

## MESSAGE FROM THE CEO



Dear Reader,

Today we are launching Samarco Update - a quarterly newsletter that brings you relevant information about our Company, sharing the ideas, challenges and achievements that we consider important on our development path.

Samarco started its operations in 1977 using a pioneering technology to beneficiate low grade iron ore and pump it as slurry through a pipeline to the coast, where it is transformed into pellets.

Now, almost 40 years later, we are the best mining company in Brazil for the third consecutive time, and also, one of the most competitive pellet producers in the world, with an expanded capacity of 30.5 Mtpa, using leading technology and supported by a high performance team.

We believe that, in order to continue developing, we must continuously strive to remain efficient, competitive and consistent with our values.

Above all, we feel it is essential to invest in building long-lasting and trust-based relationships with our customers.

In this first issue of Samarco Update, we will discuss the adjustments made in the production process to optimize quality and costs after completing the ramp-up of our last expansion project. We will also talk about investments in water management, an issue which has become of critical importance in Brazil, and share information on the subject of corporate reputation, an important asset in an increasingly unstable global environment.

I hope you enjoy reading the content we have prepared for you.

Thank you for working with Samarco and being part of our history.

Ricardo Vescovi  
CEO

## INVESTMENTS TRANSFORMED INTO QUALITY

*Improvements in the process during the ramp up phase of pelletizing plant #4*



During the seven month ramp-up phase of the P4P, changes were made to the production process to further optimize product quality. Among the most important improvements, we can mention the installation of a second conveyor in the hearth layer of the induration furnace to increase pellet firing efficiency. Second, pressure was increased in the windboxes in the updraft drying zone to optimize the hardening of the pellets. The third action was to replace the belt scrubbers of the discharge conveyors of the furnace and in the screening areas to better control the product's moisture content. Other improvements continue to be implemented along the entire process. At the mine, there is an initiative in progress to replace and upgrade, through automation systems, the trucks, front end loaders and conveyor belts in

order to increase the efficiency of the ore extraction process and ROM transport. In the beneficiation phase, adjustments are being made to allow concentrators #1 and #2 to reach an 83% rate of metallic recovery, similar to the P4P. At the pellet plants, we have focused on actions such as on-line pellet size control at the furnace feed and advanced control systems for the balling and firing processes increasing the stability of the process and additionally improving the quality of Samarco products.

### Context

The P4P was one of the largest private capital projects in Brazil, involving investments of US\$ 3.15 billion, and was concluded in the first quarter of 2014. The project included the construction of a new concentration unit in

Germano, a pellet plant in Ubu, and a 400km long pipeline connecting the two industrial units. In addition to the industrial facilities, a significant part of P4P scope consisted in complementary projects related to environmental issues and social investments in communities neighboring Samarco's operations. With the completion of P4P, the Company now has a structure consisting of three concentration plants, three pipelines and four pellet plants, besides the existing port facilities.

The new concentrator uses the most modern technology available for processing lower grade and harder minerals. Between 1977, when Samarco started its operations, and now, the iron content of the ore which feeds the concentrators has dropped from 52% to 43%, so in order

to meet pellets specifications at the required 66-68% Fe, metallic recovery at the concentration plants must reach 83%. The new pelletizing plant in Ubu has the largest induration furnace in the world, with a working area of 816 m<sup>2</sup>. The process circuits are simpler, extremely efficient and with a high throughput, which allows lower maintenance and higher operating levels. To additionally improve the quality of our products, we have made investments in

expanding and upgrading our coating facility, leading to a better performance at the DR Modules. We have also improved the stockyard and loading facilities to assure that the products will be ready for shipping at the right time and with the required specifications.

The P4P was also unique because it was the first large expansion project in Brazil that was totally carbon neutral. During the construction phase, some 150

thousand tons of CO<sub>2</sub> were compensated with the planting and conservation of forests covering an area of over 150 hectares.

All of these actions play an important role in allowing Samarco to continue supplying top quality products, always committed to occupational health and safety, and the environment, essential concerns in our business philosophy.

## WATER: CONSCIOUS CONSUMPTION

*Scarce rainfall due to climate changes on a global scale demands rationalization and optimization of water use*



Brazil holds 12% of all of the surface freshwater of the planet, and historically 90% of its territory receives rain throughout the year, which favors the formation of an extensive river network. In spite of this favorable pattern, recently the country has suffered from scarce rainfall due to climate changes on a global scale.

This scenario has brought up many discussions about the conscious use of water and ways to maximize the reserves available in the country. Therefore Samarco

has been striving even harder to implement initiatives which translate its vision of sustainability. One of these initiatives is the Positive Water Program, which allows the Company to contribute to a greater availability and improved quality of water in the river basins of the areas in which it operates. The projects provide for collaboration with government, authorities and society, based on five points: mobilization in behalf of sustainable attitudes and results, efficient use of water resources, recovery and

protection of springs and riparian forests, support to infrastructure projects related to water supply, and support of Conservation Units.

This year Samarco signed a letter of commitment with the government of the state of Espírito Santo (where the pellet plants are located) related to reforestation and preservation of areas, springs, rivers and streams which are a source of water for the southern part of the state. The initiative contributes directly to the recovery, protection and conservation

of some 1800 springs and 800 km of rivers and streams. In Minas Gerais state (where the Samarco ore deposits are located), the Company has sponsored the book “Water and Culture: Inventory of water sources in Ouro Preto”, which contains an identification and characterization of the city’s water sources, carried out by experts. Samarco has also signed letters of intent for the development of similar inventories in cities located in the neighborhood of its Germano unit.

