8.1 New economic horizons

On October 23, 1997, the Hong Kong Stock Exchange fell 10.4% and took other markets down with it. The storm hit the São Paulo Stock Exchange (Bovespa), which declined by 15% – the second biggest fall among all of the world’s stock markets that day. However, the Brazilian economy made it through the so-called Asian crisis better than many expected in Brazil.

A fundamental foundation, enabling the country to stay economically strong despite the Asian crisis, had been constructed three years previously. The Real Plan, created in 1994, was a successful experiment after various attempts to tackle inflation in Brazil, which since the 1980s had been rising, demanding successive crises that followed as of 1993, but the country would find solutions to face them.

The international markets reacted to the Asian crisis by buying less, and commodity prices slumped across the world. Oil, natural gas and minerals found fewer buyers and their prices fell. As a result of this demand shock, iron ore prices fell by 11% between 1998 and 1999, while the prices of pellets, fines and lump ore decreased by 12%, 11% and 13%, respectively.

Iron ore producers including CVRD had to take emergency action, such as reducing costs, improving efficiency levels and increasing productivity. Against this setting, the Russian crisis took place in 1998. A traditional exporter of commodities such as oil and gas, the country was the victim of a speculative attack against its currency, as had happened a short time before in Asia, and it declared a 90-day moratorium until it could renegotiate its external debt.

The international distrust generated by the Asian and Russian crises hit Brazil. External investment left the country but the real remained stable, given the fixed exchange rate regime, at rates close to the US dollar.

However, while dollars left the country, the currency remained stable at the cost of interest rates that exceeded 40% in October 1998.

The overvaluation of the real in this period was a government strategy to stop inflation from returning, but it was impossible to sustain this exchange rate policy for long. As of 1999, the exchange rate moved to a floating model.

Accordingly, devaluation was immediate and the real weakened from US$1.21 in January to...
Vale  |  Our History

The privatization of state-owned companies enabled the government to raise resources that, alongside the reduction in the public debt, generated a reorientation of the state to focus on its core activities such as health, transportation and public security. The privatization of the majority of state-owned enterprises in the industrial sector was conducted in the first two years of Fernando Henrique Cardoso’s government. As of 1997, a new stage in the PND began, and the agenda moved on to the electricity, transportation and telecommunications sectors. The focus was on improving the quality of the services provided as of that time. In the same period, the privatization process was intensified at the state government level, supported by the federal government. A long series of bid documents would be published from that moment onward.

In terms of overall figures, the PND achieved the targets proposed when it was established. Between 1990 and 2009, the federal government transferred 71 companies to the private sector and raised a net total of more than US$30 billion.

Vale’s privatization

On the afternoon of May 6, 1997, the Rio de Janeiro Stock Exchange’s building was surrounded by people – the press counted 100 protesters. The reason for such commotion was the first stage in the auction to privatize Companhia Vale do Rio Doce, after a number of postponements caused by court injunctions. As of that day, Vale began to be administered by a consortium composed of private and public sector companies. The winner was Consórcio Brasil, a consortium of Brazilian and foreign investors, which acquired 41.73% of the shares belonging to the Brazilian government. Following the auction, this consortium was transformed into a company called Valepar, in which Vale is controlling shareholder. The purchasers’ funding was guaranteed by support from the national development bank, BNDES. The winning bid was R$333,378,240.00 – representing a 19.9% premium on the established starting price. The shares were sold for R$32 each, compared to the starting price of R$26.67. The second stage consisted of the sale of the rest part of the company’s capital to employees. This took place alongside the sale of a controlling stake to the private sector, also in 1997. The third stage, which occurred at the beginning of the 2000s, completed the process of disposing of the federal government’s shares, by enabling

Vale to control the company.

Although it did not respond immediately to the devaluation of 1999, the Brazilian economy was capable of expanding its exports, reducing its import growth and rebuilding a trade surplus. Despite that year’s adverse conditions, Vale managed to minimize the consequences of the Asian and Russian crises. The company’s sales of iron ore and pellets amounted to 96.3 million metric tons in 1999, 3.2% lower than in the previous year – a smaller decline than initially predicted. CVRD ended the five-year period covered in this chapter, from 1995 to 2000, with a record profit. Its 2000 profit of R$31.5 billion was 43% higher than in 2000. Between 1997 and 2001, Vale’s net income grew at an average annual rate of 41.7%. These results showed that during that period the company was able to overcome the crises on international markets and to grow after one of the most important events in its history: its privatization in 1997.

