incorporated only in 2007. Vale Inco's data do not include contractors and First-Aid cases.

#### Lost-time Injury Rate

Number of lost time injuries, per 1.000.000 hours worked



• Data on the above graph consider both Vale's employees and contractors, except for Vale Inco's data, incorporated only in 2007. Vale Inco's data do not include contractors.

- The rates do not consider occupational diseases.
- The Health and Safety rates are calculated based on the monthly estimated hours worked by the number of employees. They include data on mineral exploration companies, including foreign units.
- According to NBR 14.280, Vale uses the hours worked equal to 180 hours/month per employee. Vale Inco and the Navigation Department use the actual hours.

Between 2005 and 2007, we implemented several measures aimed at the improvement of the health and safety management, which include the assignment of goals for all departments and the intensification of awareness campaigns.

In 2007, we started an improvement process in our health and safety registration and data collection procedures. We implemented the classification standards for incidents according to the US *Occupational Safety & Health Administration* (OSHA) regulation and carried out several training and awareness initiatives for employees, in order to standardize data gathering.

With the implementation of this process in 2007, we started to separate first-aid cases from the records of total injuries of our employees. In coming years, we plan to extend this model to our contractors.

Some of our operations already have *Occupational Health and Safety Assessment Series* (OHSAS) certification<sup>1</sup>, including some mines in the South System, located in the state of Minas Gerais, in Brazil, and also Vale Inco's units.

For Vale, OHSAS certification is not a goal, but the result of the entire improvement process in our search for excellence and best practices in health and safety.

Lost-time injury rate also declined significantly, 33% between 2005 and 2007. In effect, we reduced the rate of the most serious injuries.

It is expected that, in the next few years, our lost-time injury rate will be continuously reduced, due in part to improvements implemented and the stability in the data collection and registration methods. We have also registered in a work group from ICMM (SCHEBenchmarking) in order to align our indicators on health and safety and occupational hygiene.

## Fatalities

Sadly, in spite of all our efforts, we suffered 14 fatalities in 2007. Thirteen of these occurred in Brazil and one in Canada. Of these, 11 involved contractors and three involved Vale's employees. The fatalities involved automotive and other vehicles, working at heights, explosion with projection of hot fragments, mobile equipment, cargo handling, and hit by a falling tree.

Our primary effort to eliminate fatalities is the implementation of the Critical Activities Requirements (RACs), which will also apply to contractors. In addition, the independent audits for the evaluation of the level of compliance to the health and safety requirements will be extended to contractors.

<sup>1</sup> Certification that assures the company's commitment to the reduction of environmental risks, and the continuous improvement of its performance in occupational health and the safety of its employees.

## Assistance in Emergencies

In order to adequately respond to emergency situations that might affect employees, contractors, visitors, communities, the environment or facilities, Vale has security procedures for identification, preparation and reaction to possible emergency situations. The guidelines are consolidated in an Emergency Plan, which comprises a set of measures to be applied in the identification of risks, responsibilities, procedures and training for stakeholders.

The Emergency Plan takes into account the best practices in the sector, international standards and Vale's own Health and Safety policy. The measures to be taken for the different types of emergencies are described in the following documents:

- Individual Emergency Plan (PEI);
- Emergency Action Plan (PAE);
- Mutual Assistance Plan (PAM), if the emergency involves neighboring companies;
- Crisis Management Manual;
- Basic Risk Guidelines (DBR) and;
- Rules for Assistance to Railway Incidents (RAOF).

In order to ensure adequate responses, we also undertake regular training activities for emergency teams. In most cases, training is performed through annual simulations which are planned in advance. After each simulation, participants engage in an evaluation meeting to prepare improvement plans and evaluate the simulations.

The simulation of emergency scenarios is based on requirements and guidelines, representing situations in which different sectors of the company might be involved. We simulate situations to observe the activity and the performance of emergency teams in a range of potential scenarios.

Vale Inco's units are equally prepared to assist the community in emergency situations such as fires, explosions, leaks and spills, electricity-related and emergency work at elevated heights, among others. In Matsusaka, Japan, the home of Inco TNC, people are also trained to leave work premises in case of natural disasters.

Prevention and health risk control

Vale also maintains a strict system of health risk identification in all our units. The aim is to use this information to create specific programs, which can be implemented across the entire company, encouraging an attitude of prevention among employees, their families, and people from the communities where we operate. By the end of 2007, the following health risks were identified:

- **Occupational:** musculoskeletal diseases, low-back pain, risk of hearing loss and pneumoconiosis.
- **Endemic:** intestinal parasitosis and diseases transmitted by animals, dengue fever, malaria, Chagas' disease, yellow fever, hepatitis A and B, HIV/Aids, leishmaniasis and intestinal parasitic infections.

In order to address these and other health issues, Vale maintains a range of programs including: campaign for prevention of sexually transmitted diseases – DST/Aids; World Aids Day; a labor gymnastics program; workshops on alcohol and tobacco addiction; cancer and diabetes prevention campaigns; support groups for diabetics and people with high-blood pressure or risk of heart disease; a sexual education program (Vale Juventude-directed to young people from neighboring communities with the objective of sexual orientation and prevention of sexually transmitted diseases); vaccination campaigns against the flu; and inspections for prevention and treatment of dengue fever and yellow fever. In addition to these initiatives, Vale offers health plans to our employees and to contractors (see about benefits in Employment and Personnel Development on page 66)

Main Programs	Employees	Families	Communities
Education/Training/Awareness	YES	YES	YES
Counseling	YES	YES	NO
Prevention and Risk Control	YES	YES	YES

Preventive maintenance operations at the Brucutu Mine (MG-Brazil).





### Agreements with unions

The health and safety theme is increasingly present in the dialogue between Vale and trade unions, including the process of collective bargaining.

In Brazil, our employees are covered by union agreements, as well as companies' regulations which define mechanisms and requirements for the prevention of incidents and occupational disease such as: use of personal protection equipment, maintenance of joint Health and Safety committees; training courses; and the right to refuse unsafe work.

At Vale Inco and in other foreign operations, health and safety items which are not covered by collective agreements are handled in our company's policies or in local legislation.

### Participation of all

In Brazil, Vale's employees are represented in Internal Committees for Accident Prevention (Cipas) maintained in each operational and administrative unit. These committees are formed by employees from several levels, elected by each unit's staff, according to regulations. Their mission is to work actively for the improvement of health and safety conditions in the work environment. Similarly, Vale Inco's employees are represented by internal health and safety committees.

#### Representation in formal health and safety committees

	2005	2006	2007
Percentage of the company's employees represented in health and safety committees	98.4%	100.0%	99.7%

In some units, the percentage does not reach 100% due to new projects, which have not yet formed health and safety committees, or units whose numbers of employees are not enough to form a committee. The calculations include interns and apprentices.

"It is laudable that Vale has developed a strategy to support the sustainable development of the communities in which it is active. Particularly noteworthy are its activities in the educational and health areas."

**Karl P. Sauvnt**, PhD, Executive Director of Columbia University Program on International Investment, Co-Director of "Millennium Cities Initiative", University of Columbia. March, 2008.

## Plans for 2008

The continuity of the health and safety management strategy will be assured through a series of actions, including:

- Implementation of the new Critical Activities Requirements in operations aimed at eliminating fatalities. The action includes specific training for the activities, coaching for review of procedures and the adaptation of facilities in each unit.
- Execution of the second edition of the “Living Good Practices” Program on health and safety.
- Execution of independent audits to evaluate the level of compliance with legal health and safety requirements in the facilities of Vale’s contractors.
- Implementation of a behavioral dialogue methodology, carried out by group leaders, in the three pilot areas of the health and safety excellence strategy, in order to promote a culture of prevention.
- Continuation of the implementation of the health and safety information system in Sepetiba Bay Port Company (CPBS) (Companhia Portuária Baía de Sepetiba), Instituto Ambiental Vale (IAV) (Vale Environmental Institute), Centro Atlântica Railway (FCA), Ferro Gusa Carajás (FGC), Onça Puma, Itabasco, Kobrasco, Nibrasco and Hispanobras.
- Reinforcement of the integration of Vale’s and Vale Australia’s health and safety Best Practices in coal operations, including reporting on GRI indicators and implementation of systemic requirements.
- Development and implementation of new tools for health and safety training and qualification, both in management and in behavior and procedures for the reduction of hazards. Investments of US\$ 25.2 million are expected to be made by mid-2009.

Labor Gymnastics at the Capitão do Mato Mine (MG-Brazil).



# Employment and Personnel Development

Our people make the difference

In order to fulfill the commitment of contributing to sustainable development, we rely on each employee working at Vale. To attract and retain the highest quality workforce, our focus is on human development and our investment in health and safety. We reward professional competence and value diversity.

We undertake annual human resources strategic planning, during which demands for hiring and for professional development are identified. The human resources area also monitors indicators on a quarterly basis, such as retention of personnel, turnover and the number of managerial positions filled with internal resources. Specific actions are implemented if the expected results are not achieved.

To monitor issues related to discrimination, there are tools such as the “Alô RH” (Hello HR), which answers general questions, and the Reporting Channel (described on [www.vale.com](http://www.vale.com)).

Vale is growing and as a result, attracting, developing and retaining employees who are qualified, motivated and engaged has become a priority. To address this challenge, our approach to personnel management is consistent with our business strategy, based on ethics, transparency, and continuous investment in education to achieve our workers’ safety and productivity, with broad internal communication and recognition of those who build our future.

We value the diversity among our talents.  
Below, employees at the Tubarão Port  
(ES-Brazil).





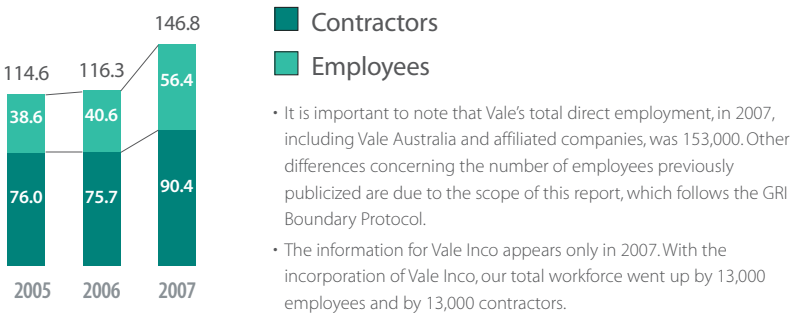
## Creation of employment

The increase in the number of employees at Vale reflects the company’s accelerated growth in recent years, driven by new projects, expansion of operations, and corporate acquisitions.

In 2007, our total workforce made up of employees and contractors was 146,800. In accordance with GRI Boundary Protocol, this number, and consequently the graphs below, do not include employees and contractors of Vale Australia and our affiliated companies. Consistent with our progressive reporting approach, data for Vale Australia will be included in coming years.

### Increase in the Number of Company Employees and Contractors

(Thousand)



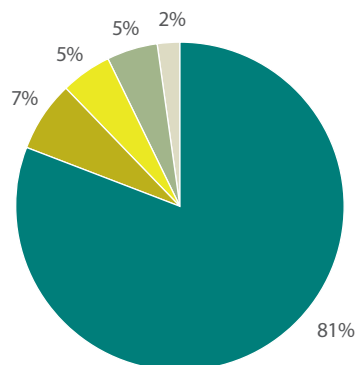
In general, our contractors work in expansion, new projects, maintenance, cleaning, security, and other services. In addition, Vale’s workforce has approximately 1,000 fixed-term contract employees –, primarily operational apprentices, who work in several units in Brazil.

Of Vale’s total employees and contractors, 81% work in Brazil. In 2007, part of the increase in workforce was due to the incorporation of Vale Inco.

By 2012, Vale expects to create approximately 62,000 direct jobs, among employees and contractors, 80% of these positions will be in Brazil.

### Company Employees and Contractors by region (2007)

(%)

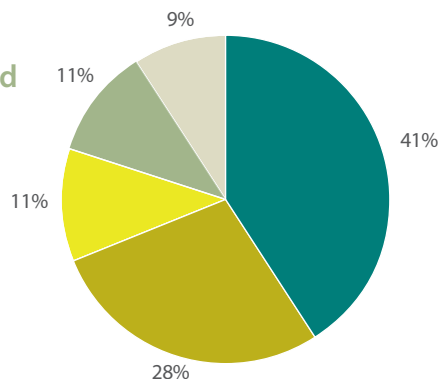


**Total: 147 thousand**



### Company Employees and Contractors by Brazilian states (2007)

(%)



**Total: 120 thousand**



• The total number of employees includes companies outside the GRI boundary, in order to use the same accounting criteria adopted in USGAAP releases. The additional amount incorporated corresponds to 7% (2005), 3% (2006) and 1% (2007) of the total number.

## Competitive wages

Vale maintains a Compensation Policy, established for all subsidiary and affiliated companies, based on technical criteria widely used in the marketplace. The aim is to keep our employees' compensation attractive and competitive. To this end, we periodically conduct comparative surveys to analyze the compensation we offer in contrast to market practices, across all regions where we operate. Compensation corresponds to the complexity of a given role and the individual employee's performance.

In addition to their wages, employees of Vale's units receive variable compensation, linked to the performance of the company, their department, and their individual performance. Due to the company's strong performance in recent years, the variable compensation has been higher than the market's average.

Variable compensation goals are related to operational, financial and sustainability performance. Topics linked to performance bonuses include occupational health and safety measured through injury rates (including lost-time injury rate and total injury rate) and, environmental performance in areas such as waste management and water resources management.

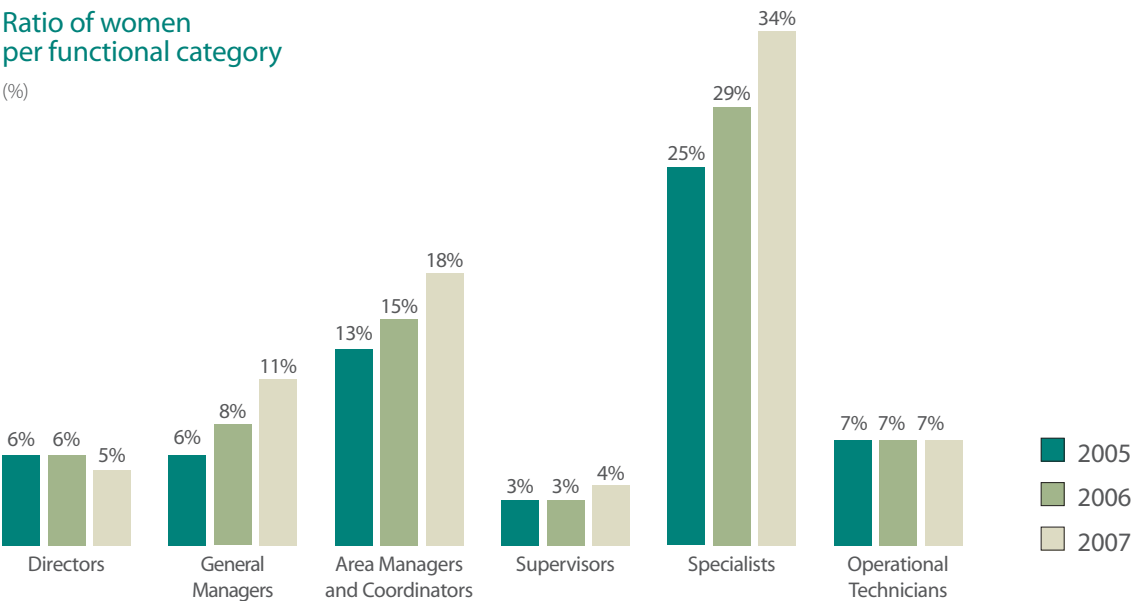
The lowest wage offered by Vale, in the period covered by the report, was equal to or higher than the minimum legal wage applied in each location.

## Equal conditions

Vale's job and compensation management system is based on technical criteria, which take into account the specifics of the market and the qualification of employees. It is part of the company's policy to have competitive salaries regardless of gender, since this is not considered a valid wage differentiation factor.

At Vale's units, the staff is composed, primarily, of male employees (90%), which is a common characteristic in the mining industry. In 2007, 56% of women employees had technical positions (operational and administrative), 38% were included in specialist categories (analysts, engineers, geologists, etc.), and 4% were in management or coordination positions.

Ratio of women  
per functional category  
(%)



Control room – Carajás  
(PA-Brazil).

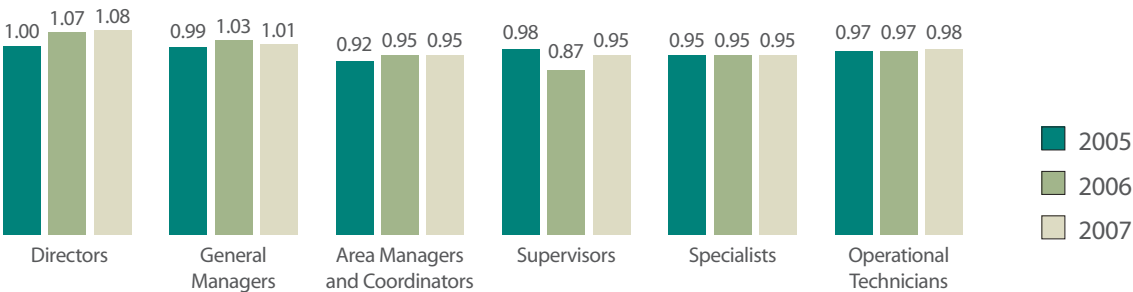




In all functional categories, the presence of women has been stable or increased, particularly in leadership roles (general managers, area managers/coordinators and supervisors). Among directors, the absolute number of women has been stable. The percentage drop is due to the increase in the total number of directors.

There is no wage difference based on gender at Vale. The following graph presents the evolution of the ratio between men's and women's salaries in each functional category over the last three years. In all years and categories, the ratio is approximately one-to-one.

**Base salary ratio between women and men,  
per functional category**



- Employees data used represent 84% (2005), 86% (2006) and 75% (2007) of LA1 (Total workforce by employment type, employment contract and region).

Data not available for Vale Inco, former MBR (2005-06) and RDME.

- Vale Inco does not track the gender of their employees. The company operates according to current legislation, which requires equivalent compensation for similar jobs.

Diversity is a very important factor for Vale. It is through the union of different points of view that we not only increase our competitiveness, but also develop innovative solutions aimed at the sustainability of the business and territories in which we work. In our Code of Ethical Conduct (Item 2.2), Vale includes as intolerable conduct subject to disciplinary penalties "discrimination based on ethnic background, origin, gender, sexual preference, religious belief, union affiliation, political conviction, ideology, social class, physical disability, marital status or age". Our efforts are directed toward the definition of procedures and goals that improve the promotion of diversity in our company. Our value "Respect for Diversity" reinforces this commitment.

## Benefits provided

Vale offers our employees a competitive benefits package, according to the different market contexts in which the company operates, encouraging their participation in costing and management. This approach translates into a wide benefit portfolio.

Generally, there is no difference between benefits provided to full-time employees and those provided to part-time or temporary employees.

The absolute majority of employees have a private retirement plan, health insurance and group life insurance. In its units, Vale also offers a transportation allowance, meals at the workplace and a meal allowance. In addition, our employees are also eligible for an educational benefit (reimbursement for courses for elementary, high school, and university education).

In 2007, the Employee Assistance Plan (PAE) was implemented at Vale's units in Brazil. The program helps employees and their families solve personal problems through counseling sessions with independent professionals. This is a voluntary and confidential initiative that reinforces our commitment to our employees and their families' quality of life.

## Collective bargaining

In Brazil, collective bargaining agreements signed by Vale apply all employees, regardless of union membership, including those in management positions. Some of the clauses in these agreements are specific to certain job categories, including work conditions, but the instrument as a whole extends to 100% of the company's employees.

In 2007, the percentage of employees covered by collective bargaining agreements at Vale Inco was 73%. Except in Brazil, unions represent only those employees who opt for membership.

## Valer – Vale Education

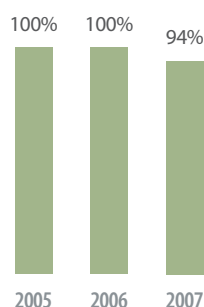
Vale regards education as one of the main strategic pillars of social transformation, as well as the key to disseminate knowledge and values both inside and outside of the company. Valer, the company's educational institution, represents the strategy for development and education, through actions directed both to the internal and the external stakeholders (*read more in the case "Valuable heritage" on page 76*)

In addition to an attractive compensation policy, Vale's strategy to retain a team of qualified people is to establish partnerships and offer opportunities for professional qualification to all employees. As well, Valer develops educational activities aimed at preparing our personnel for the management and growth challenges imposed by our businesses.

In the last three years, our investments in education have increased. These investments have included the construction of new professional educational centers and partnerships with learning institutions (technical, under graduate and graduate levels). In addition to the 21 learning units operating in Brazil, Valer also maintains a presence in Switzerland. In 2008, we intend to extend Valer's operations to other countries.

### Employees covered by collective bargaining agreements

(%)



Employees data used represent 93% (2005), 97% (2006) and 97% (2007) of LA1 data (Total workforce by employment type, employment contract and region).

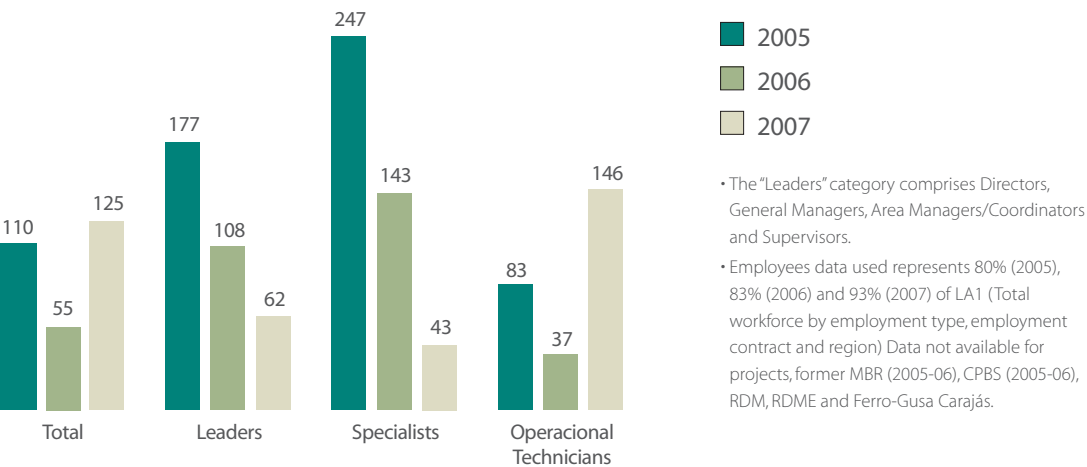
Since 2005, there has been great investment in the education of managerial and specialist personnel. The actions of these programs were concentrated in 2005, the year they were launched, and were extended in subsequent years to assure the inclusion of our target audiences.

The highlight in 2007 was the investment in technical public education.

As a result of internal changes that took place over the course of 2007, related to the reorganization of processes, only 30% of the total identified qualification initiatives were carried out. The rest of the plan is being executed in 2008.

At the same time, variations in the hours of training provided to employees were also identified across Vale's companies. These variations are related for instance to new projects where new processes and technologies (requiring extensive training) need to be incorporated into a specific activity.

Average annual training hours, per employees and functional category



We promote frequent personnel training and the continuous development of our people. Below, employees at Valer, Vale's educational institution.





## Continuing Education

The educational programs offered to Vale, through Valer, are based on principles and practices inspired by a multi-disciplinary education model, focused on business, work and life, and grounded in technical and managerial competencies. These initiatives give our employees the opportunity to participate in learning programs in all phases of their career – from hiring to preparation for retirement – including specific employability actions and activities that provide support in professional evolution or transition phases.

Vale maintains a portfolio of initiatives that includes, in addition to internal and external courses, participation by employees in workshops and conferences, as well as other opportunities for qualification. The total number of employees eligible for these programs corresponds to 97% of all Vale employees.

Vale's concern for our employees extends to the period after they leave or retire from the company. Consequently, we have programs such as job placement services, and assistance on transitioning to retirement (including pre-retirement planning).

## Performance Evaluation

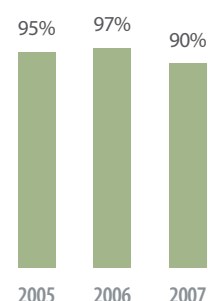
Vale's units have adopted an annual performance review program whose objectives are to communicate the most significant strategic challenges for the organization and to align efforts for the accomplishment of annual goals.

Operational performance reviews and career development are directly related to the Annual Incentive Plan (AIP).

Almost all employees participate in performance review programs. Those hired at the end of each fiscal year are included in the performance review cycles of the following year.

The decline in the rate of performance reviews between 2006 and 2007 was the result of the inclusion of Vale Inco. In the Canadian units (with 12% of Vale's employees), Vale Inco is able to carry out performance reviews for 34% of the employees. This is due in large part, to the high rate of union membership at some of our largest operations, as union members are generally exempt from performance review programs. Starting in 2008, a project to extend that scope will be developed for the entire Vale Inco organization. We expect to have all management-level employees and a portion of our technical professionals (analysts, engineers, geologists, among others) covered by 2009.

**Total number of employees receiving performance evaluations (%)**



• Employees data used represents 84% (2005), 86% (2006) and 95% (2007) of LA1 data (Total workforce by employment type, employment contract and region. Data not available for projects, former MBR (2005-06) and Ferro-Gusa Carajás.

## Supplementary pension

Although in Brazil the participation in retirement plans is compulsory (public social security), Vale offers supplementary retirement plans through the Fundação Vale do Rio Doce de Seguridade Social (Valia).

Valia is a closed, non-profit supplementary pension entity with administrative and financial autonomy. A complete description of the plans is available at [www.valia.com.br](http://www.valia.com.br).

Active employees are offered mixed plans by Valia, also known as defined contribution plans with a defined benefit component. The objective is to protect those assisted (retired employees and pensioners), and to avoid a significant decrease in income in case of disability or death before retirement. Mixed plans ensure the beneficiary and the company that the plan will not have long-term issues with financial sustainability. In the mixed plans created by Valia (Vale Mais, ValiaPrev and FCA), the employees' contribution averages 4% of their base salary, which corresponds to 40% of the plans' costs.

Valia also manages a Defined Benefit plan, which has been closed to new enrollments since April 30, 2000, when the Vale Mais Mixed Plan was implemented. The Defined Benefit plan covered approximately 17,000 members in 2007 (retired and pensioners), and had an actuarial surplus.

Valia also manages a Supplementary Allowance, which assists approximately 2,000 people. These are retirees who left the company through a Retirement Incentive Plan. In December 2007, the reserves of that fund covered 35% of its actuarial liabilities. The sponsor (Vale) has contributed to the fund since December 2001. The value of the monthly installments, which are recalculated annually and adjusted when necessary, amounted to US\$5 million (in December 2007). The goal of these contributions is to reach 100% coverage of liabilities, by November 2014.

