nexa

Environmental Programs 2023

Energy Management Programs

Energy Matrix

In 2020, as part of our dedication to sustainability and reducing our carbon footprint, we consolidated a long-term commitment by signing an agreement with Electroperú S.A. This pact ensures us a constant supply of 240 MW of renewable energy over seven years. Thanks to this initiative, we estimate savings of up to 50 million dollars during the contract period, contributing to ensuring that 98% of our energy consumption comes from renewable sources. This concrete step reflects our firm commitment to improving our environmental impact and moving towards a more sustainable future.

Fuzzy Logic Control-Ball Mill

Our testing of control strategies validated a savings in energy consumption, projecting an estimated avoided cost of \$99.5 thousand per year. These benefits will be validated during 2024





Maste Management Programs

Environmental Education Program 2023

At Cerro Lindo, we continue to run our Environmental Education Program (EEP) together with the schools in Chavín and Topará. This program aims to develop students' skills in caring for the environment, including waste separation, bio-garden recovery, and the implementation of pilot hydroponic crops.

At the Pasco Complex, training was provided on environmental issues such as accidents, environmental impacts, monitoring, and waste management. The EDA was also shared with the operating and administrative areas, as well as the joint committee, with information on environmental performance indicators for the EDA, and a workshop was organized as part of Environmental Week. At Cerro Lindo, participatory water and air monitoring was conducted.



We have internal policies and procedures for dam management based on international references and recommendations:

PG-SUS-GMA-002-PT Guidelines for Dam Projects

This document establishes guidelines for the hiring and development of studies and projects for dikes and dams for the containment of tailings/slimes from mineral processing plants, mineral processing plants, and for water storage, for Nexa's units

PG-SUS-GMA-003-ES Guidelines for Closure

Establish guidelines for the development of closure plans for Nexa Resources. It applies to all Units and Projects in the following situations: i) Existing ventures and new projects; ii) Definitive or temporary suspension of activity situations; iii) Areas that have already received environmental recovery measures but have not yet achieved a stable condition; iv) Areas of influence with high vulnerability and socioeconomic dependence and that were economically affected by metallurgical and/or mining activities.

PG-SUS-GMA-004-ES Guidelines for the Implementation and Operation of the Dam Management System

This document establishes the guidelines and methodology for the implementation and operation of the dam management system in Nexa's Units. The dam management system applies to all Nexa Business Units, whether they are new projects, dams in operation, or dams that are out of operation and have not yet undergone the respective closure.

PG-SUS-GMA-021-ES Golden Rules for Dam and Reservoir Management

This standard establishes the guidelines and criteria to be adopted for the application of the Golden Rules for the management of Nexa's dams and deposits, which are mandatory, and in case of non-compliance, disciplinary measures will be taken. This procedure applies to all geotechnical structures of the units and is valid for employees and contractors of all Nexa Resources business units.

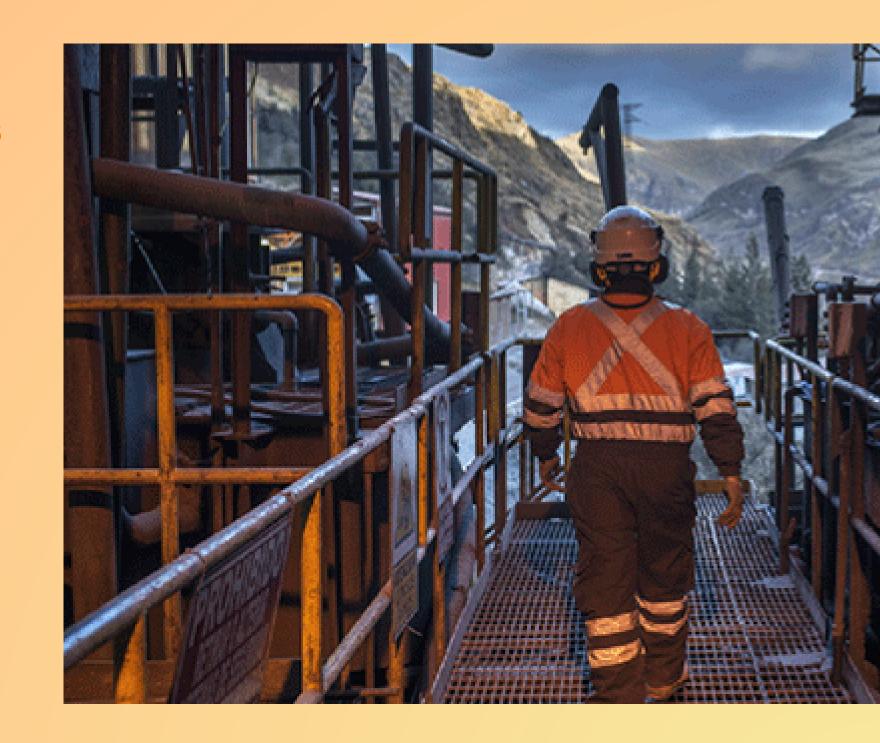


Mater Efficiency Management Programs

Water Resource Management Initiatives

To reduce water consumption, Cerro Lindo MU has a master water measurement plan, which includes the Onda 1, Onda 2, and Onda 3 projects, that uses flow meters to improve the quality of the unit's water balance. Cerro Lindo MU's water discharge management is based on a zero-discharge commitment.

At the Atacocha and El Porvenir mining units, the quality of discharged water was guaranteed through the control of operating parameters such as turbidity, total solids, pH, and conductivity, which are measured with monitoring equipment available at the unit.





Water Risk Nanagement Programs

Water and Effluent Management PG-SUS-GMA-0006:

To responsibly manage the water used in operations and minimize environmental impact, the Managerial Procedure for Water Resource Management (PG-SUS-GMA-006PT) has been implemented, and the water quality monitoring protocol of the National Water Authority (ANA) and testing methods accredited by INACAL have been used, as established by regulations. These efforts are crucial to the company's environmental strategy and contribute to environmental conservation and the responsible management of water and effluents in surrounding communities.

Our Managerial Procedure aims to establish the minimum criteria that must be met for the proper management of water use and liquid effluent discharge in Nexa Resources (Nexa) units and new projects.