8.2 Privatizations

When Fernando Henrique Cardoso was elected president of Brazil in 1994, privatizations became a recurrent theme for the federal government and a tool for tackling the crisis generated in previous decades. Established in 1995, the National Privatization Program (known by Portuguese acronym PND) was one of the instruments used to improve the trade balance and public accounts, and thereby prolong the stabilization achieved by the Real Plan. Between 1995 and 1996, 19 companies were privatized, raising a total of US$1.2 billion. The highlights in the period were the sales of Energisa – one of the biggest energy distributors in Espírito Santo – in 1995, for US$519 million, and Light – an electric power company in Rio de Janeiro – in May 1996, for US$2.109 billion.

The administrative act that included Vale on the National Privatization Program was an initiative of the Executive Branch, provided for in part VI, article 44 of the Federal Constitution, and also in Law 8.011/90. This legislation establishes privatization as the appropriate means of solving the state’s presence in the economy, under the terms of the Federal Constitution.

The data presented were taken from the National Source: Central Bank, in Pinheiro; Giambiagi and Moreira, “Empresas desestatizadas no âmbito do PND por ano.”

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thousands of people throughout Brazil to use part of their Government Savings Indemnity Fund (FGTS) resources to buy shares in Vale. Caixa Econômica Federal’s website19 states that since this Vale fund was created, its accumulated profitability as of February 2012, was 1,938.8%; in other words, for every R$1,000 invested, there was a profit of R$938.18. Over this period, if this fund had been left in the FGTS fund, its profit would have been 40.8%.

Despite the crisis conditions, 1996 was a surprisingly positive year for the company, which, due to its various achievements, won Brazil financial magazine “A Company of the Year in the Mining Sector” award for the third time.20 The awards ceremony took place in São Paulo and was attended by Vale’s then president, Francisco Schettino, and directors and leaders of the CVRD group’s companies. Vale was chosen for this award for the following reasons, among others: an increase in productivity in the Iron Quadrangle region of Minas Gerais and in Carajás, Pará; the discovery of new deposits of gold, also in Pará; international gold exploration partnerships; technological and vertical development in iron ore production by the deploying of gold, also in Pará; international gold exploration partnerships; technological and vertical development in iron ore production by the deploying of

In 1997, the Board of Directors was composed of the following: Benjamin Steinbruch, Jair Gabriel Stoliar (Market Relations Area and Corporate Center), Manoel Horácio Paulo Marinho Nunes (Aluminum Area). Eude Vieira Diniz, José Fernando de Almeida, Luiz Xavier, Maria Silvia Bastos Marques, and specialists Hadler’s. The Board of Directors had eight more members.

In Vale’s organizational chart, established after privatization, the presidency was now exercised by a Board of Directors, which the company’s controlling shareholders participated in and influenced, led by Steinbruch – who had the same position at CSN – the Board of Directors had eight more members.21 boards were also appointed for the different business areas.22 This reorganization was part of structural changes that were in these basic guidelines, provided for the shared administration of CVRD.23 The new model would be to be implemented based on a financial restructuring. The company’s 1997 Annual Report shows that the new orientation shifted Vale’s focus onto optimizing its business, leading each area to seek ways of participating in the global market. Business units (Pulp and Paper, Iron Ore, and Alumina) and a Corporate Center were created in order to stimulate production.