There has been a considerable increase in the number of participants covered by the Vale Mais plan (Mixed Plan), due to an increase in the total number of Vale employees in recent years.

### Plans offered by Valia in Brazil – 2007

Plan	Type of Plan	Participants (in thousands)	Level of coverage*
Vale Mais, ValiaPrev and FCA Plans	Mixed (Defined Benefit and Defined Contribution)	46.0	Higher than 100%
Defined Benefit	Defined Benefit	17.4	Higher than 100%
Supplementary Allowance	Defined Benefit	2.1	35% with monthly contributions
<b>Total</b>		65.4	

\* Refers to the defined benefit part of the mixed plan. Total number of participants includes active and assisted participants (retired and pensioners).

Albras (with 855 participants in 2007) and Alunorte (256 participants in the same period), companies that are within the boundaries of this year's report, are not covered by Valia. These companies instead offer open entity plans with defined contribution.

Most plans offered by companies outside Brazil are Defined Benefit Plans. In most Defined Benefit Plans, employees do not participate in the funding of the plan.

Plans offered by companies outside Brazil fall into two major categories:

- Funds held and maintained separately from the resources of the organization;
- Obligations met by the organization's general resources.

## Funds outside Brazil – 2007

### Funds held and maintained separately from the resources of the organization

Country/Plans	Type of Plan	Participants (thousands)	Level of Coverage
<b>Canada</b> – Plans: CRS (Canada) OPP (Ontario) and MPP (Manitoba)	Defined Benefit	21.3	Between 90 and 94%
<b>Canada</b> – (VBNC)	Defined Contribution	0.3	N/A
<b>Indonesia</b> – Plan: Dana Pensium Inco	Defined Benefit	2.4	95%
<b>United Kingdom</b> – Plans: INCO Europe Pension Plan	Defined Benefit	1.6	85%
<b>USA</b> – Plan: US Retirement Plan	Defined Benefit	0.5	80%
<b>Norway</b> – Plan: Pension Plan	Defined Contribution	0.1	N/A
<b>Total</b>		26.1	

- The total number of participants includes active and assisted participants (retired and pensioners).

The plans whose obligations are met by the organization's general resources are usually supplementary to those with resources maintained separately or serve only a specific number of former employees. In these plans, employees do not participate in the costing of the funds. In 2007, the estimated value of those obligations amounted to approximately US\$ 135 million.

## Funds outside Brazil – 2007

### Obligations met by the organization's general resources

Country/Plans	Type of Plan	Participants (thousands)	Obligation value estimate (US\$ million)	People eligible to the Plans
<b>Canada</b> – Plans: Canadian Ex-Gratia and Canadian COLA	Defined Benefit	12.8	111	<ul style="list-style-type: none"> <li>• <b>Canadian Ex-Gratia:</b> Additional benefits offered in the plans CRS, OPP, and MPP</li> <li>• <b>Canadian COLA:</b> Benefit offered to a group of former employees</li> </ul>
<b>Indonesia</b> – Plans: Service Bonus and Labor Law No 13/2003	Defined Benefit	2.9 thousand in each plan	5	<ul style="list-style-type: none"> <li>• <b>Service Bonus:</b> Offered to all permanent employees</li> <li>• <b>Labour Law:</b> Mandatory to all full time employees</li> </ul>
<b>United Kingdom</b> – Plan: Ex-Gratia	Defined Benefit	1.0	10	<ul style="list-style-type: none"> <li>• Additional benefits offered to retirees from the Inco Europe Pension Plan offered in the United Kingdom</li> </ul>
<b>USA</b> – Plans: Executive and Excess Plans, US COLA and US Ex-Gratia	Defined Benefit	0.5	9	<ul style="list-style-type: none"> <li>• Additional benefits offered to groups of inactive employees (439 people) and executives (20 people)</li> </ul>
<b>Total</b>		14.3	136	





# Valuable heritage

## Valer: Education for Sustainable Development

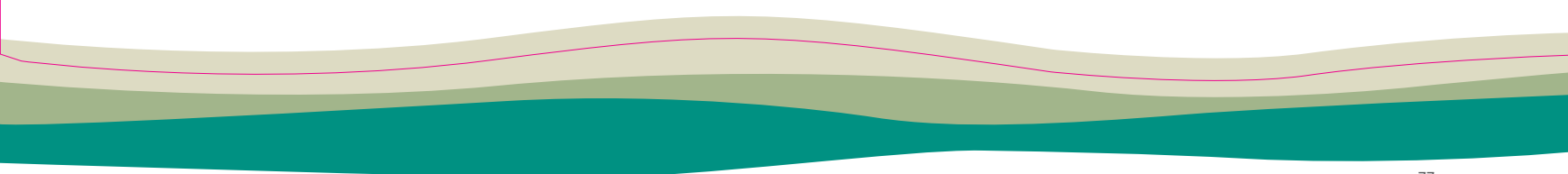
Valer has now more than 20 units in Brazil and one in Switzerland.

**P**eople are Vale's most important asset. That is why the company is committed to the development of our professionals and local inhabitants. Education is the driving force of this process and was the element that motivated the creation of Valer, in 2003. Created as part of the company's strategy for guaranteeing the sustainability of our business, Valer is the institution responsible for disseminating Vale's values and knowledge inside and outside of the company and for taking care of the continuous education of our employees and the promotion of labor in our chain of production. "The amount that the company invests in its people's education is more of an investment in organic growth as a whole, comments Vale's HR and organizational

development director, Marco Dalpozzo. "In today's world, qualifying and benefiting from so-called human capital in the best possible way is an organization's greatest challenge."

### Ongoing Education and Labor Promotion

Through the ongoing education approach, Valer offers professional development activities for technical-operational, technical-specialist, and management audiences. The action portfolio for each of these groups is developed based on demands and skills needed by the company, which permits Valer to transform knowledge into tangible business results. These educational programs range from elementary and secondary education to



technical and specialization courses, MBAs, master's, and doctorate programs.

One of Vale's greatest challenges is the need for qualified workers, at the operational as well as specialist level. To accompany the company's worldwide expansion, Valer has been broadening its span of promotional actions, attracting and training new professionals for Vale's various business niches.

Beyond tending to the company's need for human capital, Valer's promotion programs are essential for local development, as they promote the generation of jobs and employability, income, and future opportunities in the areas where Vale is located. "Valer promotes inclusion and social support through education," says Dayse Gomes, director of the department of education and personnel development at Vale. "When an individual has the opportunity to learn, he or she gains autonomy, perspective, and new dreams. The person is able to change, and transform his or her current situation. For me, education is the main source of development for people and society".

There are many current actions with this focus, like the Professional Training Program, which will train 3,500 technicians to take operational jobs in 2008, and Master's Degrees Specializing in Port, Railway, and Mining, for which scholarships will be offered to 330 professionals in 2008.

In order to offer these actions, Valer has expanded our partnerships and alliances with educational institutions, which not only benefit Vale, but also contribute to the development of the educational sector. In the last five years, Valer has invested US\$12 million in professional training centers outside of Vale which have already educated about 19,000 people, the majority of whom are youngsters who dream of building a career. One such is 21 year-old, Roberta Torres, an apprentice at Vale. "I took Vale's engine maintenance course, she says. "Vale doesn't just prepare you to be a technician but also to become a whole professional. This program offers opportunities for your professional and personal life. Vale gives you the opportunity to study and to grow as a person".

Another example of how these investments expand horizons is the case of SENAI (Serviço Nacional de Aprendizagem Industrial). The partnership with Valer in various technical training actions allowed the institution to acquire expertise in technical areas which were not previously attended. For example, in order to teach the first class of apprentices and machine operators for Vale at SENAI “Américo, René Giannetti”, in Belo Horizonte (MG), brought in retired machine operators to build his teaching staff. After all, experience and knowledge are treasures we take with us through our lives. “Hidden-away knowledge doesn’t mean anything,” says Vale’s Operational Control Center analyst, Márcio Pavan, who has been at the company for 27 years and was trained by Valer to educate other company employees. “Passing on what I know is an incomparable pleasure”.

## Education for work and for life

As a complement to professional education, Valer invests in multidisciplinary activities and offers activities focusing on corporate citizenship, culture and art. Valer disseminates “Vale DNA”, the Mission, Vision and Values of the company, that reflect our commitment to sustainability. Education, from this perspective, develops professionals who are conscious of their role in the company and of their responsibility to society. Using art and culture as education tools promotes opportunities for reflection on various topics which broaden the knowledge and the well being of company professionals who are “Proud to be Vale.”



## Education for everyone, everywhere

Today Valer has 21 units in Brazil and one in Switzerland. Intensifying its efforts to serve all locations at the scale required by Vale, Valer is expanding internationally and will broaden its bases of operation to Mozambique, Australia, New Caledonia, Canada, and China.

Aiming to better develop the economic and business assets of each region in which they operate, Valer units offer training spaces adapted to local needs, such as railway or mine equipment simulators, laboratories, libraries, and cultural spaces. And, to offer education with a high level of excellence, Valer uses internal educators and builds partnerships with renowned educational institutions such as Senai (Serviço Nacional de Aprendizagem Industrial), Sesi (Serviço Social da Indústria), Getúlio Vargas Foundation (FGV), Technological Institute of Aeronautics, (ITA), Paris Mining School (Cesmat), MIT- the Massachusetts Institute of Technology (USA) and IMD – The International Institute for Management Development (Switzerland).

The need to further enhance educational opportunities is also the basis for Vale's distance education strategy, which has a comprehensive, custom-made online course catalog which is available to employees 24 hours a day, 7 days a week. Valer also invests in knowledge management and in programs which promote the perpetuation and sharing of Vale knowledge.

After almost five years in operation, Valer recently renewed its positioning to consolidate itself as Vale's educational institution. Its results are proof that its strategies contribute to Vale's global growth and meet the challenge of discovering, attracting, developing and keeping the company's greatest treasure: its people.



# Human Rights

## Commitment to citizenship

The essence of an organization is expressed in the people who build it and in the attitude they maintain in the face of daily events





Leader of the ceramist women from Vila Mozartópolis. Winner of the Cultura Viva (Living Culture) Award, a partnership between Vale and the Emílio Goeldi Museum of Pará (PA-Brazil).

Vale has always based its activities on high ethical and moral standards. Our Values and our Code of Ethical Conduct guide the way Vale fulfills its Mission and meets its objectives. Wherever we work, in Brazil or the rest of the world, our actions are based on integrity, respect for human dignity, and citizenship.

Human rights are a recurring theme throughout the company. We are currently developing several initiatives to improve human rights management. In addition, we comply with a Code of Ethical Conduct ([www.vale.com](http://www.vale.com)), which assures a clear understanding of human rights and states the principles that guide our activities.

We are also working on the creation of a corporate policy that integrates and captures the importance of the issue to the company. This policy will formalize the guidelines that direct our actions. Together with civil society, the government and other companies in the private sector, we aim to contribute to an economically prosperous, environmentally balanced and socially fair society.

We develop social programs aimed at the promotion of the children's and adolescents' rights (MG- Brazil).

## Freedom of association and collective bargaining

We support freedom of association and collective bargaining in our operations. Vale maintains labor relations guidelines based on legislation and on collective agreements, which favors a pro-dialogue environment.

All of our agreements comply with and, in some cases, surpass legal requirements. Labor negotiations are conducted with the participation of employees' representatives, whether they are unions or other associations. Throughout our history, collective labor agreements have always been based on open negotiation. There is no record of any violation notice or warning letter issued by labor enforcement officers for suppression of union organizing and collective bargaining.

According to our Code of Ethical Conduct, discrimination based on union affiliation is considered intolerable. We offer several opportunities for union affiliation, such as participation in assemblies and other events.

The Brazilian Constitution is very rigorous in the coverage of human rights issues and the Brazilian labor legislation contains many guarantees for the operation of union organizations. In addition, Brazil signed the 1966 International Covenant on Economic, Social and Cultural Rights, and ratified the 1998 Convention of the International Labor Organization (ILO) on the right of union association and collective bargaining.

## The eradication of forced and child labor

The eradication of child labor and forced labor in the regions where Vale operates is a complex issue, one that demands the commitment and effort of all parties – governments, the private sector and civil society. We are strongly committed to this cause.

We work to monitor risks related to forced and child labor identified across the mining value chain. In order to avoid incidents in these areas we comply with and, in many cases, adopt contractual instruments that regulate the relationship with suppliers and clients, a human resources guidelines that assures the rights of employees, pro-active awareness actions in the community, and social programs developed in association with nationally and internationally recognized entities.

Since 1997, through the Vale Foundation, we have developed social programs aimed at the protection and development of children and youth, always in association with local governments and specialized NGOs. We support community awareness campaigns conducted by the ILO and by the regional labor offices.



# Human Rights in the Value Chain

## We condemn and fight against child and forced labor within our sphere of influence

Any practice that we may consider antagonistic to our values and the ideal of sustainable development is unacceptable in our company. Vale is a signatory to initiatives that combat disrespect of human rights. The company also acts directly to avoid such practices by customers and suppliers.

At Vale, we follow the specific legislation related to human rights in the countries where we operate. In Brazil, where such legislation is particularly rigorous, we operate according to inspections made by the Ministry of Labor and Employment and to the International Labor Organization (ILO) foundations, conducting specific monitoring in areas with major risk of child and forced labor.

Based on the information gathered during monitoring, we take preventive actions, to the extent possible, to identify and eliminate occasional problems detected among our suppliers, customers, and other companies participating in the mining value chain. In our assessment, one of the most significant areas of risk identified within the mining production chain is charcoal production in Northern Brazil and in the state of Minas Gerais. Companies in this area supply charcoal to pig iron producers, who are also Vale's customers. In many other countries where we operate, we have completed assessments that identify no incidents of forced or child labor within our production chain.

In order to mitigate identified risks, Vale has established specific clauses on child and forced labor in all iron ore sales contracts to pig iron producers. We also consult the Brazilian Ministry of Labor on a regular basis, since it maintains an updated listing of all companies involved in issues where respect for labor may be absent. In a number of cases we have chosen to suspend the supply of products to some clients producers of pig iron (*more details on this in the case "Towards decent employment" page 86*).

In Brazil, we have developed several programs aimed at the eradication of child and forced labor.

Electric industrial  
planning at the  
Córrego do Feijão  
Mine's powerplant  
(MG – Brazil).





## Highlights

- In 2005, Vale became signatory of the Pact to Combat Slave Labor in Brazil, an initiative of the Ethos Institute, in partnership with the ILO and Reporter Brasil, a Brazilian NGO.
- In 2007 we supported the creation of a textbook *O Menino Maluquinho e o Estatuto da Criança e do Adolescente*, (*The Nutty Boy and the Brazilian Statute for Children and Adolescents*), as part of the campaign “Mude um destino” (*Change a Destiny*), an initiative of the Associação dos Magistrados Brasileiros – AMB (*Brazilian Magistrates Association*). The publication was distributed to 15,000 judges in Brazil. In that same year, the company adopted a policy to give annual financial support to the Infancy and Adolescence Fund, which promotes child development and the prevention of child labor.
- Our business areas of copper and iron ore, which operate in the Brazilian state of Pará, have conducted several workshops on collective agreements, contract management and qualification of new managers in order to build awareness about the occurrence of forced labor in that specific state.
- In a covenant with the public administration, our aluminum business in the state of Pará monitors the arrival of new workers, attracted by employment offers, with the purpose of avoiding the occurrence of forced labor.
- In Ourilândia, also in the state of Pará, our nickel business has established a partnership with the Programa Edson Falcão – Bom de Bola, Bom na Escola (*the Edson Falcão Program “Good in soccer, good in school”*), conducted in association with city officials, with the purpose of reducing absenteeism from school and the occurrence of child labor through the practice of sports.
- A partnership between Vale, the Vale Foundation and Canal Futura, a Brazilian educational television channel, has also led to the production of the educational TV program called “Que Trabalho é Esse?” (“What Kind of Work is This?”). The program addresses human rights issues, valuing decent work and alerting viewers to the occurrence of forced labor. The program is aired in all train stations of both the Carajás railroad (connecting the Brazilian States of Pará and Maranhão) and the Vitória-Minas Railroad (connecting the Brazilian States of Minas Gerais and Espírito Santo). The program is also regularly broadcast on Canal Futura.
- In the state of Pará, our aluminum business is also a partner of the “Programa de Erradicação do Trabalho Infantil” – PETI (*Program for Child Labor Eradication*), conducted by the federal government. The partnership promotes integrated action to eliminate the occurrence of child labor and dangerous labor.

“Vale is taking important and courageous steps, to promote the full eradication of forced labor exploitation throughout Brazil’s pig iron industry. This can be a model not only in Brazil but for steel producers worldwide, showing the vital contribution that committed business leadership can make to a world of work in freedom and human dignity. Vale’s efforts deserve widespread international recognition.”

**Roger Plant**, Head of the Special Action Programme to Combat Forced Labor of the ILO – International Labor Organization. March, 2008.

## Human Rights training for security personnel

Vale regards the safety and security of our facilities and employees as a priority. Working with qualified and well-prepared security personnel is essential to operating with confidence.

We thoroughly comply with the requirements for the training of security personnel set forth by the Ministry of Justice in Brazil. All security personnel, in Brazil, primarily from third parties, are regularly provided with training, including time dedicated to “human rights.”

In addition to these requirements, we have established a goal for 2008 of developing a training program for 100% of surveillance and security personnel in our Brazilian units on human rights, service quality and community relations.

At our operations in other countries, we did not identify specific training on human rights for security personnel. We consider it important to promote a global discussion on human rights in order to align procedures, identify and share best practices, and respect cultural differences and local legal demands. This is the path we will follow in future.

At Vale Inco, for instance, policy development and training on human rights for security personnel will be undertaken in coming years.

The safety of our facilities and employees is one of our priorities. Below, the Carajás Copper Mine (PA-Brazil).



# Towards decent employment

## Vale refrains from supplying iron ore to clients involved with forced labor

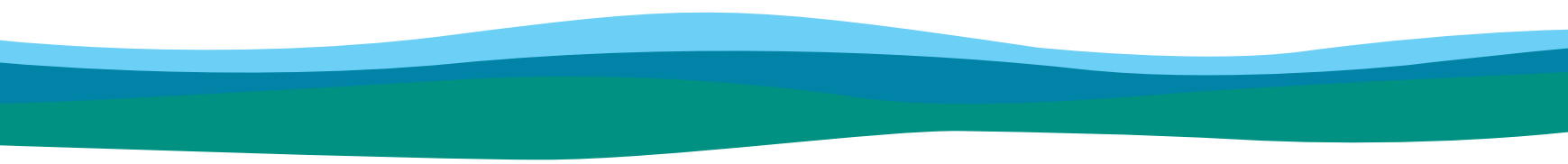
The men are poor, with little schooling, and no opportunities for work. As such, they become easy prey for those who wish to exploit them. Deceived with promises of employment, they end up isolated in the world without labor rights or proper food. This work, which is analogous to slave labor is abhorrent to Vale. Alert to this violation of rights, Vale has mapped environmental and labor citations in its value chain. Based on these citations, the use of uncertified wood and the use of forced labor were identified in the charcoal supply to some pig iron producers. This led the company to suspend the supply of iron ore to seven clients producers of pig iron in October 2007.

"The decision demonstrates a change in attitude in the steel sector and represents a benchmark in the way we view corporate social responsibility," explains Adriana Bastos, Director of the Legal Services Department for Vale. "By suspending sales of iron ore, there is a resulting loss of revenues and income."

Suspending supplies to a client is not a simple matter. "We have refrained from selling iron ore to plants which, many times, depended exclusively on our supply," explains Rafael Grassi, Legal, Labor and Social Security Coordinator for Vale. This decision

involves a task force made up of professionals from the commercial, environment and institutional projects as well as legal, environmental and occupational areas. "We were supported by the Ministry of Labor and Employment and environmental agencies," says Paulo Salles, Internal Market Sales Manager for Vale. "We do not intend to do police work, or judge companies."

Of the nine companies audited by Vale – eight steel mills are located in the Pará-Maranhão region and one in Minas Gerais – seven had their supply of iron ore suspended. However, supply was reestablished at three operations, two of them after demonstrating their compliance to the "*Termo de Ajustamento de Conduta – TAC*" (Conduct Adjustment Term), signed with the Labor Justice Department, and one as a result of a legal injunction to temporarily reestablish supply. "If the clients adjust their situation, there is nothing that keeps us from going back to the table," says Paulo Henrique Lima Van Der Ven, an Environmental Analyst for Vale. The suspension is currently in force for a total of four companies.



It is important to emphasize that forced labor is not a common practice in the pig-iron industry. Many companies in this sector have already made efforts to eradicate this practice by the association with the NGO Carvão Cidadão (Citizen Charcoal).

### Fighting slave labor since 2005

According to the ILO, 12.3 million people are subject to slave labor throughout the world. In Brazil, estimates from the *Pacto Nacional pela Erradicação do Trabalho Escravo* (National Agreement for the Eradication of Slave Labor) to which Vale has been a signatory since 2005, indicate that the number could be as high as 40,000. "The impact of market actions which exclude companies involved with this type of crime is achieving results faster than government policies because it deals with the offending companies' pockets," says Andréa Bolzon, coordinator of the project that fights slave labor for ILO in Brazil. She perceives a cultural change in companies and points to the growing number of signatories to the Pact. From 65 in 2005, the number has grown to 152.

Vale has been actively involved in fighting slave labor since 2005. In 2006, the company was one of the sponsors of the National Campaign to Eradicate Slave Labor, sponsored by the ILO, which posted ads in magazines, newspapers, on television, the radio and the Internet. In a partnership with the Futura educational television, Vale supported the creation of a series of eight educational programs in a project titled "*Que Trabalho é Esse?*" (What Kind of Job is This?) The episodes mixed hand puppets, marionettes (as an analogy to forced workers with strings attached), statements recorded in the streets and interviews with scholars. In addition to being aired in the normal programming of Futura Channel, the programs were also presented on Teletrem – a communication channel installed in the Vale railway network – increasing the awareness in communities located in the North, Northeast and Southeast regions of the country. "These actions received excellent feedback from the public," says Vale's Adriana Bastos. "In the case of the pig iron producers, we can state that they are now concerned with adopting a more proactive attitude to reversing the situation."



# Environment

## Strategic Priority

Our environmental challenges are complex and ongoing, demanding commitment, investment, and persistence in order to achieve solutions.



Vale regards respect towards the environment as a fundamental component of our sustainability strategy and seeks to balance environmental protection with economic development. As such, we have an Environmental Policy, in which our commitment to the environment is made explicit.

## Environmental Policy

- Maintain an Environmental Management System with the purpose of ensuring that activities comply with applicable laws and the standards established by the company. In the absence of specific legislation, Vale will implement best practices for environmental protection and minimizing risks.
- Educate and train employees for environmentally responsible actions, caring for the application of our environmental policy.
- Development of research and the use of new technologies for ongoing improvements in our activities, with a view to reducing environmental impacts and the use of materials and energy.
- Maintain a permanent discussion channel with employees and the community, aimed at improving environmental actions.
- Make efforts so that the companies in the Vale system embrace practices in line with this environmental policy.
- Require its suppliers to provide products and services of proved environmental quality.

Vale's policies, norms, and environmental procedures are defined by our Environment Department, which coordinates the company's Environment Quality Management System, setting guidelines and goals, monitoring environmental performance and providing tools for managing the environmental aspects related to Vale's activities, products and services.

Vale is in the process of discussing and aligning this Environmental Policy with our subsidiaries.

Within the parameters of the Environmental Quality Management System, monitoring, conservation, protection and environmental remediation measures are developed in order to assure the maintenance and the recovery of the ecosystems where we operate.

Our environmental management system is based on ISO 14001 (*International Organization for Standardization*) standards. Periodically, the operations are subjected to external auditing. Our certified units include:

- Iron Ore and Iron Ore Pelletizing (all iron ore mines and the pelletizing plants at Tubarão and Fábrica);
- Manganese and ferroalloys (Azul and Morro da Mina, RDME and RDMN);
- Nickel (Inco Europe, Inco TNC, Jinco Non-Ferrous Metal Co., IATM Dalian Co., IATM Shenyang Co. and Taiwan Nickel Refining Company);
- Port of Tubarão;
- Aluminum Production Chain (Alunorte, Albras and Valesul);
- Kaolin (PPSA and CADAM).
- Samarco and MRN alliance also has ISO 14001 certification.



# Environmental Expenditures and Compliance

Investment in order to grow

Vale has always been concerned with environmental issues, a fact illustrated by our considerable environmental investment. Our commitment to the environment is not limited to mandatory environmental controls. Environmental considerations are also an important component in the evaluation of new projects and in expansion and investment decision-making. Our expenditures are monitored on a monthly basis, publicly reported at the end of each quarter and subject to periodic financial audits.

In our environmental management, we have pursued the relationship with stakeholders, as well as the technological advances in order to improve environmental performance in our operations. We are active in the research and development of new production and control technologies, the intensification of environmental education, the conservation of biodiversity, the recovery of degraded areas, and in discussion forums about alternative natural resources.

We acknowledge, however, that there is room for improvement. An example, is the integration, already underway, of financial system platforms between Brazil and Canada, which will bring benefits in terms of budget management and environmental expenditures control.

Nursery at Vale's Natural  
Forest Reserve in Linhares  
(ES – Brazil)



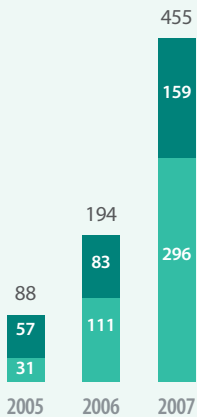
## Environmental Expenditures

Our investment policy has led to substantial growth in expenditures on applied environmental controls. The value of our environmental investments more than doubled between 2005 and 2006, going from US\$88 million to US\$194 million. The inclusion of Vale Inco's data in 2007 brought us to US\$455 million of environmental investments. The highlights for this period are:

- The carrying out of safety projects, increasing height, drainage, and environmental rehabilitation of discharge reservoirs and sterile piles, in iron ore mines in the Southeastern region of Brazil and in Carajás, in the state of Pará.
- Improvement in treatment and disposal of waste in the manganese operation in France.
- Installation of electrostatic precipitators, equipment that minimizes atmospheric emissions from industrial plant smokestacks in the Tubarão Complex, in the state of Espírito Santo, in Brazil.
- Improvement in the disposal/treatment/residue transportation system, improvement in atmospheric emissions controls, as well as the construction of a gas treatment system in the aluminum chain operations, in the Brazilian state of Pará.
- Investment of US\$178 million, by Vale Inco in 2007, specially Sudbury and Thompson (Canada) operations investments, to improve controls in residue, water, and atmospheric emissions treatment; and to PT Inco in Indonesia, which has invested in atmospheric emissions control, water treatment and reforestation.
- Start of re-vegetation and reforestation projects in the Northern region of Brazil (*See the "Forest protecting Forest" case on page 94*).