Water is a key element in all of Samarco’s production phases, such as concentrator activities, pipeline transportation and pellet production. The resource is obtained in compliance with the water use licenses granted by the Brazilian environmental entities, and all water that is not reused in the process is treated and returned to nature. Samarco uses recycled water to transport its iron ore slurry through the 400 km pipelines which connect its mines in Minas Gerais to the pellet plants in Espírito Santo. Currently the Company has

been able to achieve recycling levels of up to 90%. To continue making progress in this regard, the Company is always revising its Water Resource Master Plan, which sets the guidelines for water management. It contains initiatives and projects focused on the systematic monitoring of water resources, the reduction, rationalization and optimization of water use in the production process, assurance of legal compliance, as well as risk assessment.

## TRUST THAT GENERATES VALUE

*Expert describes the importance, how to build and maintain Corporate Reputation in a B2B Company*



“Corporate Reputation is built throughout the history of an organization. It’s a value that can’t be transferred, copied or acquired in the market.” This is how Ana Luisa Almeida, a PhD in Business Administration from the Federal University of Minas Gerais (UFMG) and Erasmus University (the Netherlands), and chairman of Reputation Institute Brazil, defines this competitive differential of the organizations that stand out in the market. Samarco

has been monitoring its Corporate Reputation since 2011 and therefore has conducted a periodical study with its stakeholders, in order to assess their degree of trust, esteem and admiration as well as their expectations towards the company’s performance. You can now read the interview of professor Ana Luisa Almeida, given to Update Samarco.

### What is Corporate Reputation?

The Reputation of an organization is the result of the perceptions of multiple stakeholders about how capable the organization is to deliver what it promises. These perceptions reflect the degree of esteem, admiration, trust and empathy people feel in regards to the company and directly affect their decisions of purchasing products,

recommending the company, investing in it or working for it. It also affects their decision of supporting the company, whenever that's necessary. Reputation works as a magnet that attracts looks towards the organization and awakens the stakeholders' interest in what the company does, the products and services it offers, the causes it supports, among other topics. In the corporate context, reputation isn't something that is built by only one area; it is the responsibility of all of the company's areas and, for its management to be effective, it must be part of the organization's strategy. Governance and Leadership have currently become two very relevant drivers in building Reputation, due to the importance of corporate integrity and of having an ethical behavior. We have seen this in several studies over the past few years.

**Why is it important to periodically monitor this topic, such as Samarco has been doing?**

A company's Reputation is a sustainable competitive advantage that allows it to differentiate itself from its competitors. In a scenario of tough competition, globalization, the activism of several stakeholders and the strength of the media, differentiating an organization through its reputation has become a very important factor, as well as a great organizational challenge. The challenge starts by understanding what

this asset is and which impact it has in the organization's specific context. Samarco has always stood out for having a strong reputation and has always been a reference in the mining industry, but it started focusing more on reputation management in 2011. Through its Reputation Study, the company seeks to understand what represents value to each of its stakeholders and what are the expectations of its clients, its suppliers, its employees, and of the local communities as well, in order to identify what aspects are being covered and what still needs improvement. Samarco's intention is to still be recognized by the quality of its products but also for being a trustworthy organization, one that has integrity, that is efficient and that has a vast experience and technical expertise. To keep this recognition is what will allow the sustainability of the company's performance.

**How does Corporate Reputation contribute to the evolution of a company's relationship with its clients and other stakeholders?**

The influence of a company's stakeholders has had a more and more determining role in the company's results and this is the main factor that furthers the "Reputation Economy". In this context, organizations need to pay attention to issues that go beyond their products and services, because there's a growing demand from different audiences for posture, action and strategy that are in line with the social

role organizations have. The great challenge for organizations is to create value for its several stakeholders. In this sense, the capacity of understanding what influences the perception of value from each stakeholder can mean a great competitive differential that is reflected in the level of engagement of the stakeholders, in getting new clients, in attracting and retaining talent, in reducing capital costs and in earning the of investors.

**Is there any difference in Corporate Reputation in the context of B2B companies?**

B2B companies depend even more on a Strong Reputation, because there is a closer and more interdependent relationship with a smaller number of clients, unlike B2C companies, which usually have a larger array of consumers. Therefore, this asset, in a B2B company, is more important, because the trusting relationship it has with its stakeholders makes it more competitive. The stronger the degree of trust, the more competitive the company is. For a B2B company to retain its clients it needs to guarantee their satisfaction and cultivate a long term relationship. Also, the nature of the business of B2B companies makes it more difficult for them to establish emotional bonds with its stakeholders, which doesn't happen with B2C companies.

**Can B2B companies benefit from a positive Reputation**

**within their value chain and their overall network?**

A company with a strong reputation can interfere in its industry as a whole, especially in an industry like mining, which has great challenges in its activities. Is the value chain makes an effort to show that its conducting more sustainable mining practices, with the latest technology, respecting the environmental issues and going beyond what's demanded by regulators, everyone will benefit. It's a process of feedback that can generate a better perception of the industry, which is better for everyone.

**To what extent can a company's Reputation be considered to be a positive asset?**

Intangible assets have been considered to be a source of value and risk and therefore efforts are necessary for them to be managed, for their value to be calculated, for future risks to be assessed, always with an economic basis as a parameter. Lately there has been a lot of talk about the Reputational Capital. A company with a fragile reputation, when facing a crisis, loses market value, loses the value of its stock and its rating with investors.

When reputation is lost, a company also loses the favorable conditions for business and will consequently have more difficulty in implementing the strategy and achieving its goals. On the other hand, a company with a strong reputation has an intangible asset, to the extent it can, for instance, have lower costs when getting a financial loan, because the degree of trust it has is higher. I can also attract and retain talent and have a more stable relationship with its clients. In other words, it has an asset that makes business easier.