The Corporate Center was established with the objective of supporting each area in its business feasibility, investments, and restructuring in each sector. In its composition, the Center brought together the Finance, Human Resources and Administration, Legal, and Planning and Control departments.24 The Corporate Center appeared at the moment when company management was putting into practice a new personnel distribution policy. A human resources structural reorganization process elimination of old functions demanded by its previous status as a state-owned enterprise. The direct effect of this was to reduce the size of the workforce from 15,483 in 1996 to 10,865 in 1997. Most of the departures took place as part of the Encouraged Dismissal Program (“Programa de Demissão Incentivada”), created in 1997 to soften the impact of the restructuring.25 Shares in the company were offered to employees at the time – they acquired 4.4% of the common shares and 5.1% of the preferred shares, through the Compensa Vale do Rio Doce Employee Investment Club (InvestVale). After this, they exercised their right to take part in the Board of Directors of Valepar, the group of shareholders controlling CVRD. Accordingly, as well as participating on Vale’s Board of Directors, employees also ensured their participation in the controlling group.26

A company reorganization was then carried out at Valepar, with the entry of InvestVale and BNDESpar, the arm of BNDES that had administered the bank’s equity stakes. Companies that constitute Brazil’s partners – represented by Valepar S.A. and consisting of a set of Brazilian and foreign investors that controlled Vale – possessed the structure of the parent company, which, at the time, was then operated as a joint venture controlled by its shareholders, or CFN). In turn, CVRD’s port terminals achieved new records. Northeast Railroad Company (Companhia Ferroviária do Nordeste, or CFN). In turn, CVRD’s port terminals achieved new records. Northeast Railroad Company (Companhia Ferroviária do Nordeste, or CFN). In turn, CVRD’s port terminals achieved new records. Northeast Railroad Company (Companhia Ferroviária do Nordeste, or CFN). In turn, CVRD’s port terminals achieved new records. Northeast Railroad Company (Companhia Ferroviária do Nordeste, or CFN). In turn, CVRD’s port terminals achieved new records. Northeast Railroad Company (Companhia Ferroviária do Nordeste, or CFN). In turn, CVRD’s port terminals achieved new records.
Community relations continued to be a priority in Vale's structure. In the year it was privatized, the company allocated R$263 million to social and economic infrastructure projects designed for the communities where it operates, through the Vale & Community Integration Program. These resources were part of the Reserve for the Development of the Regions Influenced by CVRD (RDRI), which was closed down that same year. To replace it – while still complying with the compensatory measure provided for in the privatization bid documents – the Privatization Resources Regional Development Fund (FRRD) was created and endowed with R$5.0 million, to assist the areas influenced by the company in the future. This fund would receive resources from RDRI and its management would be shared by the bank and Vale. In 1998, the Vale do Rio Doce Housing and Social Development Foundation took on the management of programs aimed at communities.

Thus, at the end of 1997, following all the modifications arising from the privatization process, Vale made a net profit of R$756 million, a substantial 46% up on the previous year. The company's profits continued to grow steadily in the following years.

8.3 Facing the future

Although the world – and especially Brazil – was experiencing a moment of economic fragility at the end of 1997 Vale would achieve records never before seen in its 55-year history. It was a new age, accompanied by new ideas and practices. With over half a century of history, the company reinvented itself at the start of 1998, adopting new concepts, establishing partnerships and showing itself to be ready for what was to come: accumulating strategies for diversification, sustainability and participation. The employee share offer was fundamental to the creation of a relationship of trust and integration throughout the company.

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Vale had learned that it was not sufficient to have large deposits: it was also essential to provide ways of transporting output in a shorter time and for a lower cost.
Soybeans conveyor belt at Praia Mole Maritime Terminal of Tubarão Complex, Espírito Santo.
An important milestone for Vale’s mining operations, marking its expansion policy occurred in May 2000: the company acquired a 43.06% interest in Grupo Belo Minas’s total equity and a 79.27% stake in the voting capital of Samitri, which in turn owned 51% of Samarco Mineradora. This transaction enabled CVRD to maintain cost savings and technological integration, accentuating the focus of its mining activities and expanding its presence in the global pellet market. Samarco, headquartered in Belo Horizonte, Minas Gerais, operated three iron ore mining complexes and was one of Brazil’s biggest producers, with annual production capacity of 37.5 million metric tons.

Samarco was one of the lowest-cost iron ore pellet producers in the world and it was highly competitive in the market. It owned and operated two pelletizing plants in Ponta do Ubu, Espírito Santo, with total production capacity of 12 million metric tons per year. Samarco also had operations at Ponta do Ubu Maritime Terminal, where it handled 20 million metric tons of cargo per year, and it had a 396-kilometer ore slurry pipeline linking its mine at Alegria Complex, Minas Gerais, to the pelletizing plants.