Consolidated environmental expenditures – 2005 to 2007

(US\$ million)



■ Costing  
■ Investment

Differences in the value of the environmental investments previously reported, are justified by the scope of this report, which follows the full GRI Boundary Protocol.

Consolidated environmental investments and expenditures per region – 2005 to 2007

(US\$ million)



■ Costing  
■ Investment

Vale Inco accounts for 95% of international spending in 2007. The remainder is referring to France, Norway and Peru. For more detailed information about the total amount of investments and expenditures for environmental protection, consult the online version of this report.



## Compliance

We believe that legislation plays an important role in environmental management, driving the evolution and incorporation of new values to be pursued, new pollution control measures representing advances in technology, and new guidelines for land occupation, etc.

Our starting point is always to act with responsibility and respect for legal environmental requirements, holding the latter as minimum standards in society's ongoing collaborative effort to overcome challenges. In addition, a preventive and environmental planning attitude provides direction to our projects, acting, in some instances, ahead of legislative tendencies or norms, in order to yield legal security to our operations and businesses, with the efficiency that a competitive market demands.

Considering the complexity of our company's operations, however, as well as the acquisition of new assets, difficulties could be faced and non-compliance issues could be corrected.

In 2007, Vale was the subject of 14<sup>1</sup> significant<sup>2</sup> actions for alleged non-compliance with environmental regulations, 10 of which were judicial in nature (actions for damage redress). The remaining four are administrative in nature (three monetary sanctions and one non-monetary). The monetary value of these processes totals US\$ 2 billion. This is based on values estimated (often overestimated) by Vale relying on the amounts demanded in the lawsuits. This total does not represent an acknowledgement of debt, since there have been no final decisions in these cases.

Two of the lawsuits were brought forth by the City of Itabira, in the state of Minas Gerais, Brazil, alleging that the iron mine operations cause damage. The company is arguing that the accusations are unfounded. There are four other lawsuits associated to the Capão Xavier mine licensing, in Belo Horizonte, Minas Gerais, Brazil.

<sup>1</sup>For the sake of data gathering in order for the 2007 Report, the lawsuits are considered relevant based on the following criteria:

a) amounts equal or above 10% of the highest fine value according to Brazilian Federal Law (R\$ 50 million); b) in view of the company's theme of interest or repercussion to the public in general, apart from the amount; c) those arising from non monetary sanctions, such as restraining orders.

<sup>2</sup>Number of related processes and values in the period from 2005 to 2007 (cumulative values):

. 2005: 10 cases totaling US\$ 1.6 bi  
 . 2006: 12 cases totaling US\$ 1.8 bi  
 . 2007: 14 cases totaling US\$ 2.0 bi

**"Vale shows real commitment with sustainable development through projects, such as, Vale Florestar, which involves social, economic and environmental aspects. In Paragominas, the company promotes employment, helping to save the forest and, making the region's furniture manufacturing complex possible. The project is an integrated effort which helps consolidate the notion that protecting the forests is an initiative that can and should bring benefits to people."**

**Adnan Demachki**, Paragominas, PA – Brazil Mayor. March, 2008.

In this case, the company maintains that it employs adequate environmental controls in all our activities and that the licensing process was conducted legitimately. In another case, in the city of Vitoria in Espirito Santo, Brazil, a lawsuit was filed in response to alleged air pollution.

In Canada, there are two environmental matters before the courts and pending final decisions. One case, a civil action, concerns alleged soil contamination connected to the Port Colborne refinery. The other matter, initiated by Ontario's Ministry of the Environment, alleges exceedances of allowable concentrations of SO<sub>2</sub> at our Sudbury operation.

We have three administrative fines imposed on Ferrovia Centro Atlântica's (FCA), which is controlled by Vale, by the Environmental Control State Agency regarding a railroad accident that occurred in the City of Itaboraí, in Rio de Janeiro. Arising out of this case, there are also two signed agreements with different public agencies. In the first case, still pending final court approval, we anticipate that the administrative fines will be cancelled and judicial process revoked. In another agreement, the company has been implementing the measures set for the conservation of the Protected Area of Guapimirim, located next to the event.

In addition, in 2006, Vale was notified for existing irregularities in the Carajás railroad fuel depot. This generated a restraining order against the fuel depot (non-monetary administrative sanction). Vale has remedied the problem and restarted operations.

In short, we are waiting for decisions in the above described lawsuits against us, as well as in the cases involving sanctions with monetary value. In many of them, we are expecting favorable decisions.

Vale's Natural Forest Reserve in Linhares,  
(ES – Brazil). The area was recognized by  
UNESCO as a "Natural Patrimony Site".







# Forest protecting Forest

A new project, the Vale Florestar Program, is already generating income, jobs and new perspectives for the conservation of the Amazon Forest

**E**nvision an area the size of two Cities of London. That is the size of the *Vale Florestar* program, which began in 2007 and is aimed at promoting the reclamation of degraded forest areas through action plans involving native and industrial forests. The project will cover 1,500km<sup>2</sup> of protected areas and will involve native trees and species, together with 1,500 km<sup>2</sup> of industrial reforestation in the southeastern region of the state of Pará – Brazil. This will represent an investment of U\$300 million by 2015.

The purpose of this project is to create a viable cycle which begins with the expansion of silviculture in the region at the same time as it works to attract forest-based industries and other associated productive activities, in addition to promoting the legalization of the land. With these initiatives, a multiplying effect is expected, creating income, jobs and taxes and improving the quality of life for local peoples. At the same time, the program will provide an orderly occupation of the land, helping to preserve native vegetation still existing in the region.



Can planting commercial forests help protect natural forests? "Of course it can." The enthusiastic answer comes from Joésio Pierin Siqueira, Professor and Doctor in Forestry Policy and Environment from the Paraná Federal University. "It's the only solution to reclaim land that has already been devastated and, at the same time, preserve native vegetation," adds the professor, who, despite not being involved with *Vale Florestar*, has acted as consultant for the company a range of projects. From his point of view, even if all Brazilians act as Amazon investigators, it won't be possible to deter deforestation unless there is an economic alternative for the production of wood. "The world, including Brazil, wants and needs timber," he points out. "So, let's plant. We have the sun and we have availability of land and technology."

With more than 25 years' experience in studies in this field, Siqueira believes that *Vale Florestar* will become a forest management model for Brazil and the world.

"The program includes all the basic actions necessary to develop the foundation for sustainable development in the region, generating wealth and social development, conserving the forest and reclaiming devastated areas," he says. "The initiative will show that it's possible to produce and conserve. Others will follow suit."

### Industrial forests

Since the beginning of activities in February 2007, Vale Florestar has carried out the planting of 41km<sup>2</sup> of industrial forests. In 2008, new farms will be incorporated and the planting will total 140 km<sup>2</sup>, while approximately 250 km<sup>2</sup> hectares will be dedicated to the recovery of native forests. The licensing process for the new areas is already under way.

"We want to streamline the implementation of the program because it is a proposal which includes a strong component to strengthen the legality of land regulation,"





Since the beginning of activities we have carried out the planting of 41 km<sup>2</sup> of industrial forests.

explains the Environmental Secretary for the State of Pará, Valmir Ortega. The main challenge in the coming years, according to Ortega, will be to create a licensing mechanism for the reforestation activities that is simpler than the existing system. "In the case of the State of Pará, this simplification could foster the legalization of the land and the implementation of a new

ecological and economic zoning strategy," he says. "We do not want to repeat the experience in the mid-southern region which replaced degraded areas with pasture and soybean plantation. We want to plant forests."

The *Vale Florestar* program proposes using half of the area for the production of lumber while dedicating the remaining area to the reclamation of native vegetation. Special attention will be given to riparian woods – essential because they protect water springs – and the ecological corridors, which connect the different forest areas. This two-pronged approach improves the prospects for reclamation and assist in the conservation and preservation of local biodiversity. Says Manoel Brum, forest engineer, "In this first year, the amount of reclaimed area was greater than the area dedicated to industrial forestry. Approximately 65% of the area was geared towards reclamation."

## Reforestation culture

Job growth has been noticeable in major cities in the region. "The same hands that once were cutting down the forest and burning them are now planting the forest," says Adnan Demachki, Mayor of Paragominas, a municipality that, along with Dom Eliseu, Ulianópolis and Rondon do Pará, comprise the area of the *Vale Florestar* program in the southern region of the state. One of the program's strong points is its capability to expand and entrench the reforestation culture as a means of generating income to the people in the



Special attention is given to riparian forests (forests that protect water sources). Linhares (ES – Brazil).

97

region. "It's not only about planting trees, but also it has enabled the installation of a furniture manufacturing center in Paragominas," adds Demachki.

In December 2007, the number of workers in the program totaled 873. Of these, 41 were Vale employees and 832 were contractors hired by partner companies. "In our agreement, we offered our employees certain benefits which go beyond those required by legislation, such as a health plan, balanced meals, and training in safety and environment," says Jacimar Zanelato, director of Enflora Empreendimentos Florestais, one of the partner companies at *Vale Florestar*.

After a difficult beginning, the businessman believes the coming years are promising. "We had problems retaining people because they were not used to working fixed jobs with fixed work hours," he says. "But now we notice that they value their job and

understand the concept of contributing to recover the forest."

*Vale Florestar* is also perceived as a model by the Brazilian Association of Producers from Planted Forest (Abraf). "Undoubtedly, it is the most ambitious and well-planned planted forests program ever developed in Brazil," claims Executive Director, César Reis. "It is socially fair and environmentally responsible."

One of the characteristics of this initiative is that Vale does not buy the land but rather fosters partnerships through leasing. The company promotes land ownership regulation and provides opportunities for landowners to remain in the region, with activities that increase the availability of timber and contribute to the reclamation of the native forest in Areas of Permanent Preservation and Legal Reservations. It's a win-win situation.



# Production

## Waste Management: awareness and responsibility

Waste management is an ongoing concern at Vale as part of our commitment to conservation of the environment. We continuously strive to minimize the generation and optimize the final destination of waste, stimulate recycling, reuse, co-processing and, finally, manage disposal in the company's own operated landfills, when other disposal alternatives have been exhausted. The companies that receive Vale's waste are evaluated in terms of meeting legal requirements and for efforts to adopt best business practices. To this end, Vale has implemented its *Programa de Gestão de Resíduos* (Waste Management Program) in our units. We are committed to ensuring that our subsidiaries and affiliated companies adopt practices that are compatible with this program.

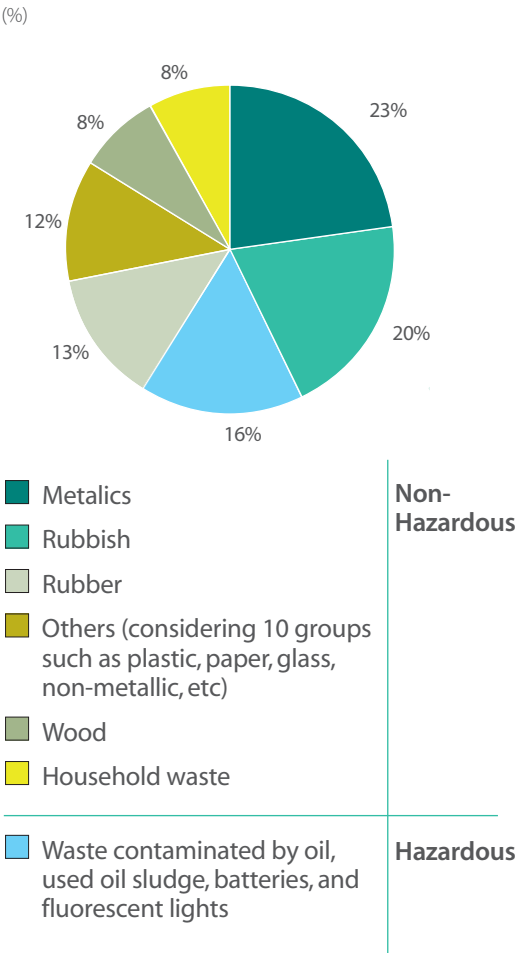
In 2007, we generated 470,000 metric tons of waste, including hazardous and non-hazardous materials. Specific waste such as tailings and waste rock are not included in this statistic as they are addressed in another section of our report.

We are committed to improving our performance in the generation of hazardous waste. One of our goals in this area is to reduce by 1% the generation of waste contaminated with oil in our iron ore, pelletizing, and logistics operations across in Brazil during 2008.

In order to improve our results in reducing waste contaminated with oil generation in these operations, we plan, to implement, among others, the following initiatives:

- To use suction pumps at engine and locomotive garages
- To improve lubricant oil filtering from locomotives and engines
- To reuse oil sludge waste to lubricate steel wires at railroads operations
- To centrifuge oil sludge waste to dewater it, to reduce volume
- To use a new bearing seal system
- To treat locomotive oil filters

Types of Waste Generated in 2007  
Vale + Vale Inco



One of the more innovative internal initiatives resulting in increased efficiency in our waste management was the consolidation of temporary waste storage through the creation of Disposable Material Centers (*Centrais de Materiais Descartados* – CMDs) in Brazil. The CMDs contribute to improving performance in waste disposal, including disposal of hazardous materials, while also minimizing the risks involved. This is achieved through working agreements with specialized companies, as well as tapping the power production potential of our waste.

Other important initiatives include partnerships formed with universities and research centers, for example, USP-São Carlos (University of São Paulo – in São Carlos), *Instituto de Pesquisas Tecnológicas – IPT* (Technology Research Institute – IPT) and *Universidade Federal do Pará – UFPA*, (Federal University of Pará) through which we finance research and development of new technologies for waste reuse. We also promote, whenever possible, the creation of waste reprocessing units in regions where our operations are located, which simultaneously increase job opportunities for the local workforce.

The high volume of non-hazardous waste generated in 2005 is largely attributable to our Waste Management Program that was being implemented at existing operational units. This program improved our inventory of waste, which resulted in non-hazardous waste from previous years being reported in 2005. Appropriate disposal of this inventory was carried out.

This program included adaptation of structures related to waste disposal and implementation of new waste management procedures at various sites.

There was an 11.2% increase in the total generation of waste from 2006 to 2007, attributable to increases in Vale's production. This figure does not include data from Vale Inco. Inclusion of Vale Inco's data for 2007 results in an additional 112,393 metric tons of non-hazardous waste and 10,301 metric tons of hazardous waste in our inventory. The consolidated data for 2007 was 470,071 metric tons of waste.

## Aggregate Volume of Waste Generated

(in thousands of metric tons)



Left: Special care with the handling of residues at Vale Inco.

Right: Mining pits restored at the Itabira Mine (MG – Brazil).



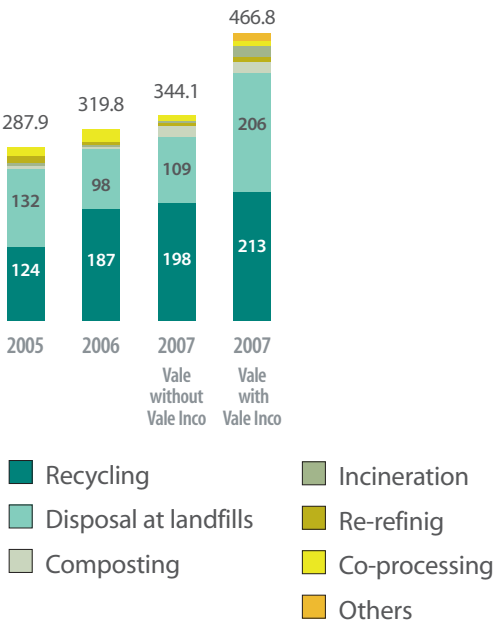
## Waste Disposal

Development of alternative destinations for waste by the company resulted in the reduction of disposal to landfills and an increase in composting. The adoption of this practice enables creation of a consistent waste processing market in the various areas where Vale is present. This result is also illustrated by the increased volume of recycling.

True to its environmental policy, Vale has sought the development of technologies that allow for the recycling and reuse of waste. Documented examples are the reuse of the rubber from tires of off-road trucks and the activities carried out at Inmetco, our central recycle unit in Pennsylvania, USA.

### Total Waste Disposal

(Thousand of Metric Tons)



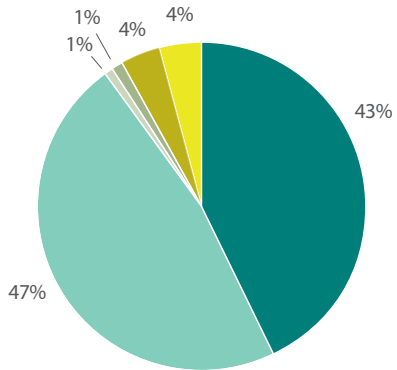
### Rubberbras

In order to solve issues related to the disposal of off-road truck tires, Vale adopted an employee's idea and developed Rubberbras, a company designed exclusively for waste processing. The company's purpose is to develop technology for shredding tires made of rubber and steel mesh in order to reprocess and convert them into lining used in transportation of ore, in transfer areas, silos, and other equipment. Before 1998, the only possible applications were the use of tires for slope holders and foundations for structures or for partitions and road signage. Both applications were limited by the size of the tires and difficulty encountered in cutting them. Despite their usage being considered adequate by the environmental office, Vale continued to seek solutions and technologies that reflected our commitment to sustainable development. This innovation was patented, along with those of Rubberbras. At the same time, our partner supplier reported a 200% increase in job creation, assisting the Itabira (MG – Brazil) economy, where the company is located.

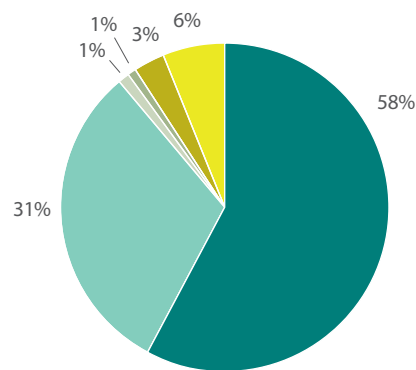
## Comparative 2005 – 2006 – 2007: Waste Disposal

(%)

2005 – 287.9 thousand  
of metric tons

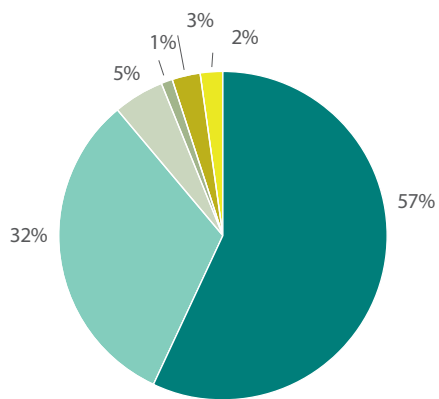


2006 – 319.8 thousand  
of metric tons

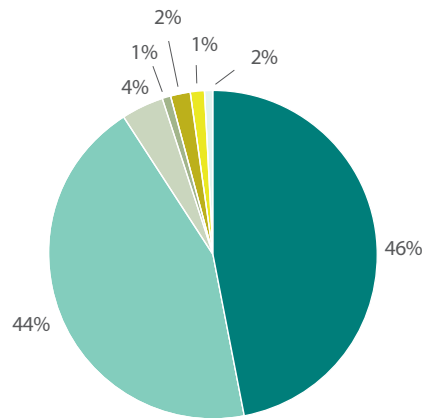


- Recycling
- Disposal at landfills
- Composting
- Incineration
- Re-refining
- Co-processing
- Others

Vale without Vale Inco 2007 –  
344.1 thousand of metric tons



Vale with Vale Inco 2007 –  
466.8 thousand of metric tons



The annual differences between the amount of waste generated and the volume of final destination is due to temporary storage.

## Ore and metallurgical waste generation

The generation of large volumes of mineral waste is an intrinsic characteristic of our industry. The main categories of mineral waste are tailings and waste rock. The volume generated is primarily connected to mineral deposit characteristics and mine production volume.

Vale maintains a specific management system for monitoring the disposal of mineral waste in tailing dams and waste rock piles. This management system is currently employed at 80 tailing dams and waste rock piles in Brazil, with plans for expansion to all of Vale's units around the world. This will allow us to consolidate information and seek continuous improvement in the management of these structures.

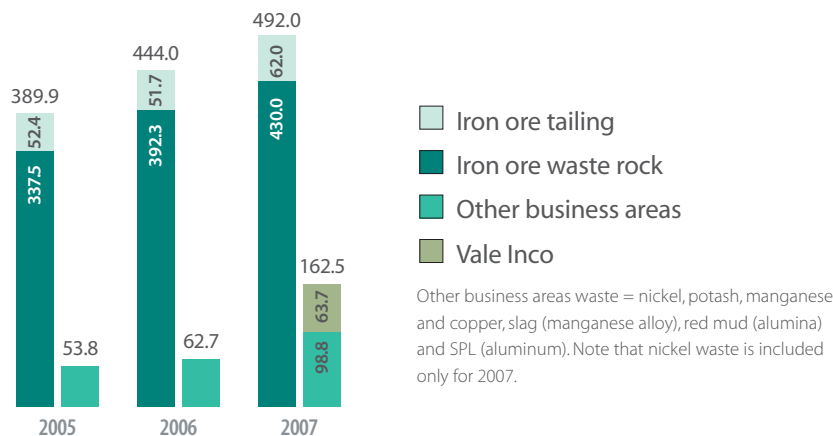
Vale's mineral-metallurgical waste is considered inert, based on the analysis of material characteristics made according to industry specific norms. The only exception is of Spent Potliner (SPL) generated in our aluminum production units in Brazil, which is classified as hazardous waste. SPL is waste generated during the production of primary aluminum due to the natural wear of the electrolytic pot. Since its generation is continuous, we have specific procedures that are designed to provide for its adequate disposal, such as internal recycling in the operational unit itself, re-direction for the manufacturing of aluminum rods or distribution to environmentally approved destinations.

In copper and nickel mines, there is the potential for leaching of metals that are present in ore and in waste rock, particularly in sulfide material, which can result in acid runoff. We are aware of this possibility and consequently conduct pre-viability and viability studies of our mines to determine the solubility and leaching potential. In the event of leaching, we are prepared to adopt environmental control measures that are aimed at the adequate treatment of effluents and their appropriate final disposal.

The chart below illustrates the year-by-year evolution in generation of our mineral-metallurgical waste, with special attention given to the waste arising from mining iron ore.

### Total mining waste

(thousand of tons)



The chart that shows SPL Hazardous Waste Generation in our aluminum production units is as the online version of this report.



## Recycling and product reuse

Generally, in the mining, logistics, and energy generation sectors, there are no recycling opportunities related to the production process. These opportunities are generally found only in the metallurgic and steel transformation phases. As a result, Vale has carried out recycling activities and product reuse only in its production stage operations.

Two of Vale's units that transform alumina into aluminum – one in the state of Rio de Janeiro – Brazil (Valesul) and the other in the state of Pará, Brazil (Albras) – utilize products from secondary metals for smelting. Valesul reinserts post consumer recycled material (aluminum cans, for example) and industrial rejects from other activities into its production process.

Similarly, Albras reuses industrial rejects in its production process. Both companies also have internal<sup>1</sup> recycling programs that reuse internal<sup>1</sup> scrap that is melted again. External reuse aims at reducing the production costs of the business, to reduce the volume of raw materials necessary for the industrial process and expand production capacity.

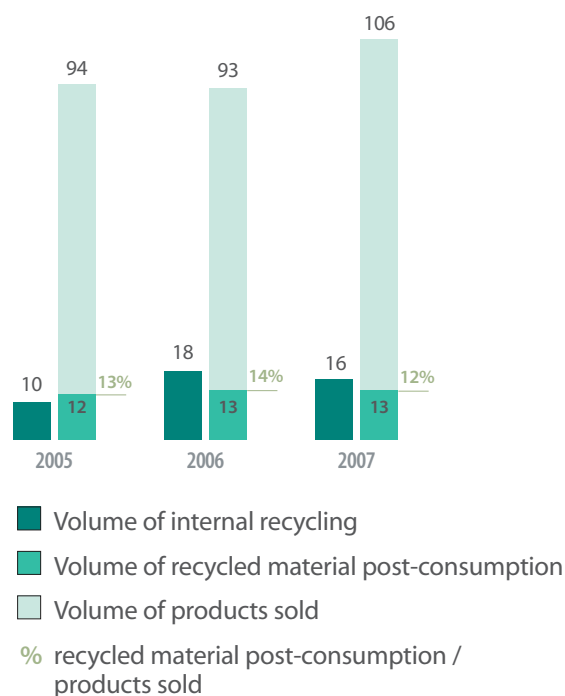
The chart takes into consideration not only post consumer recycled products, but also industrial rejects in comparison with the volume of products sold.

Vale Inco does not track the percentage of products and packaging recycled. A study about performance of the worldwide nickel industry, however, conducted by Yale University (USA) and titled *"Anthropogenic Nickel Cycle: Insights into Use, Trade, and Recycling"*, indicates that 71% of nickel entering the waste stream is recycled. It is our mid-term goal to develop and provide information regarding the percentage of recycling that occurs in our nickel operations.

<sup>1</sup> In GRI indicator scope related to material reuse (EN27 and MM4), it is required that internal recycling not be considered in the calculation of the recycling percentage.

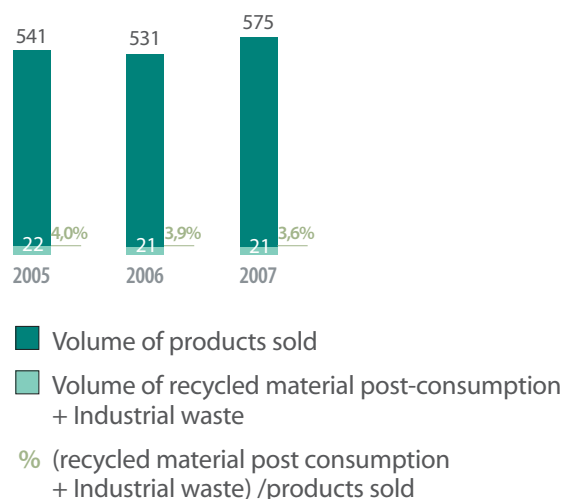
### Percentage of recycled material post-consumption used related to products sold – Valesul

(Thousand of metric tons)



### Percent of products derived from secondary material related to sold products – Valesul and Albras<sup>(\*)</sup>

(Thousand of metric tons)



\* Does not include internal recycling.

## Water

Vale, because of the nature and technology of our production process, makes intensive use of water. Vale understands that adequate water management is fundamental in order to assure the success of the sustainable development model that we have adopted.

Vale has a water resource management system that aims at ensuring legal compliance and the rational use of water resources. This system is conducted by the *Política de Gestão de Recursos Hídricos da Vale* (Vale's Water Resource Management Policy), in which general and specific procedures are detailed, in addition to the necessary organizational structure for operations. This policy was formulated to conform to Vale's Environmental Policy, as expressed in the principles stated below:

- Maintain a Water Resource Management System in a manner that ensures that our activities are performed in conformance with legal requirements.
- Develop research and incorporate technologies that are both economically and technically viable, that provide water use rationalization and minimal water resource interventions arising from the company's operational processes.
- Participate, either directly or through representative entities in different forums related to water resource management at national, regional, and local levels.

