



Vale's ESG Webinar

October 4th, 2018

“This presentation may include statements that present Vale's expectations about future events or results. All statements, when based upon expectations about the future and not on historical facts, involve various risks and uncertainties. Vale cannot guarantee that such statements will prove correct. These risks and uncertainties include factors related to the following: (a) the countries where we operate, especially Brazil and Canada; (b) the global economy; (c) the capital markets; (d) the mining and metals prices and their dependence on global industrial production, which is cyclical by nature; and (e) global competition in the markets in which Vale operates. To obtain further information on factors that may lead to results different from those forecast by Vale, please consult the reports Vale files with the U.S. Securities and Exchange Commission (SEC), the Brazilian Comissão de Valores Mobiliários (CVM), the French Autorité des Marchés Financiers (AMF) and in particular the factors discussed under “Forward-Looking Statements” and “Risk Factors” in Vale’s annual report on Form 20-F.”

“Cautionary Note to U.S. Investors - The SEC permits mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce. We present certain information in this presentation, including ‘measured resources,’ ‘indicated resources,’ ‘inferred resources,’ ‘geologic resources’, which would not be permitted in an SEC filing. These materials are not proven or probable reserves, as defined by the SEC, and we cannot assure you that these materials will be converted into proven or probable reserves, as defined by the SEC. U.S. Investors should consider closely the disclosure in our Annual Report on Form 20-K, which may be obtained from us, from our website or at <http://http://us.sec.gov/edgar.shtml>.”

Disclaimer

Agenda

Update on Samarco's remediation process

A novel dust suppression technology using recycled PET

Agenda

Update on Samarco's remediation process

A novel dust suppression technology using recycled PET

Samarco remediation

Governance

- New governance agreement

Financial Aid

- Compensation
- Water
- General damage

River and sea monitoring

- Biodiversity
- IUCN (International Union for Conservation of Nature)