Also headquartered in Belo Horizonte, Samarco was established in 1977, and less than 30 years later it was already Brazil’s fifth-largest exporter. At the end of 2010, the company distributed 8.3 billion (US$4 billion) in dividends to its shareholders. In 2011, Vale owned 51% of its shares and shared control of it with Australian company BHP Billiton. Samarco has a 396-kilometer ore slurry pipeline linking its mine at Alegria Complex, Minas Gerais, to the pelletizing plants.

Ferteco Mineração S.A., for US$66 million. Ferteco is a Brazilian company based in Rio de Janeiro, whose main activity is iron ore mining and processing, and until then it had been wholly owned by TKS. It was founded as an iron and coal miner, but since 1973 it had focused exclusively on iron ore.

At the time, Ferteco was the third biggest producer of this mineral in Brazil, with production capacity of 15 million metric tons per year. Its mine reserves were evaluated at 263 million metric tons of hematite and itabirite, of similar quality to the ore produced by CVRD’s South System. Ferteco also operated two iron mines (Fábrica and Feijão, in Minas Gerais) and a pelletizing plant in the iron Quadrangle region, also in Minas Gerais, which produced 4 million metric tons per year.

Ferteco had 10.5% of the total capital of MRS Logística S.A., a railroad company that operated 1,612 kilometers of track between Rio de Janeiro, São Paulo and Minas Gerais, with annual freight transportation capacity of 80 million metric tons. Through a wholly owned subsidiary, Companhia Portuária Baía de Sepetiba S.A. (CPSB), Ferteco ran the Sepetiba Bay Port Company Terminal in Rio de Janeiro. The Sepetiba Bay Port Company Terminal (Port of Saguaçu), the South Ports Complex, covering an area of 415,286 square kilometers, is located in the Green Coast region in the south of Rio de Janeiro State, and its piers can receive up to three ships, two simultaneously. In 2008 alone, more than 60 million metric tons of iron ore was exported from the complex, mainly to China.

In another important acquisition in this period, Vale gained full control of the Sossego copper project in Pará for US$45.5 million. Vale’s administrative renewal process and cost reductions made Sossego one of the world’s cheapest copper projects in terms of investment per ton of installed capacity—an important model to be followed at the time.

In addition, Socoma, acquired in May 2000 and incorporated on August 31 of the same year, added the high-grade hematite reserves of Congo-Santo Mário in CVRD’s antennas in the iron Quadrangle region of Minas Gerais. With production capacity of 7 million metric tons per year, the mine helped to improve the productivity and quality of the South System’s products.

By incorporating Samarco, Samitri and Ferteco, and by optimizing its logistics system, CVRD entered the 21st century with the capacity to compete on an equal footing with its main international competitors in the iron ore market.

Sustainability: communities and the environment

CVRD has always sought ways of minimizing the impact of its activities. Indeed, this commitment goes back to the company’s establishment in 1942; when plans were made to transfer resources through a development fund for the Doce River Valley region in the states of Minas Gerais and Espírito Santo.

The Fund to Improve and Develop the Doce River Valley (FMDVRD) was designed to finance projects executed by state governments with the explicit approval of the President of the Republic. In 1990, when Wilson Florindo took over as President of the CVRD, the fund was given a Community Relations management unit.

Experience of managing funds would evolve within the company. In 1999 the Vale do Rio Doce Foundation (FVRD), whose roots lay in the former Vale do Rio Doce Housing and Social Development Foundation, was created. Established in 1968 to execute Vale’s...
housing policy,12 for decades the institution was dedicated to helping CVRD employees achieve the dream held by the majority of Brazilians: to buy their own home.

The Vale do Rio Doce Foundation

From the time it was created in 1968, the Foundation worked to build homes for Vale employees in the regions where the company operated, and until the 1990s it ran a ‘Foundation News’ column in the Jornal da Vale to report on the progress of its housing projects. The institution was the first area of CVRD to appoint a female director: on September 5, 1990, Shirley Virgínia Coutinho became the Director-Superintendent of the Vale do Rio Doce Housing and Social Development Foundation.