Environmental impact assessments and the implementation of new technologies are intended to allow Vale to operate in different territories while respecting the capacity to support the environment, in which we operate, conserving the ecological integrity of each region.

Vale Inco, Canada.



In order to reach this goal, we have developed various actions related to efficient water use:

- Application, in all Brazilian units, of water resource use diagnosis tools, initiated in 2006.
- A study of regional water availability, carried out in 2007, in Brazil, in the Carajás-Pará units, Ponta da Madeira-Maranhão Port Complex, and in the Tubarão-Espírito Santo Port Complex. This study was aimed at identifying the risks of non-provision and the impact of our water withdrawals, as well as at rationalization and minimization of our water impact in territories where we operate. This study is also being expanded to other Vale units.
- Development of an Environmental Information System (EIS) intended for storage of our water management data.

## Water supply

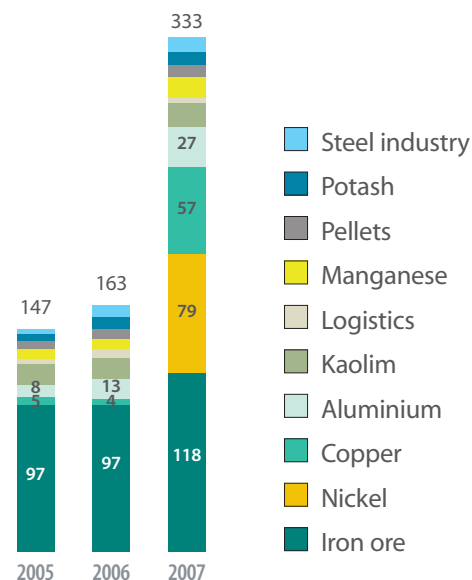
Our two business areas that require the greatest volumes of water are Nickel and Iron Ore areas. The chart below shows the evolution in the volume of water withdrawn in the last three years.

The increase in water consumption during this period can be attributed to the following:

- Inclusion of Vale Inco's data in 2007, resulting in an increase of 131 million m<sup>3</sup> from our Nickel and Copper businesses. This represents 39 % of the total water withdrawn during that year.
- An increase in iron ore and iron ore pellet production and the beginning of operations at new facilities, such as the Brucutu iron ore mine, in the state of Minas Gerais – Brazil, in September 2006.
- Intensification of the works in the Itabirite Iron Ore mines, in the South/Southeast system. With lower ore contents, this type of mineral demands, in its processing, more complex concentration actions which require greater water consumption.
- Start-up of the Paragominas Bauxite Mine operation, in the state of Pará – Brazil, in April 2007. The transportation of ore occurs through the means of a mineral conveyor, with significant utilization of water.
- Expansion of the capacity for alumina production in Alunorte, concluded in 2006, reaching 4.4 million tons per year.
- Start-up of the Ferro Gusa Carajas (Carajas Pig Iron) unit, in the third quarter of 2005, also in the state of Pará, Brazil.
- Record production levels of nine different products during 2007.

### Water withdrawals by business area

(millions m<sup>3</sup>/year)



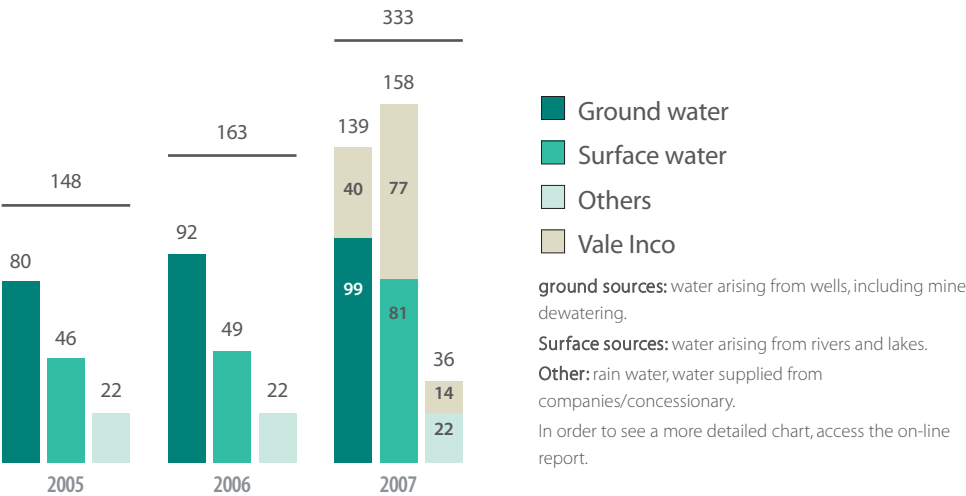


## Water Sources

Our main water supply sources until 2006 were ground and surface water respectively. With the inclusion of Vale Inco's data in 2007, our main water source has become surface water, as depicted in the chart.

### Water withdrawal by source

(million m<sup>3</sup>/year)



The rational use of water at the Brucutu Mine (MG – Brazil).





## Water use

The primary water uses in our operations include:

- 1 - Water table lowering, in order to facilitate mining activities in saturated zones
- 2 - Ore processing and transformation
- 3 - Spraying of access ways and of raw material and product yards
- 4 - Ore transportation
- 5 - Washing of parts and equipment
- 6 - Water for human consumption

## Water reuse/recycling and Water Management

Vale's basic water management guideline addresses the reuse/recycling and treatment of waste water. These guidelines establish goals regarding the implementation of programs for the reduction in water consumption and for recycling and reuse across our operational units. We have also adopted the goal for 2008 to increase by 1.5% the reuse/recycling of water resources in our iron ore, pelletizing, and logistics operations in Brazil.

In order to improve our results in increasing the reuse/recycling of water in these operations, we plan to implement, among others, the following initiatives over the years:

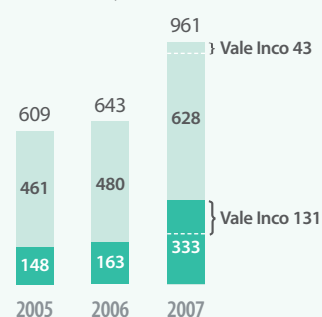
- To adopt specific Water Resources Management at Itabirito, Parauapebas and Vargem Grande mines in Minas Gerais-Brazil
- To improve water reuse at Carajas Pellet Feed Plant through specific project
- To improve Carajás thickener overflow pump capacity

Our reused/recycled water index<sup>1</sup> has remained stable at approximately 74% in the past three years, despite production increases and the start-up of operations for new units. Including Vale Inco's operation data, it reveals that during 2007, the total reused/recycled water index reached 65%.

<sup>1</sup> Calculated by dividing the amount of recycled/reused water by addition of the amount of new withdrawn water to the amount of recycled/reused water.

### Total volume of reused/recycled water + withdrawal water

(million m<sup>3</sup>/year)

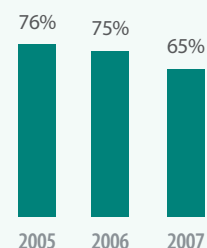


- Withdrawal water
- Reused/recycled water

**Recycled/reused water:** use of water, after undergoing a certain processing, whether in this or in another process.

### Percentage of reused/recycled water

(%)



**Recycled/reused water:** use of water, after undergoing a certain processing, whether in this or in another process.

Differences related to the water reuse figures previously reported are justified by the scope of this report, which follows the GRI Boundary Protocol, and also by methodology improvements.

Among the many initiatives that we have already developed in search of improvements in efficiency of water use are:

- Implementation of water recycling protocols and performance of water treatment station improvement work in the operating units in Ontario and Manitoba in Canada.
- Water use rationalization programs at the Sossego mine, in the state of Pará – Brazil, which have already yielded a 43% reduction in gross water collection.
- Re-circulation of mining equipment wash water at *Centro de Manutenção da Mina de Alegria*, (Mina de Alegria Maintenance Center) in the state of Minas Gerais – Brazil. All effluents generated in this activity are treated and integrated into the recirculation system.
- In 2006, we recorded a 45% reduction in consumption of water from primary supply of the Tubarão Complex Pelletizing Plant in the state of Espírito Santo – Brazil. This reduction surpassed the 40 % long term reduction goal that was established in 2003.

Concurrent with our internal efforts, we seek to contribute to water management in the territories where we operate, through joint efforts with local partners in initiatives designed to preserve and recover water springs and natural water reservoirs.

An example of these efforts is the Projeto de Recuperação e Proteção do Igarapé Ilha do Coco (Igarapé Ilha do Coco Protection and Recovery Project), in Parauapebas, state of Pará, Brazil. This initiative is a partnership with Vale and the local municipality and promotes water spring reforestation. Vale provides the necessary technical support for planting, obtains plant seedlings, and provides the specialized workforce for its implementation.

We continually pursue higher efficiency standards on the use of water (Vale Inco, Canada)



# Biodiversity

We want to ensure that ecosystems maintain their richness and diversity

## Dealing with Sensitive Areas

Our impacts are continually monitored and evaluated, either through Environmental Impact Studies at the onset of a project, or through action plans in our operations.

As noted at the table below Vale has 1,676.3 km<sup>2</sup> of operational area located within or adjacent to Sensitive Areas (Protected Areas and Areas of High Biodiversity Value). Part of this total area, 1,185.0 km<sup>2</sup> is located within Sensitive Areas (71% of the total area) while the remaining 491.3 km<sup>2</sup> is classed as adjacent to these areas (29% of the total area).

### Vale Operational Areas- Location Classification

Sensitive Areas -Type	Operational Areas - Position	Areas (km <sup>2</sup> )
Protected	Within	228.8
	Adjacent	321.5
	<b>Subtotal</b>	<b>550.3</b>
High Biodiversity Value	Within	956.2
	Adjacent	169.8
	<b>Subtotal</b>	<b>1,126.0</b>
<b>Total</b>		<b>1,676.3</b>

- Areas associated with Goro Nickel Project, in New Caledonia, are not included given that areas of high biodiversity value are still being identified.
- Vale considers Adjacent Areas as those located within a radius of 10 km from any protected area or area with a high biodiversity value, in accordance with the parameters established in Brazilian legislation by the National Environmental Council.
- The numbers in this table include officially approved and publicized future operations.
- An operational unit may be located within a sensitive area at the same time as it is classified as adjacent to another area. When this happens, we opt to count this area as adjacent also. This is done to guarantee the tracking of possible risks associated with the biodiversity of the two sensitive areas.
- Vale considers Protected Areas to be those defined as conservation units by local government. Areas with a high biodiversity value are those recognized for their important biodiversity characteristics by governmental organizations, international agencies, and non-government organizations.

The largest Vale areas within or adjacent to Sensitive Areas are in the Northern (63%) and Southeastern (24%) regions of Brazil, with small areas in the Northeastern and Mid-Western regions. The location of these operations has driven us to develop a range of Biodiversity Conservation Strategies. In the Northern region of Brazil dominated by the Amazon, the forest is large and continuous. In the Southeastern region of Brazil, the landscape is fragmented, leading the two biomes of the region, the Atlantic Forest and the Cerrado, to be considered biodiversity hot spots.

We note in particular that 58% of sensitive areas in which we operate are used for Mining Plowing and Improvement. The remaining area is used for Industrial Production and Logistics, as detailed in the table below.

### Sensitive Areas within or adjacent to Vale Operational Areas by region

Region	Operational Areas - Type	Area (km <sup>2</sup> )
North – Brazil	Protected	335.1
	High Biodiversity Rate	724.8
	Subtotal	1,059.9
Southeast – Brazil	Protected	173.9
	High Biodiversity Rate	232.9
	Subtotal	406.8
Southeast/ Northeast – Brazil	Protected	5.6
	High Biodiversity Rate	59.0
	Subtotal	64.6
Northeast – Brazil	Protected	0.5
	High Biodiversity Rate	10.0
	Subtotal	10.5
Mid West – Brazil	Protected	0
	High Biodiversity Rate	4.4
	Subtotal	4.4
Canada	Protected	20.1
	High Biodiversity Rate	4.3
	Subtotal	24.4
Australasia	Protected	0.0
	High Biodiversity Rate	105.7
	Subtotal	105.7
<b>TOTAL</b>		<b>1,676.3</b>



## Interference with biodiversity conservation

Almost all of Vale's mining operations in the Northern region of Brazil are located within the area called the Carajás Conservation Unit Mosaic in Pará State, which encompasses more than 8,000 km<sup>2</sup> of protected area. The protected areas which make up this territory are:

- Carajás National Forest
- Tapirapé Aquiri National Forest
- Itacauínas National Forest
- Tapirapé Biological Reserve
- Gelado Environmental Protection Area

Vale operations in the Northern region of Brazil represent 4.15% of these total protected area and 0.007% of these high biodiversity value areas.

Also, the Xikrim Catete Indigenous Land, which is made up of approximately 4,000 Km<sup>2</sup>, is located adjacent to the Carajás Conservation Unit Mosaic.

In the Southeastern region of Brazil, Vale owns land within the Environmental Protection Area of the Belo Horizonte Metropolitan region (capital of Minas Gerais State) and the High Biodiversity Value area of the Iron Quadrangle in Minas Gerais State. Vale's operations occupy 0.76% of the Metropolitan area of Belo Horizonte's protected land, and 0.044% of the total High Biodiversity Value area within the Iron Quadrangle.

In Minas Gerais, we have worked to protect some of the last remaining native vegetation which retains an important share of local and regional biodiversity. In that region, we own 17 Private Reserves of Natural Heritage (PRNH) and we have conducted studies to establish more efficient systems of assuring the integrity of these habitats.

In the 1950s, we acquired a total of 104 properties containing forest remains and named them the Vale Natural Reserve, which is located in Espírito Santo, also in the Southeastern region of Brazil. It is an area of about 220 km<sup>2</sup>, more than 90% of which consists of primary forest without human interference. Within this area live approximately 2,389 species of wildlife and at least 2,625 species of plant life. This area now serves as Vale's Center of Technology in Tropical Ecosystems, focusing on conservation, ecosystems restoration, reclamation of degraded areas, germplasm dissemination, and workforce building. At the Vale Natural Reserve there is a nursery with production capacity of 55 million seedlings per year, covering 800 tropical species, primarily from the Atlantic Forest. There is also an ecosystem protection system in place, operating 24 hours per day, involving protection agents equipped with motorcycles and radios to prevent and combat forest fires and discourage hunting.

Together with the bordering Sooretama Biological Reserve, the Vale Natural Reserve makes up the largest part of the Atlantic Forest at north of Espírito Santo – Brazil, totaling about 460 km<sup>2</sup>. The two reserves constitute one of the fourteen centers of high diversity in Brazil and were declared World Heritage Sites of the Discovery Coast by UNESCO (in the Espírito Santo State). Through a Cooperation Agreement signed with the Chico Mendes Institute for Biodiversity Conservation (ICMBio), Vale has been helping protect the ecosystem of the Soorotema Biological Reserve for ten years, in the same way we do on our own Reserve.

The Goro Nickel project, being developed by Vale Inco, also deserves recognition. The project is located in New Caledonia, an island recognized for its high biodiversity value. In September 2007, Vale submitted an operating application to the local authorities. As part of the environmental impact statement, a biodiversity action plan (*Plan de Sauvegarde de la Biodiversite*), was developed. Biodiversity aspects associated with the project are identified in this action plan, as well as prevention measures, management, mitigation, and compensatory options. Additionally, in October 2007, the company issued “Goro Nickel – Actions for Biodiversity Conservation” (*Demarche de Goro Nickel pour la Conservation de la Biodiversite*), which describes a general strategy regarding issues of biodiversity. During 2008, a biodiversity convention will be formalized with the government and other stakeholders.

*For more detailed information about our Brazilian operating units interaction with Sensitive Areas, consult our online report on our website: [www.vale.com](http://www.vale.com).*

Our philosophy is based on socially and environmentally responsible actions.

Below: two snapshots from Vale's Natural Forest Reserve in Linhares (ES – Brazil).



## Protected Habitats

Vale protects or helps to protect through partnerships 27 areas intended for biodiversity conservation in Brazil. Of these lands, 21 are on company properties and the other six areas are under federal jurisdiction. Most of these protected areas are located in the Amazon, while the remainder are located in the Atlantic Forest. The total of protected areas in Brazil and overseas is shown in detail in the table below.

### Protected Areas or Conservation Units which Vale protects or helps to protect in Brazil and Overseas

Unit	Location	Area (km <sup>2</sup> )	Partnership
Tapirapé-Aquiri National Forest	PA – Brazil	1,925.52	Ibama
Itacaiúnas National Forest	PA – Brazil	820.45	Ibama
Tapirapé National Forest	PA – Brazil	997.03	Ibama
Carajás National Forest	PA – Brazil	4,119.49	Ibama
Igarapé Gelado Environmental Protection Area	PA – Brazil	206.37	Ibama
São Luis Botanical Park	MA – Brazil	1.07	Vale owned
Tubarão Botanical Park	ES – Brazil	0.33	Vale owned
Cinturão Verde de Tubarão	ES – Brazil	6.13	Vale owned
Vale Natural Reserve	ES – Brazil	217.87	Vale owned
Sooretama Biological Reserve	ES – Brazil	242.50	Ibama
17 PRNH's in Minas Gerais	MG – Brazil	111.80	Vale owned
Sorowako Tropical Forest	Indonesia	1,180.00	Vale owned
Other Conservation Units outside Brazil	Canada	56.14	Vale owned
<b>TOTAL(2)</b>	-	<b>9,884.70</b>	

Ibama – Instituto Brasileiro de Meio Ambiente e dos recursos Naturais Renováveis (Brazilian Environmental and Renewable Resources Institute)

if we include the protected areas of our affiliated companies (outside of the GRI Boundary) and fragmented forest areas, we reach a total around 22,000 Km<sup>2</sup> areas that we protected or help to protect.

In the Amazon, Vale assists in the protection of areas that compose the Carajás Conservation Unit Mosaic. In the Tapirapé-Aquiri and Carajás National Forests, we have developed and implemented effective initiatives including Management Plans and activities designed to combat forest fires. This effort also applies to the Igarapé Gelado Environmental Protection Area. In the first half of 2008, we finalized the Forest Fire Prevention and Combat Plan in the Carajás Conservation Unit Mosaic, which will apply to all conservation units in that area.

Also in the Amazon, in the Carajás National Forest, Vale maintains the Carajás Zoo-Botanical Park, an area of 0.3 km<sup>2</sup>, intended for leisure and “*ex-situ*” conservation of Amazon wildlife species. In 2007, we started creation of the São Luis Botanical Park in the capital of Maranhão State in Brazil with the objective of bringing to the local population an option for leisure, culture and education while providing an example of good environmental practices. With 1.07 km<sup>2</sup> for research and the reproduction of native botanical species, this park contributes as well to the conservation and restoration of the region's ecosystems.

In the 17 PRNH's which we own in the Iron Quadrangle (Atlantic Forest), we carry out direct actions for preventing forest fires and controlling the collection of vegetation resources as well as controlling the hunting/collection of wild species across an area of approximately 112 km<sup>2</sup>. In the next five years, we intend to prepare similar management plans for all units now restricted to the Jambreiro Forest Reserve.

In the municipality of Vitória-Espírito Santo – Brazil, Vale also owns the Tubarão Green Belt, an area of 6,13 km<sup>2</sup> situated in the Tubarão Port Complex. The Green Belt separates the city's industrial areas from residential zones. The Tubarão Botanical Park which is spread across 0.33 km<sup>2</sup>. The Tubarão Botanical Park was opened to the public in May 2004 and is now a place of leisure associated with environmental education activities.

## Restored Habitats

In our restoration work, Vale follows the "Ecological Succession Principles," in which areas can be, initially, rehabilitated or restored. Diagnosis of each situation allows for the selection of the most adequate restoration techniques, as well as specific needs for land engineering.

In Brazil, since the year 2000, we have been assisting the reclamation of our areas with a pool of genetically diverse local native seeds, which stimulate re-growth and increase biodiversity. Our objective is to reproduce this technology in all our projects around the world. Examples of successful restoration processes using this technique include those in the Almas, Caeté, Riacho dos Machados and Maria Preta gold mines, and at the Piçarrão iron ore mine, all in Minas Gerais-Brazil.

## Vale's Suppressed Areas and Areas Undergoing Reclamation

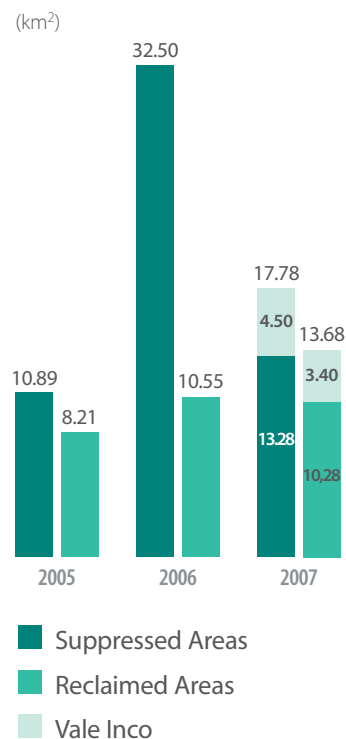
From 2005 to 2007, the suppressed area owned by Vale totaled 61.2 km<sup>2</sup>. A number higher than the total reclaimed area, which amounted to 32.4 km<sup>2</sup>. Year-to-year evolution of suppressed and reclaimed area statistics are presented in the graph below.

The gap between the size of suppressed and reclaimed areas is typical for mines in development, with large areas being plowed and used for the accumulation of tailing and waste rock. In all cases, the gap diminishes during the lifetime of the mine. Any remaining discrepancy is considered in the mine's closing analysis.



Biological research work at Vale's Natural Forest Reserve in Linhares (ES – Brazil).

### The consolidated of Vale's "Suppressed Areas" and "Reclaimed Areas" – 2005 a 2007





From 2005 to 2007, the largest land disturbances occurred in the company's Northern system of production, the region experiencing the most significant growth with the most recent mine developments. The remaining suppressed land was located in the company's South / Southeast system. Additional suppression in 2006, as observed in the graph, was related to the opening of the Bauxita Paragominas Mine, located in Pará State – Brazil, and the expansion of the Brucutu Mine, the iron mine with the greatest capacity for production in the world, located in Minas Gerais State – Brazil.

## Total Quantity of Operational Land

At the end of 2007, Vale's operational land used for mining (plowing and improvement) and production totaled 2,280 km<sup>2</sup>.

Our operational area in this case includes the quantity of land used for operations and installations of supporting infrastructure. It does not include railroads.

## Balance of Consolidated Impact

At the end of 2007, the total area impacted by the mining activities and not yet remediated (data from the 2007 active balance) reached 498 km<sup>2</sup> including data from Vale Inco.

**Table – Balance of consolidated impacted areas (km<sup>2</sup>)**

Year	Accrued balance of disturbed areas that haven't been rehabilitated yet (opening balance)	Disturbed Areas in the referent year	Rehabilitated Areas in the referent year whose final use will be decided	Accrued balance of disturbed areas that haven't been rehabilitated yet (closing balance)
2005	277.9	10.3	6.3	281.9
2006	281.9	31.2	7.4	305.7
2007	488.9	16.5	7.4	498.0

Logistics activities are not included in these values. Plowing, mine improvement and transformation, and permanently reclaimed land are included in this table. Temporary reclaimed land is not computed.

All Vale units use Mine Closure Plans which are developed during the preliminary stages of the project life cycle. As the closure of each mine approaches, the activities and adjustments identified in the closure plan are put into practice, allowing the location to return to the most natural state possible after mining activities cease. Vale provides and updates the estimated values related to the cost of rehabilitation and the closing of its mines on annual basis. These values are presented in the company's accounting statements (Form 20-F – filed with the SEC – Security and Exchange Commission – New York).



# An Environmental Attitude

The Goro Nickel Project starts operation in 2008 committed to harmonize with the environment and local communities

**G**oro Nickel SAS, a Vale Inco controlled company, has its main operations in Goro, New Caledonia, a French-ruled Melanesian insular sub-tropical territory. The project is in its final construction phase, and is almost ready to start its journey to become one of the major nickel and cobalt laterite mining and processing operations, with potential mining reserves and resources for up to 100 years.

From the first feasibility study, produced in 1993, to the construction of the industrial complex, to be completed in 2008, the project has undergone all the necessary steps to ensure the sustainable extraction,

processing and production of the mineral resources.

The Goro Nickel project plays the important role of promoting social, environmental and commercial sustainability within a very large scope, with plenty of benefits to the Goro region, the Southern Province and New Caledonia itself. This is one of Vale's key commitments.

## Water, Land, Soil, and Wildlife Conservation

The Goro Nickel project is committed to environmental conservation. All potential impacts on the environment were identified

and analyzed during the preliminary stages of the project, and the mitigation plans conceived to address them were developed in parallel. The communities were involved in each stage of such projects, so that a sustainable project could be designed and implemented.

It is widely known that New Caledonia is a natural repository for a wide array of unique and rare plant species. Since 1990, Goro Nickel has been working with researchers to determine the best way to propagate local species that were not cultivated in nurseries before. Seedlings and trees in the Goro Nickel and other nurseries are now being grown as a result of these efforts. These actions will help the preservation of species for the generations to come.

Goro Nickel's open pit mine has been designed using a series of cells. The cells will be operated for a period of time that may vary from five to seven years. The advantage of this approach is that progressive reclamation techniques can be employed. This means reclamation of the previously mined areas can occur concurrently as the next cell is being mined. Also the amount of disturbed area is kept to a minimum. Moreover, as part of the mining cycle, all the topsoil is stored and will be used for future remediation projects.



Kanak communities on a visit to the Goro Project.

Water preservation deserves and receives no less attention. The project will utilize waters pumped from Lake Yaté, and will recycle 60% of the quantities pumped.

As part of the water management program, all rainwater that may come into contact with the process waters and the waste collection areas, will be also collected and treated. After analyzing several alternatives, it was established that these waters, which are similar in composition to sea water, will be discharged in the Havannah Canal after treatment, in compliance with the French and New Caledonian standards. Monitoring systems and mitigation plans were also developed to conserve and take care of the marine and fresh water ecosystems.





The Goro Project is based on the promotion of sustainable development, through the responsible and conscientious use of the environmental resources.

Process effluent remains will be discharged in the ocean, at a distance of 4 km from the coast, after treatment. This location was selected due to specific conditions such as currents, tides and the ocean depth. A highly-controlled monitoring system was devised to validate projections that forecast no adverse effects on the marine environment as a consequence of such discharges.

Since rainfall occurs at a relatively high rate per year, a significant effort must be made to control the flux of sediments from the mining areas to the adjacent water bodies. A series of sedimentation ponds have been constructed to control the suspended solids content of the run-off.

The mine has already installed three large main basins; as the process plant and construction continues, forty other decantation basins will be constructed. Both periodic and continuous sampling will occur to monitor discharges. All other auxiliary facilities such as the conveyor system and port area will also have dedicated water management and control system.





