

# Innovation Committee's Report of Vale S.A.

December 2022

This report aims to present the main actions carried out by the Innovation Committee ("CINOV" or "Committee") in 2022 and to present the Committee's perspectives for the next year based on the guidelines of the Board of Directors ("BoD"), Vale regulations, and the result of its self-assessment.

## PRESENTATION

### Committee creation date

CINOV was created on May 18<sup>th</sup>, 2021. At Vale's Extraordinary Shareholders' Meeting of December 21, 2022 the Company's bylaws were amended to restructure and simplify the Committees structure, and CINOV started to act as a non-statutory and non-permanent Committee.

### Committee composition and structure

CINOV is composed of Roberto Castello Branco, as Coordinator, André Viana, Ken Yasuhara, and Roger Downey, as members.

The Committee also counts on Luis Carlos Affonso as external expert Consultant.

### Main attributions and responsibilities of the Committee

CINOV supports and advises Vale's Board of Directors on all matters related to innovation, digital transformation, and new technologies, among other related topics, in accordance with its bylaws.

## MAIN INDEX

### Quantitative analysis of meetings

CINOV met 8 times in 2022 (6 times in 2021), being all ordinary meetings. In addition, the Committee carried out a technical visit to Vale's Units in Minas Gerais with the purpose of seeing initiatives and Innovation vehicles implemented by the Company on site.

### Adherence rate of Committee members

Members attended 95% of the meeting time in fiscal year 2022, while in 2021 the indicator was 96%.

### Average lasting of Committee meetings

Throughout 2022, CINOV met for approximately 34 hours, and the meetings lasted 4 hours and 20 minutes on average. Its meetings were divided into 54 agendas, all informative.

Quantitative analysis of the Committee's work plan and demands/ recommendations

As in the previous year, the Committee's meetings fully complied with the agendas contained in its respective work plan and the 20 demands/ recommendations arising from the meetings were duly addressed and concluded.

## HIGHLIGHTS OF THE YEAR

Summary of the main activities carried out by the Committee in 2022

During 2022, the Committee performed its roles, aligned with the best interest of the Company and the competences of its bylaws, contributing for a strong evolution in the Company's innovation themes and processes, among which stands out the following:

- Discussion and monitor opportunities for synergy between Vale's Centers for Technological Development and R&D Portfolio, and projects for the dissemination of agile teams, digital transformation, and innovation, following Vale's cultural transformation;
- Review of the approach regarding the construction of the Portfolio of the Future, Open Innovation, Corporate Venture Builder, Partnerships, Joint Ventures, and Corporate Strategy;
- Monitoring of companies created under the Corporate Venture Capital program, such as Biocarbono, Geopolímeros, and Co-Log;
- Review and monitor innovation programs aiming low carbon emissions, Automation and Autonomous Operations, New Products, and future strategies;
- Implementation of a specific agenda for Committee and Board of Director's meetings for the presentation of outstanding projects related to Innovation (Innovation Share), with the purpose of signaling the relevance of innovation for the future of Vale and encouraging innovation in the Company;
- Discussion and monitor the main initiatives adopted on Innovation Governance and Culture, connecting strategic themes and ensuring focus on priority initiatives with high potential impact;
- External presentations to deepen knowledge on topics such as "Agile Teams" and "Digital Transformation: Importance and Journey";
- Discussion of the Executive Committee's proposal for the Innovation budget.

## OUTLOOK FOR NEXT YEAR

## Committee evaluation process, main findings, and opportunities for improvement

In 2022, after carrying out a self-assessment by Vale's Board of Directors and its Advisory Committees, it was possible to identify opportunities for continuous improvement of the governance of these bodies. The main considerations and recommendations related to the Innovation Committee included strengthening the innovation agenda directly with the Board of Directors, discussing strategic guidelines and priorities, in addition to the Committee's concentration on the most strategic themes of innovation for the Company.

## Final considerations

Regarding the Committee's evolution action plan for 2023, we highlight the following matters, which consider ongoing projects and actions that are now imposed due to Vale's new challenges.

Objectively, they are:

- Expand the content of the most strategic matters related to innovation on the agenda of the Committee and the Board of Directors, as the Governance and monitoring agenda becomes stronger;
- The Committee, in 2022, adopted a broader approach to strategy issues, monitoring ongoing projects and discussing new fronts related to future strategy, which will be expanded for 2023;
- Evaluate reinforcing the committee's expertise considering innovation issues related to (i) the core business (such as production technologies, automation and autonomous equipment, new materials, etc.); (ii) the Company's climate agenda (such as energy transition, carbon emissions, etc.); and (iii) the Company's digital transformation (such as IoT, data and analytics, AI, etc.).