In 1998, the Foundation shifted its focus from housing to integrated social development. It was then renamed the Vale do Rio Doce Foundation (FVRD). The Foundation’s principle is to support the communities the company is a part of, through actions spanning education, health, infrastructure (building the building of houses, for example), protection for children and youth, culture, sport, and the environment.13 Also in 1998, the Foundation supported the Inter-American Development Bank (IDB)’s ‘Captação Solidária’ (‘Solidarity Training’) project, which prepared 296 young people from low-income families in Rio de Janeiro for the job market. In the cultural field, the Foundation supported the opening of the Oscar Niemeyer-designed Carlos Drummond de Andrade Memorial and the release of the Vale do Rio Doce Railroad Museum in Vila Velha, Espírito Santo, and the launch of the Vale do Rio Doce Railroad Museum in Vila Velha, Espírito Santo, which depicted the history of the Victoria-Mina Railroad.14

In 1999, the Vale do Rio Doce Foundation began to develop its profile more clearly and it made education its main objective. Its first education project, Vale School, is now a model for education management across the country. The project promotes elementary education in the municipalities where the company operates using spaces such as ‘Teachers’ Houses’,15 by providing education with continuing education.16 The pilot project was implemented at 25 selected schools in six municipalities in the state of Pará, Maranhão, Espírito Santo and Minas Gerais.

With the same objectives – to educate both young people and teachers – the FVRD also created the Vale Information Technology project in 1999.17 By 2001, this project had benefited more than 9,000 public sector school students and teachers, as well as residents, in the towns of Belo Horizonte, Governador Valadares and Córrego (Minas Gerais), Vitória and Serra (Espírito Santo), and São Luís (Maranhão). In the same year, the FVRD entered into a partnership with the Information Technology Democratization Committee (Comitê de Democratização da Informática, or CDI), in order to give students access to computers provided by the company. By December 2002, Vale Information Technology and CDI planned to be active at 300 Information Technology and Citizenship Schools, benefitting more than 50,000 people in seven states.18

Over the course of 2001, Vale – through the Vale do Rio Doce Foundation – invested R$20 million in community projects, mostly linked to education and social welfare. The company won various awards, which legitimized the FVRD’s role in the development of the communities where it operates.19

12 – See the Vale’s 2000 Annual Report
13 – “Community Action” of Espírito Santo. “Community Higher Education Foundation” of Itabira, and Ação Comunitária
14 – See the Vale’s 2000 Annual Report
15 – “Community Higher Education Foundation” of Itabira, and Ação Comunitária
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18 – See the 2001 Annual Report
19 – 2001 Annual Report
One of the Foundation’s most notable projects is Citizenship and Development (“Ciudadanos y Desarrollo” or Cysis). It was launched in 1998 as a way to tie the voices of the communities surrounding CVRD’s operations into decision-making and to promote the development of the region. 

The project has five main components: 

1. **Education**: It is focused on training people to read and write in order to provide them with the knowledge and skills to participate in other components of the project. 

2. **Community Health**: This includes a new program for preventive health exams, and vaccinations.

3. **Technical Training**: This component aims to provide skills training to support the development of small businesses. 

4. **Legal Assistance**: It provides legal advice and assistance to help communities protect their rights. 

5. **Emergency Assistance**: This is provided for situations that require immediate assistance, such as natural disasters. 

The Cysis project has had a significant impact on the communities involved. It has helped improve literacy rates, provided health care for thousands of people, and supported the development of small businesses. It is a testament to the company’s commitment to improving the lives of the people it affects. 

The example of Cysis shows how companies can work with local communities to support development and bring about positive change. It is an important area for CVRD as it continues to operate in the region and seeks to improve its social and environmental performance.
Restored vegetation at Timbopeba Mine in Ouro Preto, Minas Gerais, in 2002.
areas affected by mining to approximately the same conditions found before the start of activities. Three main methods formed the backbone of this environmental program – hydroseeding, the direct planting of seedlings and seeds, and soil regeneration induced by organic matter – always planned in line with topography and the type of soil to be rehabilitated. The use of native species in reforestation processes was always prioritized, the challenge was to restore the original ecosystems.