We believe we have a co-responsibility in the search for the sustainable development. New Caledonia.

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The project's port located in Prony Bay has been equipped with all the emergency response equipment necessary in case of accidents. One of the operational plans is aimed at ships entering the port area when there are whales in the vicinity. This protocol ensures that proper actions such as avoiding the whales and reducing speed are implemented.

Finally, the protection of air quality is equally important for the Goro Nickel project. There are 17 gas-cleaning units designed to remove particulates and metals from the air flows. The location and height of the stacks were selected after plume and air dispersion models identified the most ideal location.

As well a comprehensive system to control emissions at the source, Goro Nickel has installed five continuous air monitors located close to sensitive ecosystems. Goro Nickel proposes to utilize the environmental standards developed in Australia which are more strict than European requirements because of the type of vegetation.

## Goro Nickel: Sustainable Development

It is worth mentioning that Goro Nickel's goal is to have local community members assume the majority of the direct employment opportunities, once mining operations reach capacity. It is also a goal to work with local suppliers.

The success of the Goro Nickel project is rooted in promoting the sustainable development of a business centered in the responsible and respectful use of the environmental resources and focused on the preservation of peoples' traditions and on the improvement of quality life for the aboriginal population.

# Energy

## Energy growth and efficiency

Energy, in its diverse forms and origins, is essential to Vale's businesses. Our energy management system is developed on two levels. At the operational level, each business unit is responsible for the search for efficiency, establishing unit consumption targets in accordance with its production processes and improvement opportunities. At the corporate level, the Energy Department, in collaboration with the operations, directs energy consumption management, providing strategic solutions for Vale's energy needs, mapping consumption, sources, and alternatives to ensure a sustainable supply.

The energy issue has been increasingly present in our decisions, not only in relation to cost but also for the climate change implications of energy consumption. As such, we are on the lookout for opportunities to use alternative fuels and are increasingly determined to find solutions to improve our energy efficiency.

In this context, various areas of Vale have been developing projects with the purpose of identifying opportunities to improve the energy efficiency of our equipment and work processes. The expected result is decreased power consumption and reductions in production costs that will contribute to increased competitiveness for our company.

In railway logistics, power efficiency is measured daily by monitoring of fuel volume consumed and the weight and distance traveled on the railway (TKU – ton per useful kilometer). The importance of energy efficiency is reflected in a number of our procedures for railway operations including fleet replacement, maintenance of permanent paths, preventive maintenance of rolling stock, an increase in the number of rail cars, use of the railway operation simulator, use of distributed locomotives, etc.



In our unit in Sudbury, in Canada, we have implemented the *Powerplay Program*, which, in its five years of existence, has reduced total power consumption by 10%, even with an increase in production, thereby generating savings of approximately US\$60 million (*for further details on this program, see the "It's Powerplay!" case*).

At the end of 2007 Vale's energy matrix including relevant statistics from Vale Inco, is comprised primarily of direct energy inputs (64% of the total). Electricity (indirect energy) makes up the remaining 36%. The chart below, which identifies the number of inputs per category, further reveals that a great part of our electric energy (89%) comes from hydro sources, minimizing emissions of greenhouse gases.

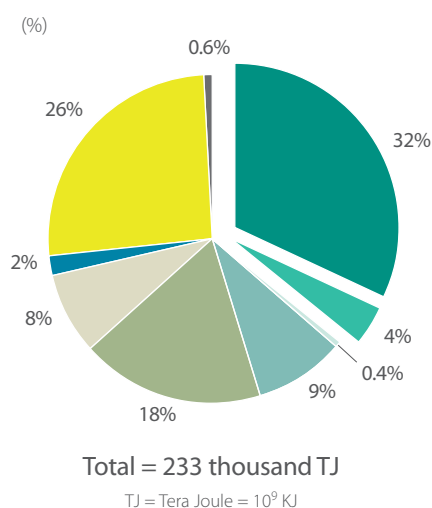
In 2007, our total power consumption as depicted above reached 233 thousand Tera Joules.

Since 2004, when the first tests were performed, Vale has been investing in biodiesel technology, aimed at the eventual replacement, or partial replacement, of other inputs, such as traditional diesel. In 2007, after having performed various field tests, in partnership with Universidade Federal do Rio de Janeiro (UFRJ) and licensing by the regulatory agency, Vale started to use a biodiesel mixture in several units in Brazil, particularly in railways and units for mining and processing of iron ore.

In these cases, we used two levels of biodiesel blends: B2 (a mix of 2% pure biodiesel and 98% diesel) and B20 (20% pure biodiesel and 80% diesel). The chart below illustrates the consumption of B100 (100% pure biodiesel).

In January 2008, the use of biodiesel became mandatory in Brazil through legislation requiring all diesel sold to contain 2% pure biodiesel.

### Vale's Consolidated Power Matrix



#### Indirect Energy

- Hydroelectric source
- Thermal source

#### Direct Energy

- Biodiesel (B100)
- Mineral coal
- Diesel
- Natural gas
- Charcoal
- Fuel oil
- Kerosene

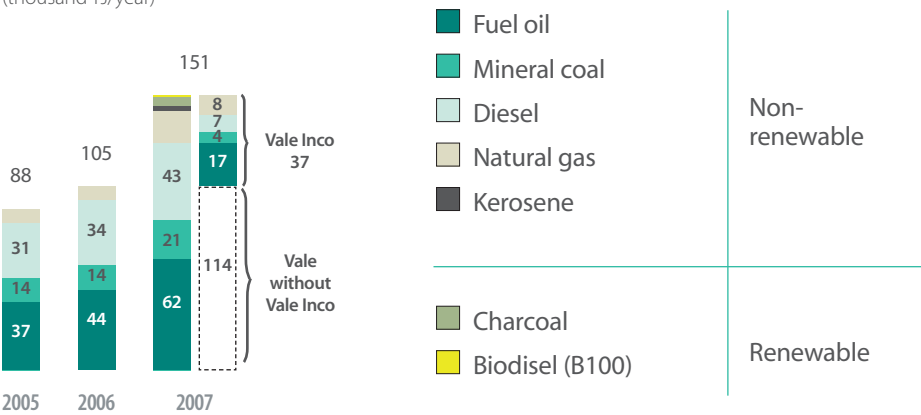


## Consumption of Direct Energy

The increase in fuel consumption presented in the previous chart is attributable to the following factors:

### Aggregate Consumption of Fuel Inputs

(thousand TJ/year)



- The formal adoption of data pertaining to Vale Inco in 2007, accounting for 24.4% of this year's total
- An increase in production during this period in various business segments

In Brazilian units, fuel oil consumption grew significantly from 2005 to 2006 as a result of the expansion of aluminum oxide production. From 2006 to 2007, we observed an increase in charcoal consumption and natural gas use, and, as previously mentioned, we began the effective use of biodiesel blends. This change was aligned with our strategy to replace non-renewable fuels with renewable and/or cleaner fuels, while considering fuel market availability.

It should also be noted that charcoal used was for the production of pig iron at our Carajás Pig Iron Unit. This charcoal originates, in its entirety, from certified reforested wood. This initiative results in 1.07 million tons of avoided<sup>1</sup> CO<sub>2</sub> equivalent emissions.

<sup>1</sup> Comparative numbers, in the event that the fuel used was coal, and not considering methane emissions in the carbonization process of charcoal.



## Indirect energy consumption

The evolution of the consumption of electricity bought or produced by Vale in the period of the Report is shown below.

The increase in electric power consumption shown above is attributable to the following:

- The integration of Vale Inco data in 2007, responsible for 24% of this year's total
- An increase in production during this period in various business segments

During 2007, we consumed 81,900 TJ or 22.7 TWh of electric power, 24% of which was produced by Vale itself, primarily through our own hydroelectric plants and participation in hydroelectric power consortiums, and 3.5% through our fuel oil electricity plants.

Vale is working towards the installation of the Barcarena Thermoelectric Plant in Pará State – Brazil. This plant will have a capacity of 600MW (5.2 TWh) and will produce enough energy to provide 23% of Vale's current electricity demand. Construction of this plant will introduce to Vale's matrix the use of coal for energy generation. Expected consumption is approximately 1.7 million metric tons of coal per year.

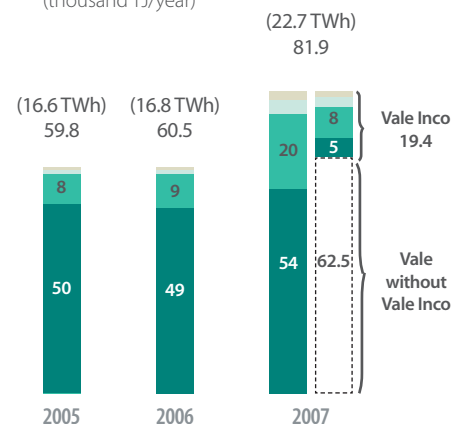
The Barcarena Thermoelectric Plant has a range of components that promote environmental sustainability. These include: the use of tangent burners, which emit less NOx; use of a closed circuit water system, maximizing the reuse of water; installation of electrostatic precipitators and a desulphurization unit, reducing, respectively, emissions of particulates and sulfur into the atmosphere; and the use of clean coal technology relying on high quality coal with a low sulfur and ash content.

Besides generating energy, the Barcarena Thermoelectric Plant will bring greater reliability and flexibility to the Brazilian National Interconnected Energy System (SIN), particularly in the Northern region of Brazil. It will be possible to use the energy available from this system to feed the region's industry, as well as meet other local demands, particularly during droughts when the hydroelectric system is forced to operate at lower capacity.

The Barcarena Thermoelectric Plant will also benefit the community by directly and indirectly increasing the level of employment in the region. The energy made available by this development may be used to facilitate other production activities in the region which could result greater employment and income. Today, lack of energy is one of the main reasons for limited development in the region.

### Aggregate Consumption of Electric Power

(thousand TJ/year)



- Purchase – Hydroelectric source
- Production – Hydroelectric source
- Purchase – Thermal source
- Production – Thermal source

1: Production-Thermoelectric Source – Brazil: CADAM/Alunorte;  
International: PT Inco/JINCO/VBNC/RDME.

2: TWh – Tera Watt Hour = 10<sup>9</sup>Kwh.

# Climate Change

## Facing climate issues

Aware of our role on the matter of climate change, Vale recently developed our Climate Change Corporate Guideline. Its general principles are described below:

- We understand that the issue of climate change is of fundamental importance to the environmental, economic and social sustainability of the planet, and that it can affect our business activities.
- We recognize the existence of scientific evidence of global warming, and that this is directly related to the increase in the concentration of greenhouse gases (GHG) in the atmosphere associated with human activities.
- We believe that the effects of climate change impact on the ecosystems of our planet and, as a consequence, on the economic activities in territories where we operate.
- It is our understanding that climate change can have implications for our strategic plans, and that, therefore, actions should be undertaken to evaluate the risks to business and comparative advantages, minimizing vulnerabilities and maximizing opportunities.
- It is our understanding that coal and other fossil fuels will continue to have an important role in the global energy matrix, and that there is a need to strive for balance between energy security and climate security.

Mongolia.



- We consider the development and dissemination of technology fundamental aspects for dealing with climate change.
- It is our understanding that we must monitor the evolution of the national and international milestones of climate change in the process of development, assess the implications for our businesses and engage with policymakers.
- We are committed to participating in the global effort seeking the stabilization of the concentration of greenhouse gases in the atmosphere at acceptable levels, employing our best efforts, according to the regulations in force and aligned with these guidelines, and promoting coordinated actions in all our operations in order to attain this objective.
- With respect to confronting climate change, our principal focus of action in the territories in our area of influence will be related to its effects on physical infrastructure, water availability and biodiversity, as well as on the local socio-economic conditions.
- We have been tracking and managing our greenhouse gas (GHG) emissions since 2005, and recognize that the nature of our industrial activity and the size of our operations results in significant emissions of GHG.
- The terms included in this guideline reflect the current level of scientific knowledge about climate change. Based on the evolution of scientific knowledge and regulatory milestones, this guideline will be updated, with a view to establishing a long-term policy that is compatible with the challenges represented by this topic.

Climate change is an issue of increasing relevance to our company. We understand that to face this issue effectively, action by civil society, corporations and governments are necessary. Only with an integrated effort will we manage to overcome the challenge set before all citizens today: to attend to the current need for development without compromising the well being of future generations.

As a result, we are focused on developing strategies that contribute to the reduction of greenhouse gases, going beyond the constant search for reductions in fuel consumption while continuing to produce high quality iron ore, which helps reduce energy consumption and CO<sub>2</sub> emissions from the blast furnaces of our clients in the iron and steel industry.

Additionally, as an integral part of our corporate Climate Change Guidelines, Vale has established a wide-ranging set of globally coordinated measures, with the objective of attaining standards of excellence in our actions regarding climate change by 2012. The Vale Carbon Program is based on five fundamental principles:

- 1 - Strategic evaluation of the impacts of climate change on business, and capacity building across the company to operate in the new competitive environment.
- 2 - Support for and introduction development of initiatives for reducing GHG emissions and promoting the sequestration of carbon dioxide.
- 3 - Cooperation and partnership for research and development into technologies and the implementation of mitigation and adaptation measures in the territories where we operate.
- 4 - Engagement with governments and other companies in the private sector to monitor and contribute to the preparation of the regulatory milestones necessary to develop climate change responses.
- 5 - Transparency and continuous improvement.

Vale has already been developing initiatives for this purpose. During 2006, we began the assessment process for greenhouse gas reduction opportunities and development of projects aligned with the Clean Development Mechanism (CDM), recognizing that the carbon market is an important instrument in climate change mitigation. Some examples:

- Implementation of a perfluorocarbon emission reduction project in Albras, our aluminum production company in Pará State – Brazil.
- Fuel switch from oil to natural gas in some of our iron ore pelletizing plants in Brazil.
- Substitution, since 2007, of a part of our diesel for biodiesel in the locomotives operating on some of our railways.

We also have developed various forest conservation initiatives. These initiatives are detailed in the Biodiversity chapter. Additionally, Vale has developed a pioneer project, called *Vale Floresta*, to support Amazon Biome reclamation and the promotion of sustainable practices in the region. Through this initiative, we intend to promote the reclamation of 3,000 km<sup>2</sup> of degraded land outside our areas of operation by 2015, through a socially and environmentally sustainable model (*to learn more about this project, see the case "Forest protecting forest" on page 94*).

The company has also participated in recent editions of the Carbon Disclosure Project<sup>1</sup>.

## Vale's Consolidated GHG Emissions – Current View

Vale's Greenhouse Gases Inventory for years 2005, 2006 and 2007 has been developed using the calculation guidelines defined in the document "Greenhouse Gas (GHG) Protocol: A Corporate Accounting and Reporting Standard – Revised Edition" from the WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development). The methodology described in the IPCC 2006 GNGGI – Guidelines for National Greenhouse Gas Inventories was adopted in the preparation of the calculation protocols.

The inventory was produced according to the top-down approach. The calculations of the emissions, however, were elaborated for individual business units, using carbon material balance and/or emission factors for the generation of electricity in the countries where business units are located, as available. The following emissions sources were considered:

<sup>1</sup> Global report, formulated throughout the world by institutional investors with the purpose of refining and publicizing information about companies listed on the FT500 ranking concerning their climate change policies and strategies for reducing environmental risks in their operations. The FT 500 Ranking includes the 500 largest worldwide companies in market capitalization and is published by Financial Times.



### Scope 1: Emissions from direct sources:

- Consumption (burning) of fossil fuels (coal, natural gas, fuel oil and diesel);
- Emissions associated with non-fuel input, contained in:
  - Ferroalloy production process
  - Aluminum electrolytic reduction process
  - Burned pellet production process
  - Use of explosives

### Scope 2: Emissions from indirect sources

- Electric power consumption deriving from the distribution network

Emissions associated with contractors (Scope 3) are not a part of the current inventory. However, Vale has established a partnership with the Carbon Disclosure Project in order to collaborate on the Supply Chain Leadership Project (SCLC), an effort to improve the criteria for the quantification of Scope 3 emissions, avoiding double-counting and seeking consistency, transparency and comparability.

The inventory methodology followed the stages below:

- Identification of the sources of emission of GHG and system of data collection
- Selection of the calculation methodology for the GHG emissions and selection of the emission factors
- Application of the calculation tools: results

The “Green Belt” around the Tubarão Port Complex, (ES – Brazil).



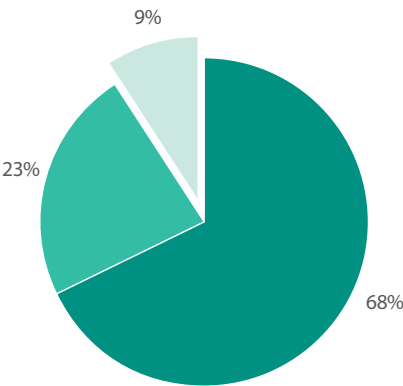
Greenhouse gases considered significant in terms of absolute emissions (tones/year) for the type of activity conducted by the company were included in the current inventory. These gases include: CO<sub>2</sub> (Carbon Dioxide), CH<sub>4</sub> (Methane)<sup>1</sup>, N<sub>2</sub>O (Nitrous Oxide), and CF<sub>4</sub> and C<sub>2</sub>F<sub>6</sub> (perfluorocarbons).

The chart below illustrates Vale's standings at the end of 2007 relative to the total of our greenhouse gas emissions in all of our units worldwide.

Aggregate Emissions of GHG – 2007

(%)

- Direct emission – fuel inputs
  - Direct emissions – non fuel inputs
  - Indirect emissions – buying electricity
- Total = 15,22 million tons of CO<sub>2</sub> Equivalent



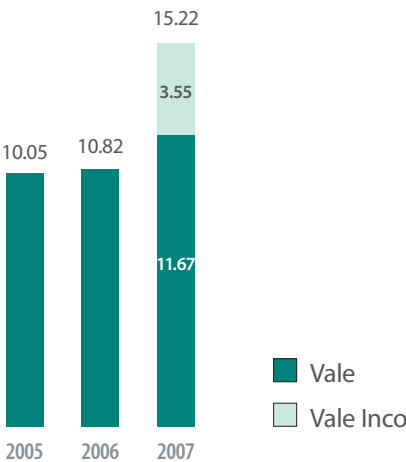
As expected, emissions represent the smallest portion of our total. This is due to extensive use of hydro across Vale's global operations which does not generate significant GHG emissions.

Evolution of Vale's Aggregate Emissions of Greenhouse Gases

The chart below represents the evolution of Vale's emissions in terms of CO<sub>2</sub> equivalent. As with other indicators, data from Vale Inco was incorporated for 2007, resulting in the addition of 3.55 million tons of CO<sub>2</sub> equivalent, or 23% of 2007's total emissions.

Development of Emissions

(million tons of CO<sub>2</sub> Equivalent)



<sup>1</sup>Methane emissions from the charcoal carbonization process at the Carajás Pig Iron Unit were not considered.

Generally, the increase in our emissions observed during the last three years is attributable to increases in production as well as the incorporation of Vale Inco data beginning in 2007.

Aware of this increase, and consistent with the Vale Carbon Program, we have developed additional initiatives to contribute to understanding of the climate change issue and the reduction of our greenhouse gas emissions. There are two recent initiatives which have already shown substantial progress in 2008:

- The signing of an agreement with the National Brazilian Institute of Space Research (Inpe). Through this agreement, a detailed study is being conducted, (over the course of 18 months) concerning the impact of climate change on the Amazon region. Effects on water availability, river and ocean levels, temperature, and the consequences of these effects on economic activity and the region's social and environmental dynamic will be evaluated.
- A contract for the creation of the Energy Technology Center (CTE), in partnership with the National Economical and Social Development Bank of Brazil (BNDES). The Center will be located in São José dos Campos, in São Paulo State – Brazil. Its objective will be to stimulate and increase the energy efficiency and flexibility of various production processes. Research for the creation and/or improvement of equipment such as turbines to use alternative energy sources such as ethanol, biodiesel, biogas, and cleaner forms of coal will also be supported. Vale and BNDES will invest US\$ 150 million in the Center during its first three years.

“Socio-environmental responsibility is increasingly becoming instrumental for private companies. Among the various initiatives that a modern company should adopt to assume this responsibility, its position concerning climatic changes should be highlighted. Responsibility should be towards controlling or reducing emissions and also contributing to the reduction of vulnerabilities on a national and global scale. INPE and Vale started an unprecedented study of the impact of climatic changes in the states of Pará and Maranhão, seeking to identify vulnerabilities in all sectors (biodiversity, agriculture, water resources, coastal regions, renewable energy and economy). This partnership will foster investments in research and technologies to mitigate and adapt to climatic changes and develop know-how to guide Vale in its socio-environmental responsibility initiatives.”

**Carlos Nobre**, Climatologist of the Center for Weather Forecasts and Climatic Studies (INPE). April, 2008.







# It's *Powerplay*!

Building awareness about energy conservation, Sudbury's *Powerplay* program has reduced the operation's GHG emissions and generated US\$ 60 million in savings as well as plenty of motivation

A "powerplay" occurs in ice hockey when one team has a man advantage – and an exciting scoring opportunity. Given the passion Canadians have for their national game, *Powerplay* seems the perfect choice as a name for Sudbury's operation-wide energy conservation program.

Introduced in 2001 to reduce costs and combat global warming, *Powerplay*, along with earlier programs, has attained significant results.

During a period that saw production increase by 20%, the program has helped cut energy consumption by 10% – realizing an actual energy savings of 30%. Cost savings have also been significant. In total, the *Powerplay* program has reduced the operation's energy bill by US\$ 60 million. "The outcomes have been rewarding," says John Lemay, Energy Manager, Canada & UK Operations and one of the creators of *Powerplay*. "And we are looking forward to even better results in the future."

## Searching out new energy solutions

The *Powerplay* initiative started when Sudbury's energy coordinators expressed a belief that much more could be done to save energy. In response, the operation's Energy Department developed a plan that encouraged coordinators to work with dedicated teams as well as individuals to search out new solutions for energy conservation.

With the support of the company's senior leadership, a multi-functional team was formed in 2000, comprised of Sudbury's energy coordinators and members of the operation's Public Affairs Department as well as outside communications consultants. Subsequently, representatives from all Sudbury units – Garson, Frood, Stobie, Copper Cliff North/South, Creighton and McCreedy mines, Clarabelle Mill, the Smelter and Copper Cliff/Port Colborne refineries – were intensively trained on *Powerplay*. A thorough communications campaign was also launched to provide all employees with detailed information about the new program.



Representatives of all units were trained and qualified on the Powerplay Program.

"Our communications strategy not only helped us introduce *Powerplay* but also made the program widely popular," notes Lemay. Indeed, employee involvement in *Powerplay* has been considerable. In the first year, some 500 employees put forward 650 ideas to reduce energy consumption.



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Powerplay's success can be credited to the strong participation of the employees.

## Generating fresh air efficiently

Ward Warren, Senior Maintenance Technologist at the Stobie mine knows first-hand how simple solutions can greatly reduce energy consumption. "We operate underground mines and generate fresh air for our workers using a system of 75 to 100 horsepower ventilation fans," he explains. To optimize ventilation – and cut energy consumption – the Stobie Maintenance team devised an automatic control device, which turns off ventilators when they are not necessary. "People always remember to turn on any given device, be it a light or ventilator, but they never remember to turn them off when they are no longer needed," says Warren. "The new monitoring device does that automatically." Another simple solution implemented at Stobie was to schedule activities with higher consumption demands to periods of the day when energy is cheaper.

## Raising awareness

The benefits of *Powerplay* are more than economic. Without question, the program has helped to raise employee awareness about the consequences of energy waste to our planet. "Before the program, the concern was focused mainly on the cost," says Warren. "Now, I notice that our people are increasingly connecting high energy consumption with the issue of global warming. What's more, they are interested in being part of the solution."

With the goal of building on success, *Powerplay* is about to go a step further. "We aim to reinvigorate the program and increase the awareness level among our people," says Lemay. "Our dream is to see energy conservation as valued within our organization as safety is now."



# Territorial Development

The potential of each territory

We seek to contribute not only as economic agents but also as promoters of social and environmental sustainability, citizenship and stakeholders engagement







A program supported by Vale and the Pará Government stimulates labor and income generation (PA – Brazil).

**A**ware that we can have significant impacts as a result of our business, Vale incorporates economic, social and environmental responsibility considerations into our business strategy. Our relationship with society in the regions where we operate is based on transparency through ongoing dialogue and respect for each people's culture.

We believe that the participation of all our stakeholders is fundamental for regional sustainable development.

## Vision of Vale's contribution to sustainable development in the regions where it operates

- **Compliance with legislation:** Compliance with all legal obligations is fundamental to our business practices.
- **Mitigation of negative impacts:** We are committed to attaining a sound knowledge of the impacts and consequences of our business in order to invest in actions that go beyond legal obligations.
- **Maximization of positive impacts:** We are also committed to maximizing the positive effects of our operations, such as generating employment and purchasing local goods and services.
- **Territorial sustainable development:** We pursue a sustainable development strategy that identifies a region's talents and needs, establishes short, medium and long-term action plans in consultation with local partners, and strives to achieve economic diversification, social promotion and environmental conservation.

This Vision has led to the implementation of tools that, year after year, are improving the management of social, economic and environmental impacts and are contributing to regional sustainable development.

Utilizing this tool, our plan is to move towards the construction of a global integrated approach to sustainable development in the territories where we operate. In partnership with local stakeholders, we aim to fully understand present realities and future possibilities, including historic, cultural, demographic, economic and environmental aspects.

## Tools for impact management and promotion of territorial development

The main objectives of impact management for Vale's developments are: mitigation of negative impacts; maximization of positive impacts; continuous improvement in our relationships with communities; and participation in local and regional projects. The responsibility for the management of socio-environmental impacts belongs to all employees. However, specific programs are the responsibility of the departments and operational areas with which they are connected.

- **Front-End Loading (FEL)** – Besides economic and engineering analysis, the methodology assesses health, safety, environment and the relationship with communities during all stages of the development of new projects. Sustainability issues are consequently inserted in the formulation process of new projects as well as the decision-making about investments.
- **Social Dialogue** – Communities have a direct channel to Vale's operational areas during all stages of projects and operations. We have a large and qualified team responsible for communication with neighboring communities, trained to establish and promote continuous dialogue and reinforce ongoing engagement. Through the closeness and constancy of relationships, we are able to identify and deal with issues that are relevant to individual communities in an efficient, flexible and transparent manner.

Volunteer Day in Sabará  
(MG – Brazil).