Rehabilitation

- Tributaries
- Springs
- River banks

Resettlements

- Bento Rodrigues
- Paracatu de Baixo
- Gesteira

Linhares Lagoons

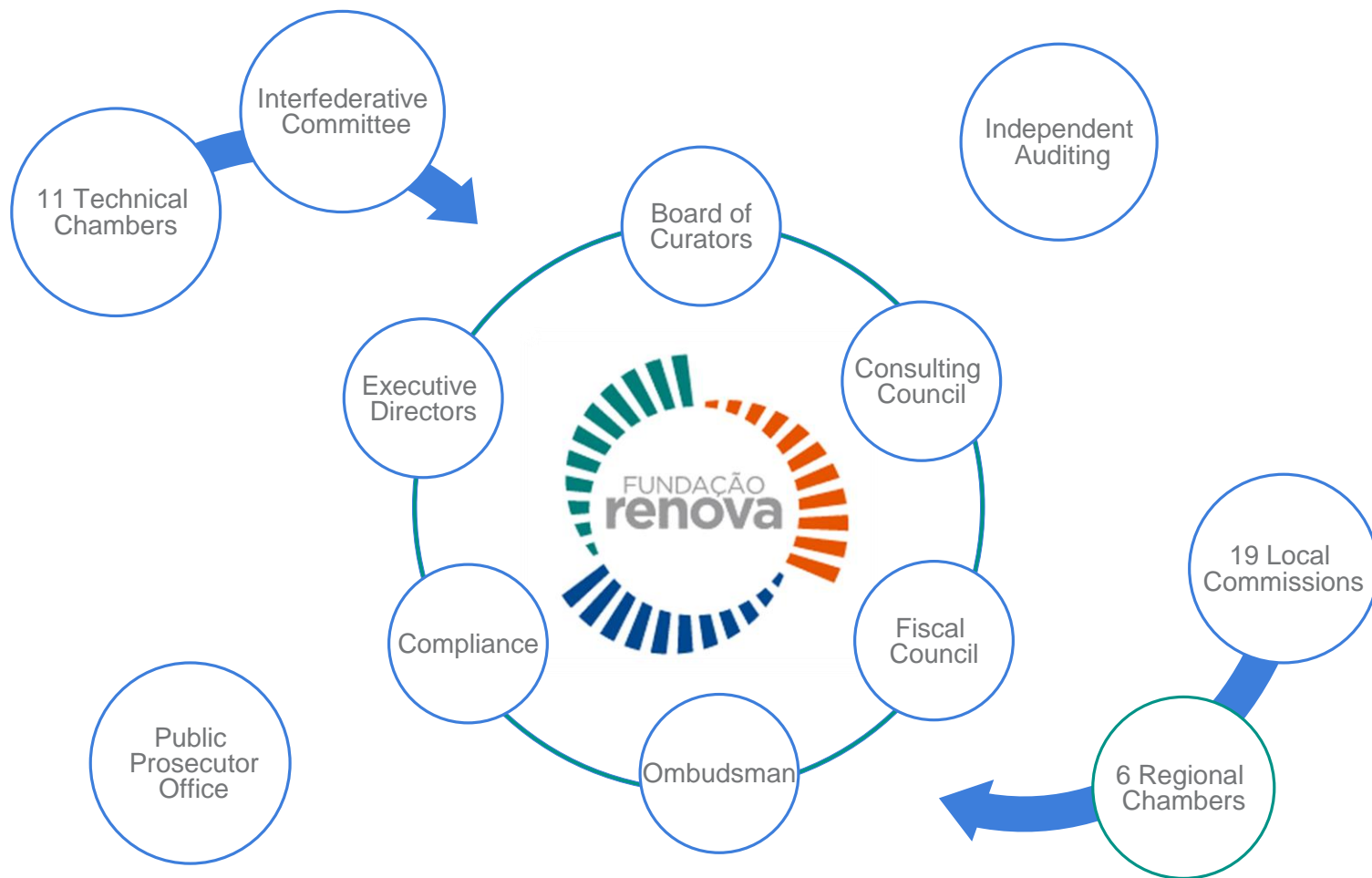
- Remediation
- Reallocation

New Governance Agreement ratified on August 8th, 2018



- Inclusion of the Public Prosecutors Office and the Public Defense Office
- Settlement of the R\$ 20 billion civil claim
- Enhancement of community participation
- Establishment of a process to renegotiate the programs of the Framework Agreement over 2 years and to progress settlement of the R\$ 155 billion civil claim

Renova Foundation with new governance and affected people participation



Governance Agreement



| | Former Agreement | Current Agreement |
|----------------------------------|--|--|
| Board of Curators | 7 members appointed by: <ul style="list-style-type: none"> • Maintainers (6) • Interfederative Committee (1) | 9 members appointed by: <ul style="list-style-type: none"> • Maintainers (6) • Interfederative Committee (1) • Affected people (2) |
| Consulting Council | 17 members appointed by: <ul style="list-style-type: none"> • River Basin Committee (5) • International Commission for Sea Resources (2) • Academy (5) • Impacted communities (5) | 19 members appointed by: <ul style="list-style-type: none"> • River Basin Committee (4) • Environmental/Marine Government Organizations (3) • Academy (3) • NGOs (2) • Local Commissions (7) |
| Interfederative Committee | 12 members appointed by: <ul style="list-style-type: none"> • Environmental Ministry (2) • Federal Government (2) • Minas Gerais State (2) • Espírito Santo State (2) • Minas Gerais Municipalities (2) • Espírito Santo Municipalities (1) • River Basin Committee (1) | 16 members appointed by: <ul style="list-style-type: none"> • Environmental Ministry (2) • Federal Government (2) • Minas Gerais State (2) • Espírito Santo State (2) • Minas Gerais Municipalities (2) • Espírito Santo Municipalities (1) • River Basin Committee (1) • Affected people (3) • Public Defender (1) |

R\$ 1.1 billion paid in financial aid and compensation



Compensation

(Mediated Indemnity Program and Emergency Financial Aid)

- 19,233 families registered
- 1st and 2nd registration campaigns completed
- 3rd campaign completed on Aug 30th, 2018

FINANCIAL AID

10,777
active cards

25,058
benefited people

WATER MEDIATED INDEMNITY PROGRAM

Aimed at those who had potable water supply and distribution temporarily interrupted

260,782
proposals accepted

254,507
claims paid

GENERAL DAMAGE MEDIATED INDEMNITY PROGRAM

Aimed at people or micro and small businesses that had their material assets impacted and their income compromised

12,960
people eligible for the compensation program (campaigns 1 and 2)

7,290
proposals accepted and paid

Biodiversity and fishing



- 230 monitoring points
- 24 research institutions
- 565 professionals
- Investment of R\$ 120 million
- 16 months 1st phase of monitoring
- 43,000 water, sediment, animal and plant samples

Independent Rio Doce Panel led by IUCN (International Union for Conservation of Nature) released its first report



“The Rio Doce Panel’s first report is based on a year of on-the-ground observation and study to determine how to strengthen the current restoration and rehabilitation efforts in the affected watershed and coastal zone, and to identify measures that will help ensure a more sustainable and resilient legacy for future generations.”

Yolanda Kakabadse, chair of the Independent Rio Doce Panel

Rehabilitation of degraded areas



- Rehabilitation of 113 tributaries
- 511 protected springs and another 500 in process of enclosure
- Enclosure of protected areas: 37 rural properties of Mariana (main river channel, forest fragments and springs)
- Control of erosion and reshaping of the river banks in 1,522 hectares between Mariana and Rio Doce
- 92 monitoring stations along Rio Doce and 120 parameters of water and sediments

Forest recovery



- Recovery of 40 thousand hectares in 10 years
- More than 1,000 hectares will be protected by the end of 2018
- Protection and recovery of 5,000 springs, within 10 years

Bento Rodrigues resettlement of 225 families



- Site and urban development project approved by local communities: 99% of votes
- Activities started on May 9th, 2018
- Vegetation suppression
- Meetings were held with the first 45 families to discuss future house projects

More information:

<http://www.fundacaorenova.org/en/news/installation-of-construction-site-of-the-new-bento-rodrigues-district-has-begun/>