By December 1998, a total of R$430 million had been invested in restoring the area around Del Rey Mine in the municipality of Mariana, Minas Gerais, as part of the Timbopeba Project. The main transformations included environmental rehabilitation to enhance the geotechnical stability of mining areas and waste rock piles, control of erosion by installing drainage and sediment containment systems, and the preparation of substrates to restore soils and vegetation.

After preparing the site, medium-term actions were implemented, such as control of forest fires, fertilization of vegetation and maintenance of replanted areas. Everything was based on an environmental diagnosis of Del Rey Mine, conducted by Vale, and a Plan for Restoring Degraded Areas, approved by the State Environment Foundation (FEAM).

The experience gained in Mariana was valuable when CVRD implemented social and environmental initiatives in its hometown, Itabira. On May 18, 2000, Vale received a Corrective Operating License for Itabira Mining Complex. The license was obtained at the end of a democratic process involving the participation of all stakeholders, including many members of the local community, representatives of the municipal, state and federal governments, and representatives of numerous organizations, not just from Itabira but from the whole of Minas Gerais State. The final approved text contained 54 conditions, encompassing operational control of the mining process, rehabilitation of degraded areas, environmental compensation, and improvements to the quality of life in the municipality.

Throughout the year 2000, the Master Plan for the Protected Green Areas of Itabira was also developed. This was a pioneering initiative to develop a joint program to preserve and protect woodlands in both private areas and on sites owned by the municipal government. The implementation of the programs defined in the Master Plan was one of the conditions of the Corrective Operating License in Itabira.

Official recognition of environmental issues, specifically in forest protection, then expanded to the north of Brazil. One structural change was the official registration of the nearly 412,000 hectares of Carajás National Forest and the announcement of an agreement with IBAMA to produce a master plan for the region. It was a kind of draft for the organization of the National Forests of Carajás and Tapirapé-Aquiri, both in Pará. Across the country, National Forests are units designed to foster sustainable growth for forested regions. In the case of the National Forests of Pará, which surround Vale’s mines, the overarching goal was to create plans to enable mineral exploitation alongside environmental preservation. This is no easy task and, to attain good results, Vale used the pioneering experience it had gained at the Vale Natural Reserve in Linhares, Espírito Santo. In both the north and south of the country, the aim was “ecological and economic zoning, and the study of programs related to the sustained use of these reserves.”

Air and water

Continuing its project to reduce the impacts of its activities, CVRD began to focus more on air and water pollution. Control of atmospheric pollutants was—and continues to be—a fundamental question in the company’s environmental policy. In 1999, the last stage was conducted in the installation of chimney outflow dust...
Effluent collection and treatment was also implemented on the Vitória-Minás Railroad (EPM) and Carajás Railroad (EFC). The focus was on treating wastes generated by the maintenance and washing of locomotives and train cars in workshops located along the tracks. The target was to improve water quality in receiving bodies (the final stage in the use of water in any industrial process), soil quality, and the protection of ecosystem conditions at facilities. All of CVRD’s investments in sustainability were endorsed for their effectiveness by the ISO 14001 Environmental Certification obtained by the company in the late 1990s and early 2000s.

Certifications
As of the mid-1990s, professionalizing environmental management at all business units was a strategic condition for CVRD. Around the 1990s – strengthened the competitiveness and image of Vale, which became the first mining company in the world to attain such results. The celebrations were marked by the unveiling of Flower of Carajás (“Flor de Carajás”), a sculpture by Franz Weissmann. Born in Austria, this naturalized Brazilian sculptor, who works mainly with iron plates, has been one of the main exponents of geometric art in the country since the 1950s. In the following years, it was the pelletizing sector’s turn to obtain its certification. In July 1999, the Pelletizing and Metallic Goods Department made Vale the first Brazilian iron mining company to achieve ISO 9001 certification, following an audit by certification entity BVQI. This time, the attainment of the certification took place differently especially in two aspects: the inclusion of Kobrasco in the list of certified plants; and proof of the capacity of pelletizing operations to develop and design new products with assured quality.
The shipping system created by Vale do Rio Doce – featuring large ships and a port complex with support to receive them – was the main element in the company’s fast commercial progress in the 1960s. It was in this period that company president Eliezer Batista instituted the concept of economic distance, which would modify Vale’s export dynamics, especially to Asian countries.