- **Management of Environmental Impacts** – As previously mentioned, Vale maintains an Environmental Management System (SGQA) which establishes guidelines and goals, monitors environmental performance and provide tools to manage environmental aspects.
- **Socio-Economic and Environmental Impact Management Program** – In 2006, the Socio-Economic and Environmental Impact Management Program, which uses a methodology developed in partnership with Agência 21, an independent consulting company specializing in sustainability strategies, was created and implemented as a pilot project in the Brucutu Mine expansion. It is a participative program that engages community leaders in the analysis of impacts and mitigating actions (*see the case “Conversation is the key of understanding” on page 139*). The outcome of the pilot study was positive and allowed the systematization of the process in the form of a guide, which can be used in other projects.
- **Professional Qualification** – The actions in this area aim to increase the qualifications of the local workforce, as well as the percentage hired, both for Vale’s projects and for the employment market in general.
- **Development of Local Suppliers** – This initiative acts to enable and encourage local companies and entrepreneurs to become suppliers to mining, railroad and port operations, thereby contributing to local sustainable development.
- **Mine Closure Guide** – This determines, for the operational areas, the guidelines that must direct the closing and decommissioning of mines. While the Guide deals primarily with environmental aspects, Vale is studying the inclusion of social and economic aspects in this tool as well.
- **Program for the preservation of local culture** – This program, which is meant to appeal to everyone from traditional communities to artists, encourages local and regional initiatives of valuation, revitalization and preservation of cultural assets.
- **Integrated Management Plan** – By sharing knowledge about the territorial diagnostics with local stakeholders and working in partnership with them to develop action plans, we strengthen the positive effects of Vale’s investments in the daily activities of neighboring communities.

Vale will gradually apply this planning expertise to all our global operations. However, our companies also have specific practices aligned with corporate initiatives. Vale Inco, for instance, maintains its own policy, adopted by all its business-units.

In general lines, this policy determines:

- active participation in the socio-economic development of the communities;
- joint operations with stakeholders to improve knowledge of the economic, social and environmental impacts of their activities;
- adoption of best practices and technologies directed to control environmental impacts;
- engagement of the various stakeholders for an open and transparent dialogue in a joint search for sustainable development.







# Conversation is the key to understanding

The expansion of the Brucutu Mine brings change to two cities and provides additional opportunities for dialogue

Ever since Vale began the expansion of the Brucutu Mine, in São Gonçalo do Rio Abaixo, in the interior of Brazil's Minas Gerais State local lifestyles have been changing quickly. While this sudden development may have caused surprise among younger people, many older residents expected nothing less!

A humorous popular belief in São Gonçalo is that the city would only grow when the wooden rooster adorning the top of the church came down to drink water. In March 1999, according to José Ribeiro, one of the oldest residents in the city, this actually occurred. A windstorm knocked over the rooster who landed with his beak stuck in the wet ground.

Only eight years later, development is evident in the town of 8,500 inhabitants. Public works are transforming the streets of São Gonçalo. The House of Representatives is ready to inaugurate its first building, a cultural center that opened in 2007. Meanwhile, all municipal public schools have been reformed, a Senai (Serviço Nacional de Aprendizagem Industrial – National Service for Industrial Learning) unit prepares future employees to work for Vale, and youths who desire a college education no longer need to leave the city to study. This has been possible since the installation of the campus of Universidade Presidente Antônio Carlos (UNIPAC).

Left: the town of São Gonçalo do Rio Abaixo (MG – Brazil).

Growth opportunities within the city are a reality. Strengthening of the education system is considered a symbol of change for the future prospects of the city's youth.

Not long ago, the city's agricultural economy offered little work and educational alternatives. Today, Ribeiro, 72, is a living witness of previous days. When he turned 18, he moved to Rio de Janeiro and returned only after retirement. "Young people today may not be ready to work in the best job positions at Vale, but our little ones will be," he says. "Then the city will have a different youth."



The Brucutu experience hallmarks the change in the way Vale relates to the communities.

## Barão de Cocais faces challenges

Neither Ribeiro nor anyone else in São Gonçalo could imagine that the popular belief about the rooster would also apply to neighboring cities, especially Barão de Cocais. Expansion work for the Brucutu Mine increased its iron ore production capacity from 7 million to 30 million tones per year, causing significant transformation in Barão de Cocais.



Despite the fact that the mine is not located within its municipal boundaries, Barão de Cocais has received benefits such as the creation of new jobs, technical training and hiring of young people from the region. Additionally, development of local trade and the installation of a large automotive dealership, a supplier of Vale that moved to the city, were fostered by Vale.

The impacts of a large development such as Brucutu, however, are not only positive. "Brucutu was a well-planned project from a technical standpoint," recalls Silmar Silva, Director for ferrous metals at Vale. "Nevertheless, the concern for neighboring cities could have been greater. When I arrived here in 2005, in all meetings I had with the authorities in Barão de Cocais, I could feel there was a certain negative opinion towards Vale."

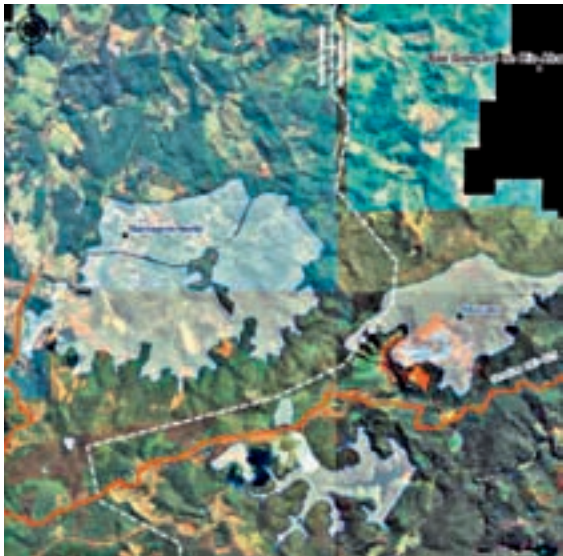
The largest impacts to Barão de Cocais emerged from the 6,000 men who worked in the construction of the project. Most of these men were lodged in the city, which in those days had better infrastructure than São Gonçalo. The sudden increase in population, although temporary, brought significant challenges. Even the motel in the city was adapted to house the workers and garages became dormitories.

The population increase resulted in problems related mainly to health, transportation and safety services. The lack of dialogue between Vale and the community increased difficulties. Sueli Mourão, Communications Secretary in Barão de Cocais recalls, "We would call Vale and not achieve anything. We couldn't talk to the contractors either. Nobody was accountable for the chaos which took over our town."

To reverse the situation detected in Barão de Cocais, Vale conceived an investment plan aimed at the region's development.

## Change in attitude

Relying on the support from the Vale Foundation, the company started to deploy an impact management strategy and to prepare a Sustainability Plan for the two cities. The initiative also relied on support



With the support of Vale's Foundation, the company started the Impact Management activity and elaborated an Action Plan on Sustainability.

from Vale's contractors, such as Agência 21, which specializes in the development of sustainability strategies and Phorum, which is headed by economist Paulo Haddad, former Treasury and Planning Minister, and which prepared a study about the economic impact in the region. "The arrival of large companies such as Vale always causes structural problems in small towns," explains Haddad. "A joint effort is required from all stakeholders in order to reduce this impact."

In order to reverse this situation in Barão de Cocais, Vale prepared an investment plan to support growth in the region. Nonetheless, throughout the process, the company realized that many of the suggested solutions involved investing in dialogue rather than large expenditures in infrastructure.

This change in company attitude started from the inside out, beginning with the process of raising employee awareness, especially of a specific team, dedicated to maintaining a public dialogue with the community. This team took part in joint solution groups, comprised of company representatives, local citizens and authorities, who debated the difficulties the cities were experiencing. These groups sought viable solutions for the existing social impacts in the city.

Vale assumed responsibility for the overall impact resulting from our arrival and operations, discussing with the population the responsibility for the pre-existing problems. In support of these meetings, several specialized studies were conducted to assess each issue. Traffic problems caused by the increase in the number of vehicles from the company, for example, were mitigated with the help of outside consultants. These experts suggested actions such as switching the right of way of certain streets, relocating bus stops from certain points and changing the route used by trucks. The changes were implemented with funding from Vale.





Conversely, a study indicated that difficulties experienced in the local hospital were pre-existing and suggested solutions that needed to be adopted by the local government. “We changed from sources of impacts to driving agents for solutions,” explains Silmar Silva.

In São Gonçalo do Rio Abaixo, opinions differ when it comes to blaming Vale for the difficulties faced today. “We have problems such as the increase in violence, drug abuse and modern habits,” explains schoolteacher Beatriz Stella Blonski, director of the recently inaugurated Cultural Center. “But these were not brought about by Vale. These are problems associated with progress.”

## Northern Dam

The Brucutu experience marks a change in the way Vale relates to communities. Today, company actions are proactive and participative. We are committed to open dialogue, transparency and the search for joint solutions. The efficiency of this new way of engaging with our communities was confirmed in the project for the construction of

the *Barragem Norte* (Northern Dam), which will receive tailings from nearby mining operation, allowing the increase of the useful life of operations in Brucutu.

During the construction of the Northern Dam, the largest setback was the occupation of the residential dwellings church lands and a cemetery in the township of Brumadinho, in the district of Cocais. As the latter is a holy place for the community, relocation of the church to another area was not well accepted. Based on a participative dialogue process and understanding community pleas, Vale changed the project reducing the number of houses that required relocation. Nevertheless, the area where the church and the cemetery are located will have to be used.

“We were able to put off the flooding of the church to the year 2020, enabling us to have more time to plan together with the population other viable alternatives,” explains the Planning Manager for the Brucutu Mine, Joaquim Pedro de Toledo.

Above: the town of São Gonçalo do Rio Abaixo (MG – Brazil), seen in a new angle.



## Integrated Management Plan of the Regions

The identification of our indirect economic impacts was improved by socio-economic diagnostics. These studies, as previously mentioned, are being conducted by independent specialists using a specific methodology that allows the comprehensive identification of the most important socio-economic direct and indirect socio-economic impacts, both positive and negative in the regions where Vale operates. The objective is to fully understand the local reality in order to better understand how Vale might best contribute to integrated regional planning and development.

Each diagnostic has, as its goal, the construction of an integrated approach to the region, which takes into account the present reality and, in some cases, a vision of the future. As a result, each study considers the historic, demographic, economic, social (education, health, public safety, social protection, organization of the local governance structure, and municipal management) and urban dimensions.

In the period from 2005 to 2007, we finished our diagnostic in the following Brazilian regions: southeast Pará; Quadrilátero Ferrífero, in Minas Gerais; Greater Vitória, in Espírito Santo; and center-south of Rio de Janeiro. In Peru (Bayovar Project) and in Mozambique (Moatize Project), our efforts focused on social and cultural aspects.

In our various projects, Vale has traditionally promoted several direct positive impacts in the communities where we operate, such as:

- professional qualification
- generation of direct employments
- increase of public income through taxation
- hiring of services and products from local suppliers
- investments in infrastructure



Through the diagnostics, we also identified and quantified the main positive indirect impacts of Vale's projects. These include:

- increase in production, employment and wages in the non-mineral sectors, due to generation of higher income (income effect)
- increase purchase of inputs and increase of the municipal tax collection originated from other sectors
- qualification of local workers
- qualification of suppliers
- improvement of infrastructure

The experience accumulated by Vale shows that we have the means to multiply these positive impacts through initiatives that prioritize local purchases, share knowledge with communities and support development with social investments in infrastructure and services.

In the case of southeast Pará, for example, according to the socio-economic diagnostic, mining has had a positive effect on other economic sectors. It has also been possible to calculate the capacity increase of the municipal tax collection in the region, showing that it would be feasible, with supplementary federal income integrated with PAC resources (Brazilian Federal Government Program for Growth Acceleration), to defray the present deficit of infrastructure and public services, as well as to increase assistance to the population resulting from demographic growth (vegetative and migratory) projected up to 2010 (*see the case "Transformation needed" case on page 43*).

On the other hand, we have also identified and quantified the most important negative direct impacts, such as:

- environmental impacts such as atmospheric emissions, dust and noise, among others
- interference with the use of the land
- risk of accidents

We have also registered indirect negative impacts, such as:

- accelerated population growth due to the attraction that job opportunities generate in regions with significant unemployment rates
- pressure on existing infrastructure and the increasing demand for public services
- increase in housing cost, especially in remote areas

As of 2008, the Socio-Economic Diagnostics performed will be supplemented with environmental analysis employing a comparable methodology and depth. These new studies will add environmental information to the socio-economic vision, assisting regional development planning as well as the conservation of environmental assets.



In the studied areas, with the local communities, we have already started the development and implementation of Integrated Management Plans. Each plan starts from the information and analysis of the socio-economic and environmental diagnostics and takes into consideration the information obtained in diagnostics presentation meetings held with local authorities, trade associations and community leaders.

These plans foresee the engagement of our stakeholders and investments geared to meet the needs of the region and mitigate the negative impacts of our operations. Among the actions anticipated are projects for infrastructure work, housing planning and training of local workers and suppliers.

## Social investments

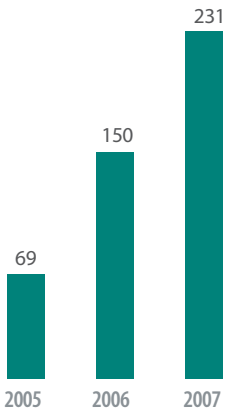
Our strategy for the development of the regions where we operate is supported by our ability to generate and distribute wealth. This is achieved through direct and indirect mechanisms such as payment of taxes, wages and benefits, and purchases of goods and services, as well as social investments in projects that benefit our local communities and social programs.

The social investments carried out by Vale include education, culture, income generation, and incentives for social capital strengthening through Vale Foundation Programs, sponsorships and donations. In the last three years the total amount of Vale social investments was in excess of US\$ 450 million.

Among our social investments, our those directed to improvement of infrastructure and support to public services. Between 2005 and 2007, the amount exceeded US\$140 million, as illustrated in the following table.

### Total social investment<sup>1</sup>

(US\$ million)



		2005	2006	2007
	Total US\$ thousand	9,076	31,896	99,232
By type	Support to public services	4%	7%	6%
	Infrastructure	96%	93%	94%
	Total	100%	100%	100%
By manner	Pro bono	1%	9%	14%
	Trading engagement	-	19%	13%
	Materials/Products	99%	72%	73%
	Total	100%	100%	100%

**Infrastructure** – road paving, school and hospital construction, etc.

**Support to public services** – Investments through payment for costs such as hiring nurses, teachers, etc.

**Materials/Products** – investment for providing services or for product delivery, such as ambulances, roads, schools.

**Pro bono** – investment made through activity developed on behalf of the public. It can be the allocation of people during work hours, for instance, management of the sanitation company.

**Trading Engagement** – activity that benefits the public but primarily generates economic or profit benefit to the company investment. An example would be the construction of a road to enable the transportation of production).

## Sponsorship

Vale's sponsorship policy is the responsibility of our Communication department. Sponsorship projects are available by category on Vale's website. Those eligible to tax relief laws are listed separately. Sponsorship approval takes into consideration the adequacy and relevance of projects.

<sup>1</sup> Any difference from numbers previously publicized is due to the scope of this report, which follows the GRI Boundary Protocol.

# Vale Foundation

The Vale Foundation aims to contribute to the development of the areas where we operate, benefiting the people and communities, while respecting the local cultural identity. We promote the causes we believe in: improving quality of life; fighting illiteracy; promoting quality education for all; encouraging access to culture; contributing to the enhancement of public service management; and increasing of work and income opportunities. All these causes are reflected in our programs and in our work.

This commitment motivates us to get to know each region and its people, habits, needs and opportunities. To achieve our objective, the Vale Foundation promotes the in-depth studies (socio-economic diagnostics) that reveal the reality of the areas where we operate. These thorough and complex studies guide us in the construction of long-term efforts, implemented in partnership with various levels of government and civil partners and are aimed at contributing to the identification and solution of prioritized matters from each region.

## Focus on People

We are developing Human Development Agencies – civil society organizations of public interest (OSCIPI) which are local reference centers designed to support our programs in an integrated fashion. The Agencies focus on youth training and improvement of access conditions to labor market and income generation.

Each Agency also contributes to the individual training of children and youth through sports, which help to shape values and universal attributes such as discipline, respect, dedication, strength to overcome problems and feelings, – as well as music, dance and arts.

## Helping Improve Quality of Life

The main objective of the Vale Foundation is to improve the quality of life in our communities. Our diagnostics map the challenges and priority needs of each region. These studies help support the preparation of the Socio-economic Integrated Management Plan whose actions are implemented in partnership with local authorities, civil society and private initiatives. Through partnerships, we work to create conditions to assist each community in developing its capability and talent in social, environmental and economic areas.

## Partnership

Our programs and actions are developed in partnership with Non-Governmental Organizations, government (local, state and federal), private initiatives and communities. Such alliances help develop the transforming potential of individual regions. Specialized third party institutions systematically assess and monitor our programs, thereby illustrating the commitment of Vale Foundation to achieving tangible social results.

## Programs

To achieve such results, we work mainly on six fronts, developing long-term programs. These include:

Education	Health	Citizenship	Work and Income	Culture	Local Development
<ul style="list-style-type: none"> <li>• “Escola que Vale” (Vale School)</li> <li>• “Trem da Vale” (Vale’s Train)</li> </ul>	<ul style="list-style-type: none"> <li>• “Vale Juventude” (Vale Youth)</li> </ul>	<ul style="list-style-type: none"> <li>• “Educação nos Trilhos” (Education on Tracks)</li> <li>• “Trem da Cidadania” (Citizenship Train)</li> <li>• “Vale Alfabetizar” (Vale Literacy)</li> </ul>	<ul style="list-style-type: none"> <li>• “Cultura em Rede” (Network Culture)</li> <li>• “Rede que Vale” (Vale Network)</li> </ul>	<ul style="list-style-type: none"> <li>• “Novas Alianças” (New Alliances)</li> <li>• “Museu Vale” (Vale Museum)</li> <li>• “Vale Música” (Vale Music)</li> </ul>	<ul style="list-style-type: none"> <li>• “Programa Vale Mais” (Vale Plus Program)</li> <li>• “Programa Voluntários Vale” (Vale Volunteers Program)</li> </ul>

More information about Vale Foundation programs and partners available in our website [www.vale.com](http://www.vale.com).

## Local workforce

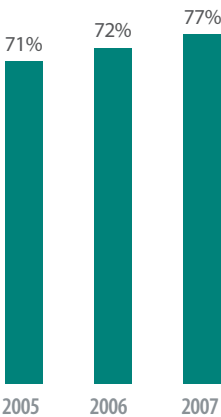
Local employment generation is one of the most important ways we maximize direct economic impacts in our communities. Hiring local residents is strategic for the sustainable development of the company and of many of the regions where we operate.

In general, in the Brazilian units of Vale, hiring local residents is a common practice, provided that the candidate fulfills all job requirements. Hiring of local residents also takes place in specific situations, such as in the case of our nickel operation in Newfoundland and Labrador (Canada), where the Inuit and Innu local communities and our company developed a mutually beneficial Impact and Benefit Agreement (IBA).

In Brazil, the average number of local residents hired has increased significantly in recent years. In 2007, it reached 77%, an increase from 71% in 2005. This growth reflects the social development of the regions where Vale operates. Particularly, it represents enhancement in the educational level and improved qualification among the local workforce. We contribute to this development through several educational initiatives carried out in partnership with schools, universities and other local teaching institutions.

### Employees from local communities Vale Brazil

(%)



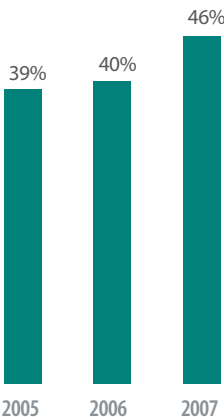
Employees' data used represents 84% (2005), 87% (2006) and 75% (2007) of LA1 data (Total workforce by employment type, employment contract and region).

The graphs contain data for Vale operations in the Brazilian states of Minas Gerais, Pará, Maranhão, Espírito Santo and Rio de Janeiro (approximately 90% of Vale's total employees in Brazil).

Data for projects and former MBR not included. Vale Inco carries out monitoring in Newfoundland and Labrador (Canada).

### Proportion of Management Positions\* held by Local Community members – Vale Brazil

(%)



\*Management Positions – Refers to Executive Directors, Directors, General Managers, Area Managers and Coordinators.



Concerning leadership positions, Vale encourages our employees' professional development and growth in order to increase the number of our people qualified to hold management positions.

Given that in certain regions of Brazil the qualification of the executive market is still under development, the percentage of local leaders hired is smaller than the percentage of local employees in general.

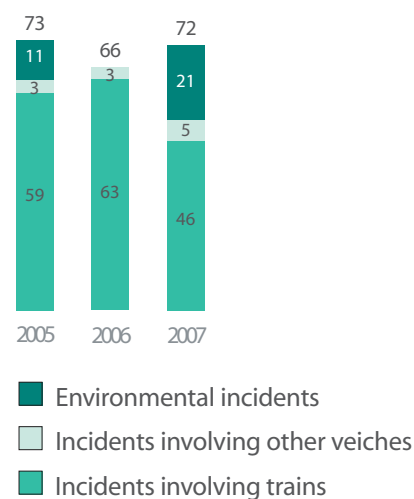
## Incidents: prevention and solution

Preventive actions, constant monitoring, and developing new solutions related to different types of occurrences that affect people as well as the environment are relevant aspects of Vale's relationship management with communities. Our company is committed to operating transparently and mitigating risk. As well, we strive to act quickly and in partnership with the community to address concerns.

To manage this aspect, Vale keeps a registration and follow-up system to deal with occurrences, allowing us to understand the risks, create prevention mechanisms and reduce the impacts of occurrences. Concurrently, we develop educational and awareness programs so that the entire community can participate in prevention efforts, act as agents of solutions, and help identify opportunities for improvement.

The evaluation of the incidents which occurred in the three previous years show that we still have a great challenge regarding accidents that involve railroads in Brazil.

### Total number of significant incidents

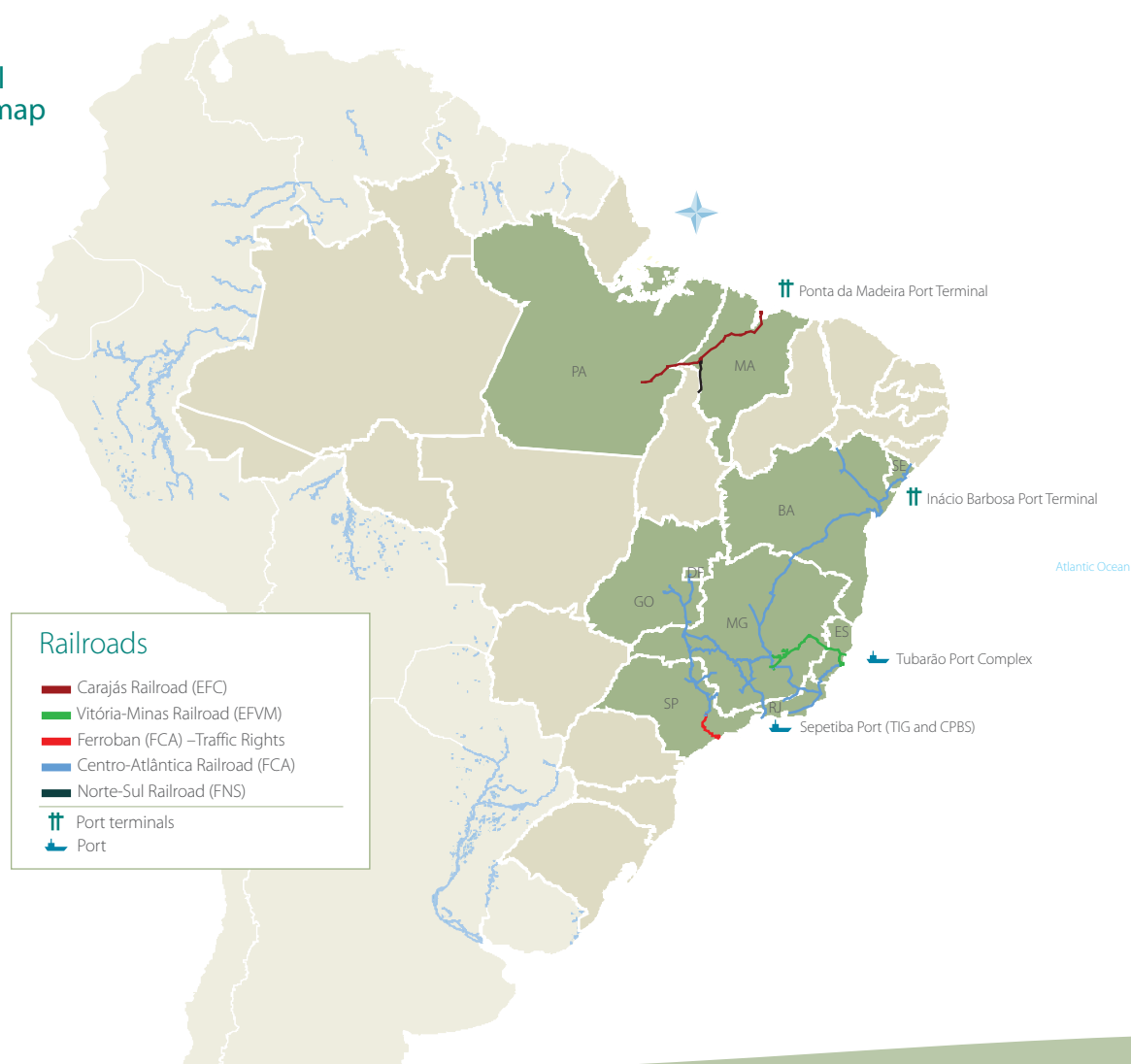


Significant incident: refers to incidents leading to individual, collective or environmental losses.

Two snapshots of the Vitória-Minas Railroad – Tubarão (ES – Brazil).



## Vale Brazil Railroad map



Vale operates a rail network of approximately 10,000 kilometers in Brazil. The railroad tracks run through nine states, and almost 400 hundred municipalities. In several places, communities have grown near the railroads. As a result, we consider it essential to involve the local population and authorities in addressing the risk of injury around our railroad operations. Our company has already taken action on this front. Initiatives include:

- Mapping review of all intersections of Vale's three railroads, with the objective of identifying engineering solutions such as pedestrian road crossings, overpasses, tunnels and bypass of cities.
- Actions carried out together with authorities to increase the safety area and monitoring around railroads to reduce the risk of accidents.
- Partnerships with public agencies in order to intensify patrols near the railroads, especially during popular festivals when the flow of people in the intersections increases.
- Inclusion of railroad safety issues in traffic study weeks and in the school activities of communities near the railroads.

- Educational campaigns, which strengthen and give continuity to the projects “Olha o Trem” (Look out for the train), “Cidadania nos Trilhos” (Citizenship on the Rails) and “Educação nos Trilhos” (Education on Rails), aimed at the communities neighboring the railroad areas. The public recognition of these efforts came when the Company was awarded with the Aberje National Award (Brazil), in the “Communication with the Community” category, in 2005 and 2006.