Paracutu de Baixo resettlement of 140 families



- Purchase and sale contracts signed for 9 plots
- Registration process of real estate in progress
- Environmental studies for the environmental licensing process are in progress
- Site and urban development project approved by local communities

Gesteira resettlement of 37 families



- Eligibility criteria for resettlement were discussed and approved by the community
- Due to the increase of eligible families, it was necessary to review the area to be acquired
- Environmental studies for the environmental licensing process are in progress

Engineering works on provisional dams – Linhares Lagoons



Rio Pequeno

- After the rupture of the Fundão dam, Linhares city hall filed a suit to receive financial support from Samarco and build water protection barriers on lakes and channels in the Linhares (Espírito Santo) region. Samarco was legally required to follow suit.
- Impacts on rural houses during 2017-2018 rainy season
- Upstream: 5 families reallocated due to flooding
- Downstream: 56 families temporarily reallocated due to the channel opening beside the barrier

Agenda

Update on Samarco's remediation process

A novel dust suppression technology using recycled PET

Dust suppressor through the use of post-consumption PET

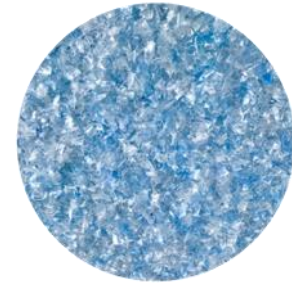


- Sustainable technology of dust suppressant resin production by chemical recycling of post-consumption PET (polyethylene terephthalate)
- Agreement between Vale and Federal University of Espírito Santo (UFES)
- Product: colorless or colored dust suppressor
- Vale's 1st green patent
- Control of particulate emissions in:
 - Piles of iron ore, coal, limestone
 - Railway transport
 - Unpaved roads

Chemical process



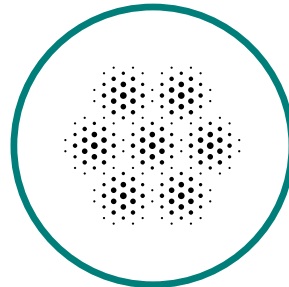
PET cleaning | washing



PET crushing



Eco-friendly and
biodegradable



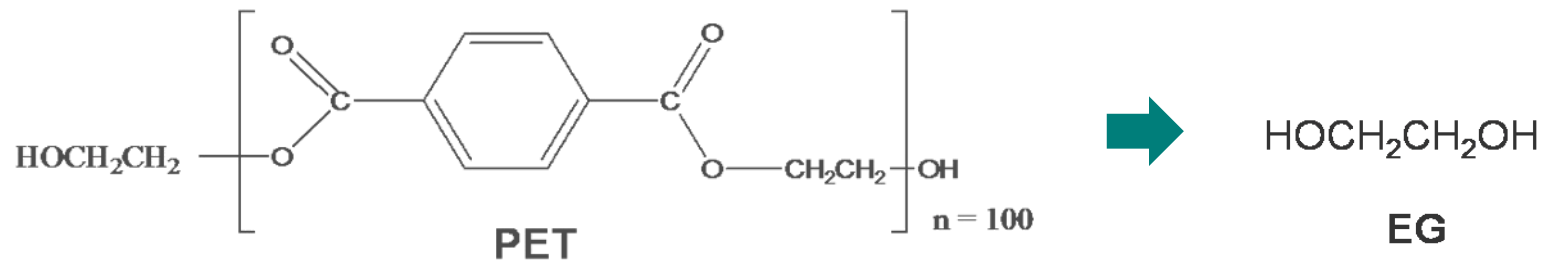
Dust suppressor



Chemical recycling

Indirect and intangible benefits on Health and Safety

Chemical recycling (transformation to non-harmful product)



Dust suppressor product characteristics



After a few hours



- Easy to apply without separation of liquid and solid phases
- Doesn't cause clogging in the product application system

Dust suppressor through the use of post-consumption PET



- Test carried out applying product in 170 iron ore wagons in the Vitoria-Minas railroad (660 km extension) showed excellent results:
 - high durability
 - efficiency
 - no need for reapplication
- The PET based product uses lower concentration than the currently used product
- Cost reduction of around 30% compared to currently used product

Indirect and intangible benefits on the environment

Benefits

- Avoids contamination of the oceans
- Sustainable destination

Key facts

- About 8 million tons of plastic per year reaches the sea
- At least 269,000 tons of plastic debris float on the surface of the oceans
- Half of marine animals have ingested pieces of plastic or got entangled into them

Expected indirect and intangible benefits

- Community involvement and relationship improvement
- Income generation for local communities
- Brings other industries to the same region
- Development of technology and capacity building: equipment and scholarships for MSc and PhD

Development of new products



PS (polystyrene)
and nylon



PE (polyethylene)



PS (polystyrene)



PET



Polyurethane



HDPE (high density
polyethylene)



Other plastic waste generated by communities and industries are being studied

Save the date: next Vale ESG Webinar

When

- December 11th, 2018
- 12:00 pm (Rio) / 9:00 am (NY) / 2:00 pm (UK)



VALE