The plan created by Batista consisted of sending giant-capacity ships from Brazil loaded with iron ore and returning them with other products. The volume of cargo was enormous, but the transport costs were lower and so the net effect was always positive. The strategy played a key role in the most successful period of CVRD’s shipping company, Rio Doce Navegação S.A. (Docenave).

At the beginning of the 1990s, transoceanic shipping was one of Vale’s main sources of income. Docenave participated actively in bulk cargo transportation and had its own fleet of ships. In 1992, it had 21 bulk carriers trading with all continents, carrying 28.9 million metric tons of cargo per year.

The results obtained in the subsequent years continued to improve, although the company had to reduce the size of its fleet over time. In 1993, it had 20 ships. In 1994, the same number of ships transported 32.2 million metric tons of goods. In 1996, it had 18 ships of its own and another 25 chartered ships. In 1997, it had 17 bulk carriers, three ore-oil carriers and eight tugboats.

With the restructuring of Docenave in 1999, its operating assets directly related to shipping activity were transferred to its parent company, Navegação Vale do Rio Doce S.A. (Navedoce), which became the holding company for the Docenave Group. Its name was also changed to Docexpar S.A. At Docexpar S.A.’s extraordinary general meeting of April 29, 1999, the payment of dividends was approved, with the delivery of shares in the new Docenave, which continued to exist. Consequently, both companies became directly controlled by Vale, which at the time owned 96.84% of the latter.

In May 1999, Docenave expanded its participation in Brazilian coastal shipping by entering the container transportation market. To do so, it chartered four multipurpose ships, covering ports between Rio Grande (Rio Grande do Sul) and Manaus (Amazonas). In November, this service was extended to Buenos Aires, Argentina, by chartering another ship. The Port Support Services area was also restructured as a business unit, encompassing tugboats, with the mission of raising the business’s share of this market. Of all the cargo transported during the year, 48% was iron ore, 23% was coal, 15% was bauxite, and 16% was other cargo. This generated revenue of R$321.9 million.

After 24 years of activity, the Seamar Shipping Corporation continued to be responsible for most of Vale’s transoceanic transportation, while Docenave directly handled the coastal shipping of dry bulk goods. In 2000, R$500.3 million of revenue was generated. Of the cargo transported, 53% was iron ore, 21% was coal, 15% was bauxite, and 14% was other cargo. Coastal shipping covering ports between Buenos Aires and Manaus generated revenue of R$46 million. Docenave’s fleet was then composed of 15 of its own ships, including five Capesize, eight Panamax and two Post-Panamax.
two Handysize vessels, with total capacity of approximately 1.5 million deadweight tonnage (dwt), as well as 10 chartered ships. In 2001, Vale decided to discontinue its long-distance (transoceanic) shipping operations. At the time, these operations were no longer considered strategic for iron ore as the freight market offered more competitive prices. Accordingly, seven ships in its fleet were sold for US$55 million. Docenave’s activities now focused on tugboat and coastal shipping services. Moreover, now 100% owned by Vale, remained active in coastal shipping at leading ports between Buenos Aires and Manaus. In 2003, the company handled 45% of Brazil’s total container volume. The contraction in its activities and fleet led to a reduction in its revenues, but even so, in 2001 it accounted for 4% of Vale’s gross sales, or R$440 million. However, this contraction was inversely proportional in CVRD’s expansion on the international market. From the 1990s to the 2000s, Vale’s activities expanded around the world.

As of the late 1990s, Vale made efforts to further internationalize its business. Its actions concentrated on partnerships in South American countries capable of supplying minerals that Brazil had limited scope to produce. In 2001, the company signed a memorandum of understanding with Corporación Nacional del Cobre de Chile (Codelco), the world’s largest copper producer. This coordinated action was aimed at the possibility of establishing a joint venture for joint copper exploration and mining by Vale and the Chilean company. As of the late 1990s, Vale made efforts to further internationalize its business. Its actions concentrated on partnerships in South American countries capable of supplying minerals that Brazil had limited scope to produce. In 2001, the company signed a memorandum of understanding with Corporación Nacional del Cobre de Chile (Codelco), the world’s largest copper producer. This coordinated action was aimed at the possibility of establishing a joint venture for joint copper exploration and mining by Vale and the Chilean company.