The noise from train whistles has been singled out by some communities as a major nuisance. However, this is one of the safest ways to prevent railroad accidents since it announces the approach of trains providing the necessary warning. In order to deal with the complaints triggered by the safety procedure, Vale has a noise control program, and has been studying ways to alter the form and times of the whistle blows.

Vale strives to prevent environmental incidents, primarily through the use of environmental management systems at each unit. Efforts to prevent, register and handle incidents are integrated into these systems and are also contemplated in relationship management with communities.

Results to date suggest that the strategy has been successful. Nevertheless, we acknowledge that there is room for improvement, both in the areas of prevention and development of incident solutions.

Control room at the  
Vitória-Minas Railroad  
-Tubarão (ES – Brazil).

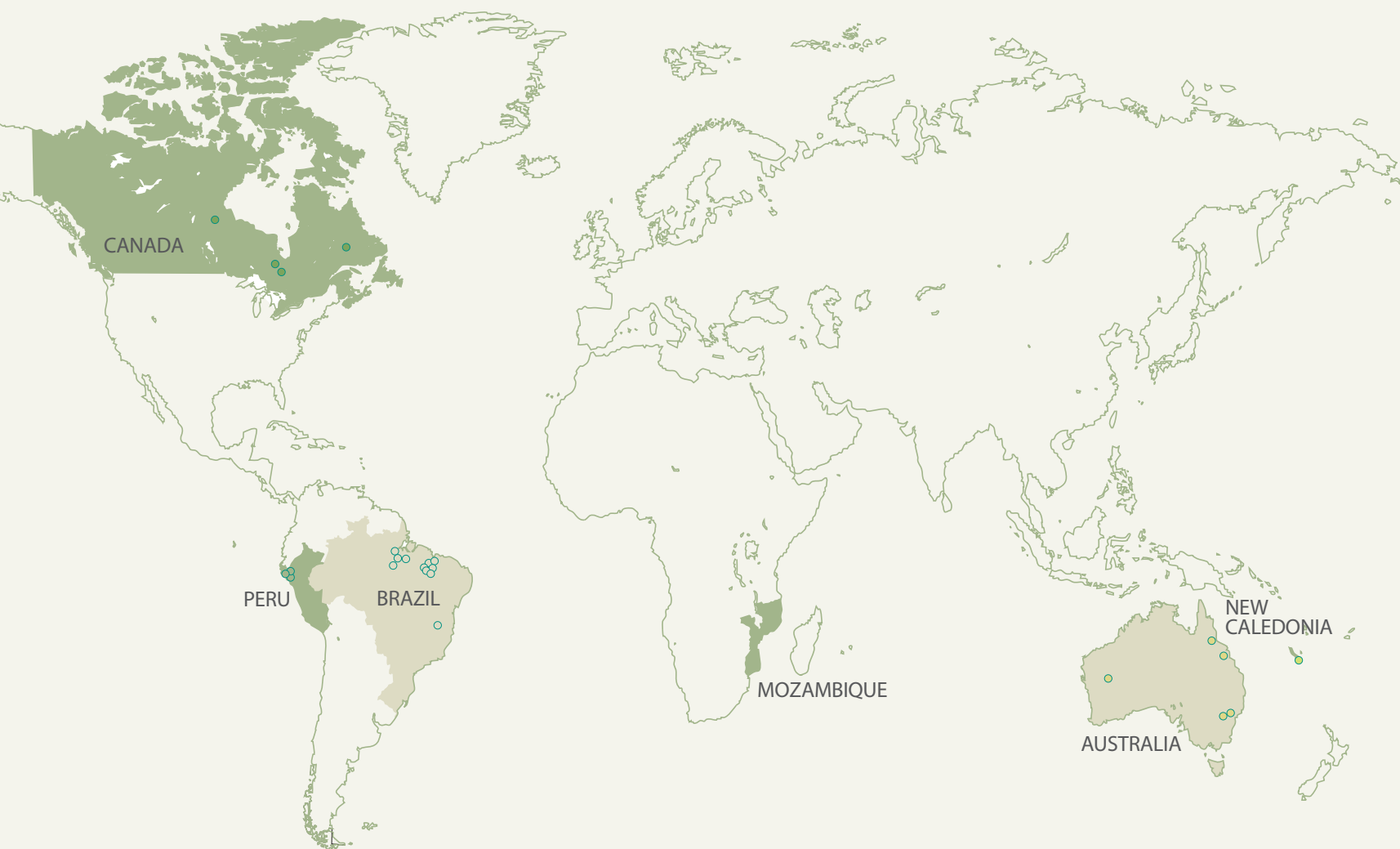




## Indigenous Communities

Each year we have worked to enhance the dialogue with indigenous communities that are located in the regions where we operate in order to encourage their development in harmony with Vale's operations. Through medium and long-term agreements we try to construct a relationships that are positive, constructive and based on mutual confidence. This practice, which is adopted worldwide, is based on the idea that the understanding between parties is a constant challenge that should be beneficial for all involved.

### Indigenous Communities with which Vale has established relationships



One of the most important results of this practice is the positive relationship we maintain with the Gavião Parkatêjê community (Hawk Parkatêjê community), in the state of Pará, Brazil. It started during construction of the Carajás Railroad and has evolved remarkably in recent years (*see more details in the case “In the nest of the Gaviões (Hawks)” on page 157*).

## Australia

Regions	Indigenous group
Coppabella and Moranbah south-east of Moranbah	Barada Barna Kabalbara & Yetimarla #3 (BBKY #3) and Barada Barna Kabalbara & Yetimarla #4 (BBKY #4)
New South Wales	Mutawinji Local Aboriginal Land Council e Tibooburra Local Aboriginal Land Council
New South Wales: (Hunter Valley)	Combined Council of Hunter Valley Aboriginal Corporation Lower Wonnarua Tribal Consultancy Pty Ltd Ungooroo Aboriginal Corporation Upper Hunter Aboriginal Corporation Upper Hunter Wanaruah Council Wanaruah Custodians Wanaruah Local Aboriginal Land Council Manaruah Nations Aboriginal Corporation Wattaka Wannarua Cultural Consultancy Service Yarrowalk Wanaruah Culture Heritage Giwirr Consultants Hunter Valley Cultral Consultants Valley Culture
Queensland: (central or north-east Queensland)	Barada Barna Kabalbara Yetimarla People Wiri People
Western Australia	Wongatha Claimants North East Independent Body Widji Native Title Claimant Group Central East Native Title Claimant Group Central West Native Title Claimant Group Gubrun People

## Brazil

Municipality	Indigenous group
Bom Jardim – MA	Guajajara
Bom Jesus das Selvas – MA	Guajá, Guajajara
Bom Jesus do Tocantins – MA	Gavião
Buritcupu – MA	Guajá, Guajajara
Marabá – PA	Xikrin
Moju – PA	comunidades quilombolas do Jambuaçu
Ourlândia do Norte – PA	Kayapó
Paragominas – PA	Tembé, Timbira, Urubu Kaapor
Parauapebas – PA	Xikrin
Resplendor – MG	Krenak
Santa Luzia – MA	Guajá, Guajajara
São João do Carú – MA	Guajá

## Canada

Ontario	North American Indians, Métis, Inuit
Manitoba	North American Indians, Métis, Inuit
Newfoundland&Labrador	North American Indians, Métis, Inuit
Mississauga, Ontario.	North American Indians, Métis, Inuit

## Mozambique

The great majority of Mozambique’s population have roots in the territory of this country. The relationship between Vale and the local communities is based on dialogue and respect for the local culture.

## New Caledonia

Noumea	Kanak
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## Peru

Cajamarca	Comunidad Campesina
Piura/Sechura	Comunidad Campesina San Martin de Sechura

Between 2005 and 2007 no cases involving violations of indigenous rights by Vale employees were registered. However, in Brazil, four lawsuits related to traditional communities' rights were filed against our company, as outlined in the following table.

Year	Community affected	Ground of Action	Position in December 2007
2005	Quilombolas from Moju (PA-Brazil)	Possible environmental damages caused by the construction of an ore conveyor	Being analyzed by the Federal Public Ministry
2005	Krenak Indigenous Community (MG)	Possible damages caused by the construction of the Aimorés Hydroelectric Plant (Eliezer Batista)	Parties initiated studies for an agreement and the process was temporarily suspended.
2006	Tembé, Tembé Mariquita and Urumatéia Indigenous Communities (PA)	Request for renewal of the Cooperation Agreement that deals with financial investments to the communities	Parties await for the Intimation to be published, in order to make public their position.
2007	Xikrin do Cateté and Djúdjêkô Indigenous Communities (PA)	Checking of supposed impacts of the Carajás Iron Mining activities	The process is presently being judged by the Brazilian Justice Dept.



### Rights preserved

The negotiation with the Innu and Inuit who live in communities surrounding our Voisey's Bay operation (Newfoundland and Labrador, – Canada), took seven years and helped strengthen the relationship between our company and the local aboriginal peoples during construction of the Voisey's Bay Nickel Company (VBNC) facility. For two years, this operation has been dedicated to the exploration and processing of nickel, copper and cobalt.

Since the beginning of the project, aboriginal rights have been recognized. The commitments made have been respected and are part of the operation's routine. More than half of Voisey's workforce of 450 employees at its mine and mill is composed of members of the local community.

“The problems caused by the arrival of large companies in any region are the footprint of development. Since there is no development without unbalance, Vale began partnerships with specialized consulting companies in order to go beyond legislation. This attitude has already become an ideological commitment of the corporate culture in both management and staff. Currently, we can say the idea of sustainability is truly a part of Vale’s institutional mission”

**Paulo Haddad**, Former Minister of Treasury and Planning, Brazil. March, 2008.



## Involuntary resettlement practices

For the development of activities related to mining, logistics, power and other projects, Vale acquires land and, when other approaches are not possible, promotes resettlement. In all land acquisition and resettlement activities, we try to establish amicable agreements.

Our company tries to adopt practices in line with recommendations of the World Bank and their Operational Directive on Resettlement. This document deals with land acquisition and resettlement, recommending actions to avoid social and economic impacts and providing guidelines for any necessary resettlement activities.

Between 2005 and 2007, resettlement took place in ten Brazilian municipalities. A total of 621 homes were displaced, 90% of which were re-established consistent with the practices recommended by the World Bank.

Actions carried out during this process included: meetings with communities and social services; monitoring of resettled families; indemnifications; analysis of the families' profile to improve access to education programs and; income generation with the assistance of the Vale Foundation.

Our aluminum business, with operations in Pará, was responsible for the largest number of displaced homes: 489 households located on the thoroughway of the bauxite pipeline connecting the municipality of Paragominas to Barcarena, both in the state of Pará. This total represented 79% of the resettled homes in the period, work that was performed according to the World Bank's recommendations.

Vale has improved our management aimed at aligning all our operations with the best international practices in regard to resettlement. In the area of iron ore, for example, our company is already developing practices in line with World Bank standards, such as: provision of appraisal reports from qualified companies; provision of real estate history including relevant statistics; technical justification from the unit; and letter from the property owner stating the level of desired compensation.

### MINAS GERAIS

**5 resettlements and 35 residences**

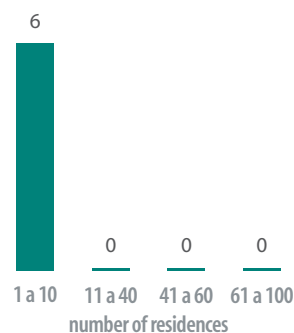
(number of resettlements)



### MATO GROSSO DO SUL

**6 resettlements and 13 residences**

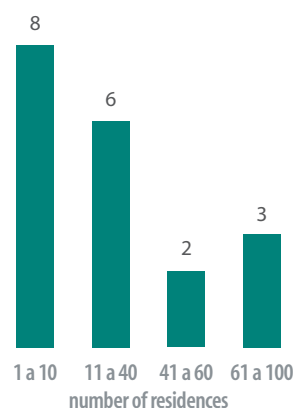
(number of resettlements)



### PARÁ

**19 resettlements and 573 residences**

(number of resettlements)





# In the nest of the “Gaviões” (Hawks)

Previously threatened by extinction, the Parkatêjê are experiencing reforestation and recovery of their indigenous culture and integration to Brazilian society

Anyone who drives down highway BR 222, in the southeastern region of the state of Pará, between Marabá and Bom Jesus do Tocantins in northern Brazil probably would not realize that just a few kilometers from the highway, inside an indigenous reservation, an ethnic development project is underway. “We are building the future of our people. Our children and their children will have healthcare, education and opportunities. My dream is to see my people stay here, caring for the jungle, living in peace and rejoicing.” Speaking in a low but firm tone, Chief Krohokrenhum

Jôpaipaire, better known as “Captain,” explains his views of the future and exemplifies, in practical terms, the concept of ethnic development: economic development which respects the cultural background of a nation.

Some years ago, the *Gaviões* (Hawks), as the Parkatêjê are known in the region, were very close to losing their cultural identity and ceasing to exist as a nation. They escaped this fate through the visionary leadership of Captain and the good management of financial resources stemming primarily from Eletronorte, and now, Vale.

Vale's relationship with the Parkatêjê was initiated in 1982. Left: the “Captain” at the corn fields.



Gradually, the Gaviões reinstated their rituals, reclaimed their history and began to take up their native tongue Timbira Oriental. They did so without giving up working, studying and integrating into Brazilian society. "We want to show that we are not special or helpless creatures," explains Akroiarere Topramre, son of Captain and coordinator of the Integrated Development Project (PDI). "We are a unified community that has a culture of its own and does not need protection. We can work for our development and continue to exist as a nation, having good food, health and education."

PDI initially began as a proposal from the Parkatêjê community during a round of negotiations with Vale, five years ago. "When they brought us the project, we could clearly see their degree of maturity as well as the stability of the relationship we had established," says Antonio Venâncio, Relationship Manager with the indigenous communities for Vale. "It wasn't simply a draft. They showed us, in a very well structured manner, how they wanted to proceed in the development of the activities."

## Growing Population

The relationship between Vale and the Parkatêjê nation began in 1982, during the construction of the Ferro Carajás Railway, which crosses the Mãe Maria Reservation. By then, the first partnership between Vale and Parkatêjê was signed. "We learned to talk to Vale and they learned how to listen. Today we can dialogue," says Captain. In 2007, the Parkatêjê nation and the company renewed a five-year agreement. "Now, we can make our plans and Vale, having knowledge of our goals, can contribute with long-term actions," explains Captain.

The Integrated Development Project (PDI) takes into account this five-year planning. The plan encompasses diversified investments in agriculture, livestock, fishing and income generation workshops, while also anticipating income intended to maintain conditions in the villages. The plan incorporates equipment and technology into the community tradition, increasing work efficiency for everyone. The results can be



Fish reproduction in the Gaviões Reserve.



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witnessed in the houses – all brick with basic sanitation and running water – and in the public infrastructure, which includes schools, health centers, sewing shops, and a plant that produces frozen fruit pulp. Thanks to the improvements in the quality of life and opportunities for the future, the population of the Hawks has been growing year after year, reversing a trend that threatened the future of the village. In 1975, the Parkatêjê numbered 18. Currently, they number 400.

The Hawks plant traditional crops such as corn and manioc as well as rice, beans and other produce. “With the mechanization of the farming, we increased the productivity of the land and improved work conditions,” says Ubirajara Sompré, a technician responsible for PDI. In addition to the investments in agriculture, fish tanks were also built and cattle raising work was initiated. “We want the entire process to be sustainable,” explains Akroiarere Topramre. “Cattle raising, for example, can provide income through the selling of calves.

As such, an increase in the pasture area won’t be necessary. Our intention is not to be large cattle ranchers, but rather to have an activity which is integrated with the environment.”

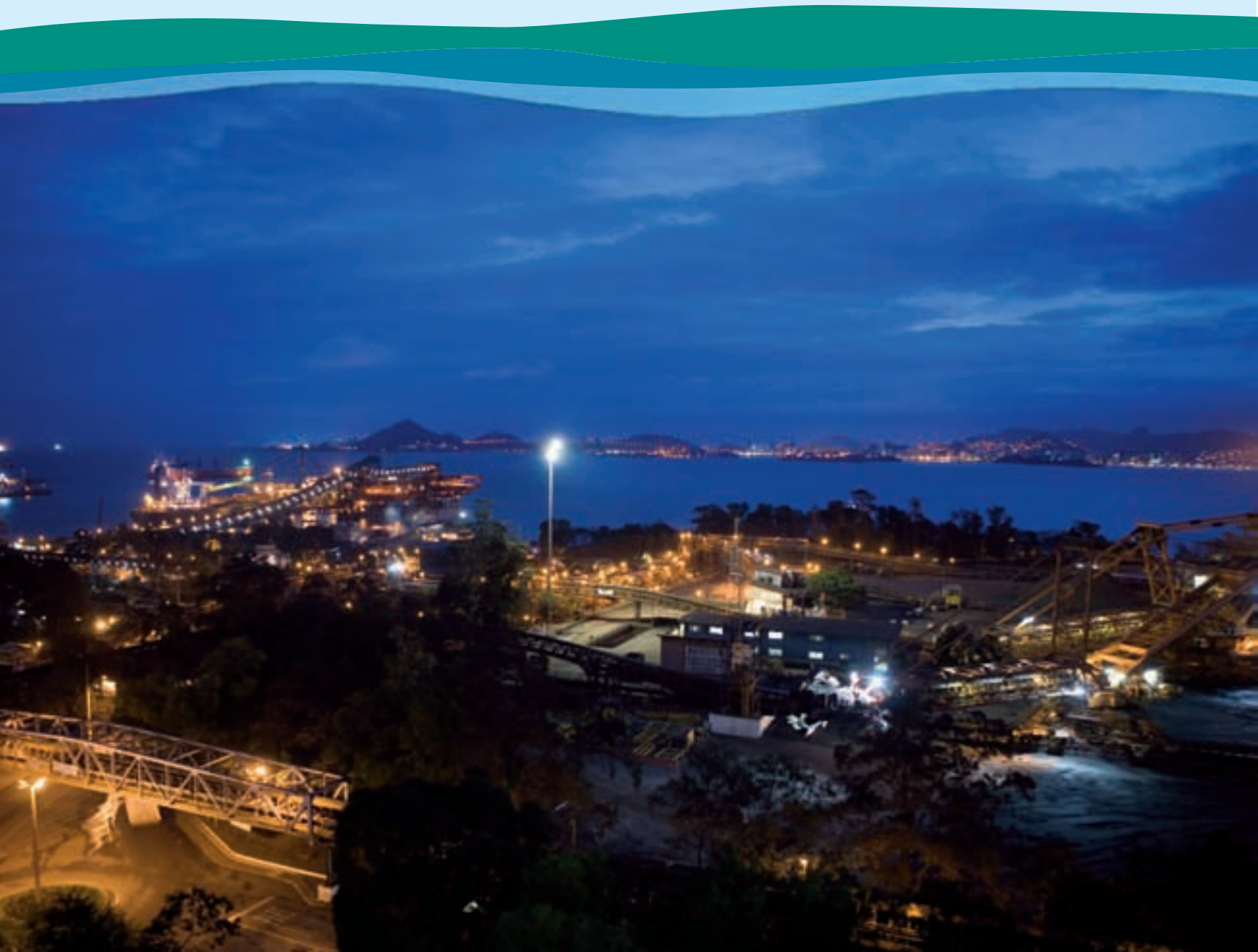
In the backyard of the Parkatêjê chief’s house, one can envision what the future will bring. A small chicken coop is already being used as a model for the implementation of a chicken farm. Captain also studies raising wild boar, known as *queixada*. The area of new projects also includes a plant nursery for reforestation, production of native seeds, planting of fruit and the processing of the Brazil nut. “There has been large amount of deforestation in the vicinity. We are experimenting with certain seedlings which may be used for reforestation. We can and will help,” says Krohokrenhum.

A sewing project helps to increase the Parkatêjê income.

# Value Chain

We seek to establish a mutual commitment  
with sustainable development

Our sustainability performance depends on the quality of our  
relationships with clients and suppliers.







Quality is a constant pursuit.  
Tubarão Port Complex  
(ES – Brazil).

## Our suppliers

**O**ur relationship with suppliers is a crucial aspect of our business. The act of investing in their development strengthens our bonds and motivates us to create lasting relationships that can ensure greater quality in our processes and products.

Our company's growth creates an array of new opportunities for synergies and partnerships along with a range of challenges. That's why we are committed to improving relationships that assist us in overcoming obstacles.

### The choice and management of partnerships

More than 15,000 small, medium, and large companies currently supply products and services to Vale.

Our suppliers management system includes regular evaluations to ensure compliance with performance requirements and fulfillment of all legal obligations, particularly those related to labor issues, life and safety, and environmental protection and conservation.

Our Code of Ethical Conduct (available in our website [www.vale.com](http://www.vale.com)) reaffirms Vale's attitude towards suppliers, defined by our commitment to "Refrain from establishing commercial relations with companies that are known not to follow ethical standards compatible with those followed by the company".

A night view of the  
Tubarão Port Complex,  
(ES – Brazil).

From global to local

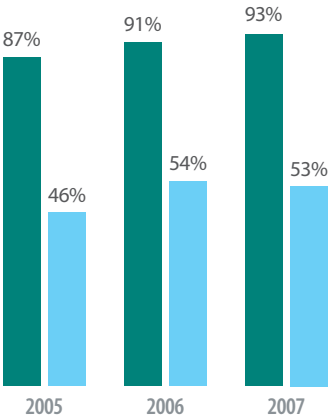
Although we are aware that global-scale purchases can greatly benefit our businesses, we understand that our sustainability performance is also dependent on local suppliers.

In the many regions where we operate, we encourage the development of local partners. In partnership with business associations, public and private sectors, we invest in programs aimed at the development of suppliers. The strengthening of such partnerships is among Vale’s priorities. Our purpose is the integrated qualification of suppliers and their workforces, so that they become more competitive and capable of meeting the needs of large client companies like ours. Such a strategy contributes to the local sustainable development and boosts the economy through employment and income generation.

This program has already been adopted in the Brazilian states of Pará, Maranhão, Espírito Santo, and Minas Gerais, and is promoting the development of more than 2,000 companies.

More than developing and qualifying our suppliers, Vale aims at encouraging social responsibility all along the value chain. To this end, we participate as the Brazilian Mining sector anchor company in *Programa Tear – Tecendo Redes Sustentáveis* (Tear (Weave) Program – Weaving Sustainable Networks). The program is the result of a partnership between the Brazilian Ethos Institute (Instituto Ethos de Empresas e Responsabilidade Social), a widely respected institution that brings together companies involved with social responsibility issues, as well as the Multilateral Investment Fund of the Interamerican Development Bank. The focus of the program is to widen the opportunities for small and medium-size companies that operate within the value chain of anchor companies across different industries (more information on this in the case “Domino Effect” on page 164).

Local purchase (%)



- Total percentage of local purchase made in Brazil
- Average percentage of local purchase by Brazilian States

Total percentage of local purchase made in Brazil considers only data from Vale’s own units in the country.

The average percentage of purchase in the Brazilian states takes into account local purchases made in the states where our main operations are located (including subsidiaries).

Global scale purchases – oil, trucks, machinery etc. – are not considered.

## Monitored Quality

Vale believes that, in order to reach the necessary level of excellence in our operations regarding “prioritizing life and safety” and the environment, it is essential to stimulate the ongoing development of our supplier base. Regular assessments of our suppliers enable us integrate improvements in our own management process.

The assessment procedures allow us:

- To classify and reward the best suppliers in each of our categories, by region and operation
- To help suppliers fully understand our company’s values and also to develop competencies necessary for the best performance in their specific activities
- To manage our supplier base and to be able to renew it regularly.

We are committed to improving of our management systems, so as to generate opportunities for suppliers to work with us. We also monitor, on a regular basis, the participation of local companies in our supply chain, in order to ensure their share in the company’s purchases.

In Brazil, our suppliers are also audited on their compliance with the necessary legislation. This includes monitoring the lists issued by the Ministry of Labor and Employment of companies involved in child and forced labor – procedures that Vale does not tolerate.



# Domino Effect

Large companies act as agents for sustainable development with small- and medium-sized suppliers

**A**n industrial assembly company which just opened a station to supply its fleet with biodiesel; a maintenance service provider that has incorporated issues such as ethics, quality and safety to its Code of Conduct; a steel machining company which no longer discards recyclable material. What these three companies have in common is their commitment to advance sustainability concepts with support from Vale.

These companies are part of a pilot group in Vale's Tear Program – Creating Sustainable Networks. Sponsored by Ethos Institute and the Inter-American Development Bank's Multilateral Investment Fund (IDB), the initiative fosters the adoption of corporate responsibility measures and helps improve management in the value chain of strategic companies, in seven industry sectors: Sugar and Alcohol; Civil Construction and Large Developments; Electric Power; Oil and Gas; Steel; and Retail and Mining. The initiative involves large mining companies, which act as anchors for programs in each of these sectors. Anchor companies also co-finance projects and elicit the participation of 108 small and mid-size suppliers. The goal is to increase by 5% the productivity of these companies.

Vale takes part in Tear as an anchor company in the mining sector and, since the first half of 2006, has involved 15 small- and mid-sized suppliers in the program through our Minas Gerais network. Changes can be seen among all participants. The participating companies are adopting actions such as best practices in governance, volunteerism, increasing availability of professional training courses for the community and reduction in the consumption of water and power.

Recuperadora Sales Gama, in the industrial maintenance and assembly sector in Itabira, successfully took the sustainability concept to almost every level. It took everyday measures such as exchanging plastic cups for glass and more strategic actions for its business. With an incentive campaign towards conscious consumption, the company was also able to reduce water expenditures by up to 50% and electricity usage by 40%. Another initiative aimed at reducing environmental impacts by the company occurred with the construction of fuel stations to ensure the fueling of its vehicles with biodiesel.

Besides the social and environmental aspects, this program has helped improve operating management and productivity at Sales Gama. Previously, each maintenance agreement was managed separately, with independent personnel structures, equipment and vehicles, and with all decisions requiring board approval. Under the new program, 20 supervisors now meet weekly to discuss joint solutions. "One helps the other by relocating professionals or vehicles according to needs," explains Marcos Vinícius Linhares, one of the partners and sales director for the company. "We now have a systemic vision of business and everyone is involved in decision-making."

Discussions generated by Tear have also created more effective relationships with employees. For instance, Sales Gama has put in place a Job Classification Plan, which assesses employees in a more objective way. "Previously, this assessment was based on 'feelings and not even the Board knew if the person hired was qualified,'" says Linhares. "Now, we have assessment criteria and this has helped improve employee motivation."

Today, Sales Gama intends to influence its own suppliers. The practice of driving the local economy by giving priority to regional companies has been transformed into an official policy. The next step will be to adapt values that are set forth in the Code of Conduct as an assessment criteria for potential suppliers.

This new attitude goes beyond the gates of the company. With the support of neighborhood associations, Sales Gama started offering its training programs for new professionals to underprivileged youth. "We have adapted training courses from a responsibility standpoint, seeking not only to address our needs but also to qualify youth from various communities," explains Linhares.

Starting in the second half of 2008, courses in the area of vulcanization – repair and substitution of belts and other rubber parts used in equipment – will be offered in a partnership with the National Service for Industrial Learning. This will increase opportunities for training local labor. Participants in the course will be remunerated by the company as professional apprentices and may be added to the Sales Gama staff at the end of the training course.

## Big players only?

At MMP, another company participating in Tear, the program helped bring together the Board and employees. According to Mitrione Coura of the Planning Department, "There wasn't very much dialogue and the company had no idea of what was right or wrong from an employee standpoint." With the development of a new Code of Conduct, issues such as responsibility, ethics, quality and safety became clearly defined. The development of that document, involving all employees marked a change for the better. "Now, employees and directors walk hand-in-hand," says Coura.

At Semafo, a company that operates in the area of machining, welding and industrial maintenance, Tear represented an entry gate to new management practices. "The social and environmental responsibility concept seemed something very distant to us, something



"We started to develop a systemic view"  
Marcos Vinicius Linhares, commercial director  
from Sales Gama Company.

restricted to large companies," explains Marcella Bedetti, an HR consultant for the company. "Tear helped change this notion and proved that adopting responsible practices in management is more a case of mentality than size or economic power."

Among the initiatives developed by Semafo, which is located in Barão de Cocais and has 60 employees, is the creation of a Code of Ethics, adoption of performance assessments, inclusion of sustainability issues in internal newsletters, and the implementation of environmental awareness actions among employees. Since October 2007, recyclable waste has been separated and, since the municipality does not offer any selective waste collection system, the material has been sold to local recycling companies.





Both the Interamerican Development Bank and the Ethos Institute will support the Tear Program up to the end of 2008.

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## Integrated competition

Of the 15 members of the Vale pilot group, four are competitors in the construction sector. However, in the monthly Tear meetings, partnership and exchange of experience is evident. For Vale, taking part in Tear serves as another opportunity to put into practice our vision of integrated development. "Spreading the responsibility concept is placing a bet on the building of a more humane and sustainable society," says Maria Alice Santos, who is responsible for monitoring the Vale Foundation program.

While Tear has brought positive change to various small companies, it has also benefited Vale. This is especially the case in the area of procurement and contract management. "The network has helped us to internally stress the importance of having suppliers who are engaged and aligned with our social responsibility concepts," explains

Maria Alice. "Our relationships are increasingly shifting from purely business to one that promotes sustainable development."

In the assessment of Carla Stoicov of the Ethos Institute, "Vale has increasingly accepted challenges proposed by the program and today, the company is one of the anchors that best uses the project to engage and raise awareness of its employees". Stoicov points out that there are positive results for all parties involved: "Companies identify the efforts of Vale regarding alignment issues discussed in their meetings. And the mining company benefits from communication and learning from suppliers."

The financial support given to the initiative from the Inter-American Development Bank and Ethos Institute will be extended to the end of 2008. However, at Vale, the initiative has no predetermined termination date. Other groups of suppliers are being created to proceed with work efforts in 2009 and the goal is to expand Tear to other company units.

## Our Clients

Vale's performance reflects the high quality of our products and services, as well as the success of the company's strategy for ensuring our status as a trustworthy and lasting supplier

In our mining activities, Vale operates fully integrated systems of production and shipment incorporating mines, railroads, and ports. The company's production of ores is anchored in our high quality natural reserves, a team of qualified professionals and is a result of our accumulated expertise in the mining sector.

In the area of logistics, Vale offers integrated and customized solutions, fully oriented to the generation of value to its clients. Vale is widely recognized for our technical expertise in logistical operations, supported by cutting edge technology. Through our own solutions, and those of our partners, we make significant efforts to integrate communication with clients, thereby standardizing and accelerating the business process.

### Client satisfaction

We are focused on meeting the needs of our clients. This attitude is not only reflected on the quality of our products, but also in the quality of our long-term client relationships. We guarantee our clients' privacy through the fulfillment of all legal requirements, contractual clauses, and our Code of Ethical Conduct (item 1.6).

With the purpose of identifying opportunities for improvement of our products and services, we monitor and assess client satisfaction in all of our business units on a regular basis. The methods employed, intervals and the scope of such assessments varies among our business units, in order to address the specific needs and characteristics of each market segment.

As Vale's business is primarily conducted with other companies (*business to business*), rather than between Vale and end-users (*business to consumer*). Our business units maintain regular contact

Capitão do Mato Mine  
(MG – Brazil).



with client companies, particularly through technical visits and meetings. Projects are developed considering a client's standpoint and are planned on an integrated basis, including technical processes, specific business and territories. All actions are developed in full compliance with the legislation and regulating agencies of the regions where we operate.

Satisfaction surveys conducted by Vale are focused on the complete understanding of the needs of our clients and their businesses, as well as their view of the products and technical assistance we offer. Our main purpose is to identify the best solutions and possibilities for new synergies, along with assessing conformity with the international quality standards ISO-9001.

With regard to our clients in Logistics, we conduct a monthly service assessment, in order to monitor the quality of our services. Since 2006, this specific tool has driven the actions of the logistics area, in the pursuit of operational excellence.

With respect to passenger transportation, satisfaction research has been conducted with the support of qualified institutions. Research conducted in 2006 by the Vox Populi Institute was focused on the Vitória-a-Minas Railroad. In 2007, IBOPE researched users of both the Carajás and the Vitória-Minas railroads.

## Products

As one of the largest mining and metals producing companies in the world, Vale is present in the life of millions of people in many countries. The ores we produce are essential to a wide array of products that are part of our daily lives, such as electronic appliances, automobiles, computers, construction materials, and agricultural components.

### Phases of products' life-cycle



Our products and services are mapped so that the phases of their life-cycle that are subject to assessment on health and safety can be identified. Classified in the categories of aluminum, alumina, bauxite, copper, logistics, iron ore, pellets, manganese, steelmaking, potash, nickel, and kaolin, all Vale products are assessed during the fabrication and production phases.

The logistics activity undertakes the analysis of potential health and safety impacts across a greater portion of its operation. This is necessary due to the transportation of dangerous cargoes by the logistics area.

Although European legislation concerning the registration, evaluation, authorization and restriction of chemicals (REACH), which is designed to establish a consistent regulatory system for the management of chemical products exempts ores in the registration requirements, Vale is ensuring procedures to comply with all requirements. Vale Inco, for example, is an active participant in the Nickel Institute REACH Consortia that is in the process of compiling all the information necessary to propose consistent classification for nickel compounds in the European Union.

The manganese area is also being prepared for its registration, through the International Manganese Institute. The pre-registration of both nickel and manganese is expected to occur in the second half of 2008. Issues pertaining to REACH are being addressed by the Environment, Health and Safety, and Commercial departments of Vale.

## Labeling

As stated in Article 7 of Convention 170 of the General ILO Conference, labeling procedures are mandatory only for dangerous chemical products. Since the majority of our products is not classified as dangerous, labeling procedures are not required. Some of our nickel compounds, however, are subject to product classification and labeling requirements. Vale Inco is in compliance with these requirements.

Even so, our production is controlled by technical entries that contain information on the ore content, grain size distribution, and control measures to reduce risks.

Among the mandatory information demanded for labeling procedures (outsourced components, content, safe use of the product or service and disposal procedures to avoid environmental/social impacts), 10 of the 12 significant categories of products (83% on average) require half (50%) of such information.



We constantly search to identify present and future demands, to anticipate tendencies and to adopt the best responsibility practices regarding our products. Among the practices already adopted by Vale are:

- Technical meetings with customers that allow us to address issues regarding the safe use and composition of products.
- The creation of technical cooperation agreements with specific consumers, to pursue joint solutions and improvements.
- Elaboration of the *Bulk Cargo Information – BCI* (information on bulk cargoes) containing data on product safety in the shipping of ore in ships.
- The supply of *Material Safety Data Sheets – MSDS* (a form containing the material's safety data) to international customers regarding the shipping of iron ore.
- The publication of the Safety Manual for Wagon Loading and Unloading.

Vale Inco also adopts the practice of assessing its products on health and safety aspects. Clients and all stakeholders have full access to documents such as Material Safety Data Sheets (MSDS) and Product Data Sheets (PDS) on the company's website. The MSDS is offered in various formats in order to comply with Canadian, American, and European legislation. Vale's Policy on Product Stewardship also contains the most relevant information on the proper use of nickel at Vale Inco.

We monitor the impacts on health and safety in all operations.  
Tubarão Port Complex  
(ES – Brazil)



# Reporting Process

About our report

Our aim through this report is to provide an overview of our sustainable development vision and of economic, environmental and social performance



In 2006, we began developing our sustainability reports based on the available GRI guidelines. Since then, Vale has made the decision to issue our annual sustainability report in line with the GRI methodology in its most updated version, the G3. Consistent with this methodology, our 2007 Sustainability Report presents data from the past three years.

This report includes information from sites across Vale's global operations including Vale Inco and its subsidiaries.

We invite readers interested in learning more about this report to visit our website [www.vale.com](http://www.vale.com) under "Talk to Us."

## Communication for sustainability

This report is part of our corporate strategy and represents one of our key dialogue platforms with Vale's stakeholders.

The evolution we have experienced in recent years is also reflected in this publication. Consistent with our core values, we have decided to adopt the GRI sustainability guidelines as our guiding standard for sustainability reporting.

More than just an editorial product, our sustainability report represents an intensive process. In July 2007, we established a learning cycle and began discussing issues related to sustainability management through a series of workshops for stakeholder relationship managers.

We trained and qualified leaders, aligned concepts and created multiplying agents of GRI principles within the company. A series of exercises, questionnaires and collective discussions helped us to identify stakeholders and relevant issues, as well as the availability of an extensive quantity of information.

## Materiality

In order to define the contents of this Report and of its electronic version, we have considered the principles established by GRI, especially the one on Materiality. In short, the term “Materiality” refers to the significant economic, environmental, and social impacts generated by the organization’s activities, or to impacts that may substantially influence the evaluations and decisions made by its stakeholders.

### Identifying material issues (2007)

#### Phase 1

In workshops conducted with relationship managers, the most relevant issues for Vale’s stakeholders were identified.

#### Phase 2

Issues were classified according to their degree of relevance and grouped under macro topics (see chapter Sustainability Strategy on page 34), subdivided according to GRI aspects and dimensions.

#### Phase 3

The structure and content of the report were defined taking into account broader social and sector expectations in addition to the feasibility of obtaining consistent information in this first GRI reporting cycle.

#### Phase 4

The Materiality Matrix, which guides how we address relevant issues in our communications, was constructed based on the knowledge generated by interaction of institutional and community relationship managers with our stakeholders.

We applied the GRI Boundary Protocol guidelines, which provide the method for consolidation of information based on the degree of influence (shareholder or operational control) and the potential impact to sustainability criteria.



The Boundary study resulted in the following table for our approach:

Negócios	Indicators <sup>(1)</sup>	Management Approach <sup>(2)</sup>	Dilemmas <sup>(3)</sup>
Iron ore and pellets	Vale Itabasco Kobrasco Hispanobras Nibrasco	Samarco	
Manganese	RDM <sup>(4)</sup> RDME <sup>(4)</sup> RDMN <sup>(4)</sup> Urucum Mineração <sup>(4)</sup>		
Logistics	Vale FCA CPBS <sup>(4)</sup> Seamar Shipping	Log-In Tug boat services: Barra dos Coqueiros e Baía de São Marcos	MRS
Potash, kaolin and phosphate	Vale Cadam PPSA Miski Mayo <sup>(4) (5)</sup>		
Copper	Vale Salobo Metais <sup>(4) (5)</sup>		
Aluminum	Vale Alunorte Albras Valesul <sup>(4)</sup> New Alumina Refinery <sup>(4) (5)</sup>	MRN	
Steel	Ferro Gusa Carajás (FGC) <sup>(4)</sup>	CSI	CSA Usiminas
Coal	Rio Doce Mozambique <sup>(4) (5)</sup>	Joint-venture Yankuang Joint-venture Longyu	
Energy	UTE Bacarena <sup>(4) (5)</sup>	Energy Consortia: Igarapava, Porto Estrela, Candonga, Amador Aguiar I e II, Funil, Aimorés (Eliezer Batista) and Estreito (under construction)	
Nickel	Vale Inco VBNC Inco Metals Shanghai Inmetco Novamet Inco Europe (Clydach and Acton) PT Inco Goro Nickel Jinco IATM (Shenyang) IATM (Dalian) INNM (Dalian) Inco TNC Onça Puma <sup>(4) (5)</sup>	Korea Nickel Taiwan Nickel	

<sup>(1)</sup> Subsidiaries and companies under operational control are reported through performance indicators and management approach of aspects.

<sup>(2)</sup> The management approach is reported for companies over which Vale has significant influence. Pineland Timber Company, Alantum, Exide Group and Refining Inco Technical Services were not considered in this report as a result of being non-operational or being classified as companies that will be considered under our progressive reporting approach. In the specific case of the Santa Isabel hydroelectric power plant, we continue our efforts to obtain the necessary environmental license to begin its construction.

<sup>(3)</sup> Companies over which Vale has influence are reported with information concerning issues and dilemmas.

<sup>(4)</sup> As of November 2007, these companies incorporated the Vale brand, even when their legal name was not altered.

<sup>(5)</sup> Information about the Projects was included whenever applicable and available.

The report includes information about companies from around the world and from each of our business areas. Vale’s operations in Australia and the mineral research companies will be included in future reports, consistent with our progressive reporting approach. This decision was made for a number of reasons. Namely this is the first of Vale’s GRI compliant reports; we only recently acquired Vale Australia and that mineral exploration companies are considered to have relatively little impact on sustainability.




### External Assurance

The independent auditing of this report was undertaken by KPMG.

For assessments on location, external assurance was carried out across four of Vale’s business areas: iron ore, logistics, copper and aluminum. At Vale Inco, two Canadian operations were selected: Sudbury and Port Colborne. These sites were selected for the volume of operations and portion of revenues.

### Level of application

In compliance with GRI’s guidelines, our report is self-declared as Level B +. This is a significant accomplishment for Vale, as we began to adopt the GRI G3 model less than a year ago, bringing along a wide range of our global companies.

		2002 in accordance	C	C+	B	B+	A	A+
Mandatory	Self Declared			Report Externally Assured				Report Externally Assured
Optional	Third Party Checked			Report Externally Assured				Report Externally Assured
	GRI Checked							

### Technical Point of View

The Brazilian Foundation for Sustainable Development – FBDS – analyzed Vale’s 2007 Sustainability Report, taking into account the views and expectations of external stakeholders and issued a technical Point of View. Some recommendations were incorporated while others will be considered in the company’s future Sustainability Reports.

## Independent Auditors' Limited Assurance Report

To  
The Board of Directors, Shareholders and Other Stakeholders of  
Companhia Vale do Rio Doce  
Rio de Janeiro - RJ

### Introduction

We have been engaged for the purpose of applying procedures of limited assurance on Vale (former CVRD)'s Sustainability Report related to the year ended December 31, 2007, which was prepared under the responsibility of the Vale. Our responsibility is to issue a report of limited assurance on this Sustainability Report.

### Procedures of Limited Assurance

The limited assurance procedures were performed in accordance with Rule NPO 1, issued by the Brazilian Institute of Accountants (IBRACON) and with the 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 importance, coherence, volume of quantitative and qualitative information and operational and internal control systems that served as a base for the preparation of Vale's Sustainability Report 2007; (b) the understanding of the calculation methodology and the consolidation of the performance 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's Sustainability Report 2007; and (d) the comparison of the financial indicators with the financial statements and/or accounting records.

### Reporting criteria

The information of Vale's 2007 Sustainability Report was prepared according to Global Reporting Initiative guidelines (GRI-G3) for reporting of sustainability information.

### Scope and limitations

The objective of our work was to apply limited assurance procedures on Management Approach and Sustainability Performance Indicators of Vale and it does not include any evaluation of their policies, practices and sustainability performance. The applied procedures do not represent an examination in accordance with the audit rules for financial statements. In addition, we do not provide any 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 of B+ for its Sustainability Report related to the year ended December 31, 2007. Vale has reported 43 essential and additional performance indicators and 8 indicators from the mining sector supplement. 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 modification that should be performed on Vale's Sustainability Report, related to the year ended December 31, 2007, to agree with the GRI-G3 guidelines and with the records and files that served as a base for its preparation.  
June 12, 2008



KPMG Assurance Services  
CRC 2SP023228/O-4 FRJ  
Partner

Alexandre Heinemann  
CRC 1SP228175/O-0 SRJ

## Correlation between the Global Compact Principles and the GRI Indicators

Businesses should support and respect the protection of internationally proclaimed human rights	HR5, HR6, HR7, HR9, LA4, LA6, LA9, LA14, HR8 (partial), SO1 (partial) MA-Vale – Directions and practices implemented. Governance Items – 4.6, 4.9, 4.12, 4.13; (items not reported: 4.4, 4.8, and partially reported: 4.11)
Businesses should make sure that they are not complicit in human rights abuses.	HR5, HR6, HR7, HR9, HR8 (partial), SO1 (partial); MA-Vale – Directions and practices implemented. Governance Items – 4.6, 4.9, 4.12, 4.13; (items not reported: 4.4, 4.8, and partially reported: 4.11)
Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	LA4, LA9, HR5 LA-Vale – Aspects covered by the HR Policy. Governance Items – 4.6, 4.9, 4.12, 4.13; (items not reported: 4.4, 4.8)
Businesses should uphold the elimination of all forms of forced and compulsory labour;	HR7; LA-Vale – Partial monitoring. Governance Items – 4.9, 4.12, 4.13 (item not reported: 4.8)
Businesses should uphold the effective abolition of child labour;	HR6 Governance Items – 4.9, 4.12, 4.13 (item not reported: 4.8)
Businesses should uphold the elimination of discrimination in respect of employment and occupation;	EC5, EC7, LA3, LA4, LA12, LA14; LA-Vale – Policies and practices implemented. Governance Items – 4.6, 4.9, 4.12, 4.13 (items not reported: 4.4, 4.8)
Businesses should support a precautionary approach to environmental challenges;	SO8, MN6, MM7, MM12, EN30; LA-Vale – Environmental Management implemented. Partial monitoring and training programs. Vale Inco – The Sustainability Policy comprises some of the environmental management aspects. Governance Items – 4.9, 4.12, 4.13 (items not reported: 4.4, 4.8)
Businesses should undertake initiatives to promote greater environmental responsibility;	EN10, EN30, EN27 (partial); LA-Vale – Environmental Management implemented. Partial monitoring and training programs. Vale Inco – The Sustainability Policy comprises some of the environmental management aspects. Governance Item – 4.12 (item not reported: 4.8 – item partially reported: 4.11)
Businesses should encourage the development and diffusion of environmentally friendly technologies.	EN10, EN27 (partial); LA-Vale – Environmental Management implemented. Partial monitoring and training programs. Vale Inco – The Sustainability Policy comprises some of the environmental management aspects. Governance Items – 4.9, 4.12, 4.13 (item not reported: 4.8 – item partially reported: 4.11)
Businesses should work against corruption in all its forms, including extortion and bribery.	SO4, SO7, SO8; MA-Vale – Practices implemented; theme has been included in the Code of Ethical Conduct.



## GRI SUMMARY

### Overall Indicators - 42

#### 1. Strategy and Analysis

1.1 Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	2-5
1.2 Description of key impacts, risks, and opportunities.	2-5, 34-42, 48-53, infographic

#### 2. Organizational Profile

2.1 Name of the organization.	9
2.2 Primary brands, products, and/or services.	9
2.3 Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Flap, 175
2.4 Location of organization's headquarters.	Flap, 9
2.5 Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Flap, 4
2.6 Nature of ownership and legal form.	9
2.7 Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	15
2.8 Scale of the reporting organization (number of employees, net sales or net revenues, total capitalization, quantity of products or services provided, total assets, beneficial ownership).	9, 10, 13-17, 68
2.9 Significant changes during the reporting period regarding size, structure, or ownership, the location of, or changes in operations, <sup>7</sup> changes in the share capital structure and other capital formation, maintenance, and alteration operations.	7
2.10 Awards received in the reporting period.	21

#### 3. Report Parameters

##### Report Profile

3.1 Reporting period (e.g., fiscal/calendar year) for information provided.	173
3.2 Date of most recent previous report (if any).	173
3.3 Reporting cycle (annual, biennial, etc.).	173
3.4 Contact point for questions regarding the report or its contents.	173

##### Report Scope and Boundary

3.5 Process for defining report content, such as determining materiality, prioritizing topics within the report, and identifying stakeholders the organization expects to use the report.	174
3.6 Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	7, 175
3.7 State any specific limitations on the scope or boundary of the report.	175, 176
3.8 Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	7, 175, 176
3.9 Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	Techniques are explained in the data presentation. 7, 172-176
3.10 Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	Reporting differences in comparison with previously published information are highlighted and are due to changes in the reporting methods, with the adoption of GRI G3 and its Boundary of Report and Indicators Protocols.
3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	

##### GRI Content Index

3.12 Table identifying the location of the Standard	178, 179
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##### Assurance

3.13 Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s).	176
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#### 4. Governance, Commitments, and Engagement

##### Governance

4.1 Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	23-24
4.2 Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	3-5
4.3 For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	Online version*

4.4 Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	26-31
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4.5 Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	24
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4.6 Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Online version*
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4.7 Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	24
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4.8 Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	26, 27, 29
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4.9 Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	24, 26
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4.10 Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Online version*
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##### Commitments to External Initiatives

4.11 Explanation of whether and how the precautionary approach or principle is addressed by the organization.	50
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4.12 Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	32, 33
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4.13 Memberships in associations (such as industry associations) and/or national/international advocacy organizations.	32, 33
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##### Stakeholder Engagement

4.14 List of stakeholder groups engaged by the organization.	29, 30
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4.15 Basis for identification and selection of stakeholders with whom to engage.	29, 30
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4.16 Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	29, 30, 31
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4.17 Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns.	30
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### Management Approach and Performance Indicators

#### Economic Performance

Disclosure on Management Approach (goals and performance, policy, additional contextual information)	12-21
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EC1 Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	18, 19, 146 ●
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EC3 Coverage of the organization's defined benefit plan obligations.	74, 75 ●
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#### Market Presence

EC5 Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	68 ○
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EC6 Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	162 ○
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EC7 Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	148, 149 ○
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#### Indirect Economic Impacts

EC8 Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	146, 147 ●
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EC9 Understanding and describing significant indirect economic impacts, including the extent of impacts.	144-146
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#### Environmental Performance

Disclosure on Environmental Management Approach (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information)	88-93
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#### Energy

EN3 Direct energy consumption by primary energy source.	120-122 ●
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EN4 Indirect energy consumption by primary source.	120-123 ●
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EN8 Total water withdrawal by source.	105 ●
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EN10 Percentage and total volume of water recycled and re-used.	107, 108 ●
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#### Biodiversity

EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	109, 110 ●
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EN13 Habitats protected or restored.	111-115 ●
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#### Emissions, Effluents, and Waste

EN16 Total direct and indirect greenhouse gas emissions by weight.	126-129 ●
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EN22 Total weight of waste by type and disposal method.	98-101 ●
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EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	● Online version*
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Products and Services		
EN27 Percentage of products sold and their packaging materials that are reclaimed by category.	103	○
Compliance		
EN28 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	92, 93	●
Overall		
EN30 Total environmental protection expenditures and investments by type.	90, 91	●
Social Performance - Labor Practices and Decent Work		
Disclosure on Management Approach to Labor Aspects (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information)	57-75	
Employment		
LA1 Total workforce by employment type, employment contract, and region.	67, 68	●
LA3 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	71	●
Labor/Management Relations		
LA4 Percentage of employees covered by collective bargaining agreements.	71	●
Occupational Health and Safety		
LA6 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	64	●
LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	60, 61	○
LA8 Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	63	●
LA9 Health and safety topics covered in formal agreements with trade unions.	64	●
Training and Education		
LA10 Average hours of training per year per employee by employee category.	71, 72	●
LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	72, 73	●
LA12 Percentage of employees receiving regular performance and career development reviews.	73	●
Diversity and Equal Opportunity		
LA14 Ratio of basic salary of men to women by employee category.	69, 70	○
Social Performance – Human Rights		
Disclosure on Management Approach to Human Rights Aspects (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information)	81-87	
Freedom of Association and Collective Bargaining		
HRS Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	82	●
Child Labor		
HR6 Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	82-84	●
Forced and Compulsory Labor		
HR7 Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	82-84	●
Security Practices		
HR8 Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	85	○
Indigenous Rights		
HR9 Total number of incidents of violations involving rights of indigenous people and actions taken.	154	●
Society Performance Indicators		
Disclosure on Management Approach to Social Aspects (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information)	135-159	
Community		
S01 Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	135-137	○
Corruption		
S04 Actions taken in response to incidents of corruption.	53	●

Public Policy		
S05 Public policy positions and participation in public policy development and lobbying.	31, 125	○
Anti-Competitive Behavior		
S07 Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.	55	●
Compliance		
S08 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	54, 55	●
Product Responsibility Performance Indicators		
Disclosure on Management Approach to Product Responsibility (goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up, additional contextual information)	168-171	
Customer Health and Safety		
PR1 Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	169, 170	●
Product and Service Labeling		
PR3 Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	170, 171	●
PR5 Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	168, 169	●
Mining & Metals Supplement		
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. Relevant information includes: - Percentage of goods, materials, and services purchased locally; - Percentage of workforce from local communities; - Investment in public infrastructure and its maintenance; and reparations.	134-149, 162	●
MM2 Value added disaggregated to country level.	18, 19	●
MM4 Percentage of products(s) derived from secondary materials. This includes both post-consumer recycled material and waste from industrial sources (e.g., new scrap from fabricators and old scrap from end-of-life equipment), but excludes internal recycling within the facility.	103	○
MM6 Describe approach to management of overburden, rock, tailings, and sludges/residues including: - assessment of risks; - structural stability of storage facilities; - metal leaching potential; and - hazardous properties.	102	●
MM7 Describe significant incidents affecting communities during the reporting period, and grievance mechanisms used to resolve the incidents and their outcomes.	149-151	●
MM9 Describe resettlement policies and activities: - Identify sites where resettlements took place and the number of households resettled in each; - Include practices regarding resettlement and compensation, and the degree of alignment with the World Bank Operational Directive on Involuntary Resettlement.	155	●
MM12 Describe approach to identifying, preparing for, and responding to emergency situations affecting employees, communities, or the environment. Include a description of the nature of existing skills, teams who respond to emergency situations, training, drills, review processes and community involvement.	62	●
EN23 In compliance with Mining & Metals Supplement	115	●

● Indicadores Completos

○ Indicadores Parciais

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Cover photo: in the Brazilian State of Minas Gerais, the closing of the Córrego do Meio Mine is an example of how we duly recuperate and revegetate the mining area after the operations are terminated.

Photograph: Mayumi Salliem, Patrick de Lima and Walter Elpidio Vale's employees from Minas Gerais, dressed with the company's new uniforms that will be adopted until the end of 2008.