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Energy solutions

Energy is a fundamental input for the sustainability of Vale’s activities and is part of its business strategy. As a major consumer of this resource, the company’s priority is to continuously ensure its energy supply mix to meet the demand of its operations.1 Accordingly, Vale invests heavily in generating its own energy, always seeking sustainable, clean solutions of low environmental impact. The company now has hydropower plants in Brazil, Canada, and Indonesia.

When investing in energy, Vale acts in four main areas: the development of renewable sources, the creation of mechanisms for reducing its own consumption, the pursuit of efficient energy supplies that ensure the sustainability and competitiveness of its operations; and value generation during the development of mining projects through more reliable and cleaner energy solutions.

Over the years, Vale has sought to diversify its energy generation investment projects. The sector became a part of the company’s activities in October 1997, when it established its subsidiary Vale do Rio Doce Energia S.A. (Vale Energia), which works in the oil, natural gas, solid fuel and electricity sector.2

The implemention of a new corporate governance model, the electricity generating business was allocated to the Business Development and Company Stakes Executive Department.3 At this time, the company’s investments in building new hydropower plants amounted to US$1.5 billion.4

The sector’s deregulation process and the trend in electricity prices, which started in 2000, were key factors in Vale’s decision to promote the energy area. In November 2000, the Board of Directors approved the creation of the Energy Department, with the purpose of promoting balance between own production and consumption of electric power.5

The electric power rationing that occurred across Brazil in the second half of 2001 showed that Vale’s strategy of investing in hydropower projects was prudent.6 In that year, the company consumed a total of 12.5 TWh of electric power.7 Due to its own production, Vale did not face any interruptions to its operations at any of its units during the nationwide blackout of July 1, 2001 – a unique situation among major companies at the time.

The generation and especially the sale of its own energy began to present results as of 2005. Of its total consumption of 16.9 TWh, 9% was supplied by its own hydropower plants.8

In December 2007, the company, in partnership with BNDES, established Vale Soluções em Energia (VSE), with the objective of developing technology programs, focusing on environmentally sustainable processes and the use of renewable energy sources.9 The following year, the company published its Corporate Climate Change Guidelines, with the aim of cutting its greenhouse gas emissions, which started in 2000, were key factors in Vale’s decision to promote the energy area. In November 2000, the Board of Directors approved the creation of the Energy Department, with the purpose of promoting balance between own production and consumption of electric power.9

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Vale also invests in its own energy supplies outside Brazil. In Canada, the company supplies part of the power used by its Sudbury operations in Ontario, from five generating stations. In Visconde do Rio Branco, 100% of the energy consumed in produced using diesel generators. In Indonesia, practically all the power required to operate the local electric furnace is supplied by three hydro plants on the Larona River (the Larona, Balambano and Karebbe plants).

While intensifying investment in hydro power based on each region’s potential, Vale has also pursued other options for clean, sustainable energy. One example of this is the company’s project to generate energy using palm oil. The decision to invest in biofuel gained force when Vale incorporated Riosulama da Amapaia S.A. in February 2011.

Most of the oil produced will be used to power Vale’s locomotives and large machinery in its operations in Brazil, using 93% of biodiesel and 7% of regular diesel.10 Together with the specific work of producing fuel oil, Vale, through Riosulama, has implemented projects to restore and regenerate 50,000 hectares of native forest in the fast-growing Tabatinga Territory region of Pará. In addition, a family farming program was created to provide employment to 2,000 families in the region. Vale’s idea is for families to produce palm oil on their properties, with the company providing technical assistance and guaranteeing to purchase their output.

By diversifying its investments in energy generation projects, Vale seeks to reduce its costs and protect itself from electric power price volatility, as well as regulatory uncertainty and power shortage risk. In addition, the company seeks to align itself with global issues related to climate change, to ensure the availability of this resource and contribute to environmental conservation.

Aerial view of the Igarapava Hydropower Plant (on the border of the states of Minas Gerais and São Paulo), on November 25, 1998.