

We are global leaders in the provision of professional services to improve that improve physical and social infrastructure and the environment.



Responsible Mining Services



Summary of Qualifications

Diverse experience: Cardno has successfully implemented several projects in Latin America and is recognized for its world-class services in socio-environmental consulting, engineering and infrastructure services, and natural resource management. For more than 20 years, Cardno has worked with the largest national and international clients in the region.

National and international knowledge: Cardno understands how to work in Latin America and has a deep knowledge of the physical, environmental, socioeconomic and legal context that operates in this region. We know the diversity of cultures and environments, which allows us to adapt our approach and develop practical strategies that consider existing conditions. In addition, we have the support of an extensive network of Cardno global professionals, always available to share their knowledge in various sectors and regions of the world.

Deep knowledge of engineering, socio-environmental and natural resources management: Cardno is at the forefront of sustainability and understands the challenges that customers face in the development and implementation of social and environmental responsibility objectives.

Aligned with the most important socio-environmental standards: Cardno has extensive experience in consulting and coordination with various types of agencies, government entities and compliance with national and international standards, including ISO, the IFC Performance Standards, the World Bank Environmental and Social Framework, among other guidelines that protect communities and the environment. In addition, Cardno Latin America is a registered environmental consultant in your country and knows the local regulations relevant to the sector.

Multidisciplinary teams: Cardno's approach brings together the diverse skills and professional experiences of a multidisciplinary team that works alongside the client in the design and development of holistic analyses, strategies and solutions.

Professionals with proven experience: Cardno Latin America has assembled a committed team of professionals whose collective experience covers diverse specializations and knowledge in several complementary fields.

We support responsible mining.

Our knowledge and experience allows us to develop studies and projects in accordance with the technical and legal standards of the country, always prioritizing people and the environment.



Cardno has experience in metallic, non-metallic and aggregate minerals, and is able to deliver multidisciplinary services and advanced engineering technologies for the development of innovative and sustainable solutions for mining operations of all sizes, and in every phase.

Our interdisciplinary teams of professionals work with their respective departments to conduct evaluations based on a solid understanding of geographical, socioeconomic, physical and legal contexts.

The data and knowledge are part of integrated plans and designs, which are then strategically implemented, managed and evaluated to ensure the highest standards of quality and performance, during each stage of a project.

Our methodology combines the knowledge and experience we have in various sectors, and allows us to offer, among others, the following integrated products and services for mining development.

Engineering Designs

- > Design and planning of underground and open pit mines
- > Geo-mechanical studies
- > Slope studies
- > Design and planning of quarries
- > Tailings tank designs
- > Designs of waste deposits
- > Heap leach designs
- > Concentrate plant designs
- > Design for concentrate storage
- > Tailings system design
- > Designs of ADR plants and merrill crowe

Infrastructure

- > Camp and auxiliary infrastructure design
- > Sedimentation design
- > Water pumping systems design
- > Hydraulic management
- > Lifting system design
- > Access road designs
- > Ramp designs
- > Borer raises
- > Funnel designs
- > Special Studies



Special Studies

- > Geological modeling
- > Geochemical modeling
- > Geometallurgical models
- > Feasibility studies (profiles, pre-feasibility, feasibility and detail)
- > Economic valuation of environmental impacts
- > Industrial safety and risk studies
- > Analysis of safety standards in the energy and mining sector.
- > Contingency plans.
- > Seismic risk studies

Hydrology and Hydrogeology

- > Hydrological studies and modeling
- > Hydrogeological studies and modeling
- > Watershed studies and management
- > Water balance
- > Hydraulic compensation plans
- > Neutral water separation projects

Environmental Studies

- > Environmental and Social Impact Studies (EsIA) and (EIA)
- > Declarations of Environmental Impact (DIA)
- > Technical Reports
- > Mine closure plan and designs
- > Mining Environmental Liabilities Closure Plan
- > Environmental Adjustment Plan
- > Environmental Studies for Concentrate Storage
- > Environmental Audits
- > Environmental Monitoring

Biological Studies

- > Wetlands studies
- > Hydrobiological studies
- > Biological and environmental compensation plans
- > Forestry studies and native species nursery development

Soil Studies

- > Studies of contaminated soils
- > Studies on the restitution of contaminated soils
- > Soil decontamination plan
- > Soil sampling
- > Environmental Modeling

Environmental Modeling

- > Air (pollution dispersion)
- > Noise and vibration
- > Surface water quality

Waste Management

- > Management studies of hazardous and non-hazardous industrial waste
- > Landfill designs
- > Solid waste warehouse design

Treatment Plans

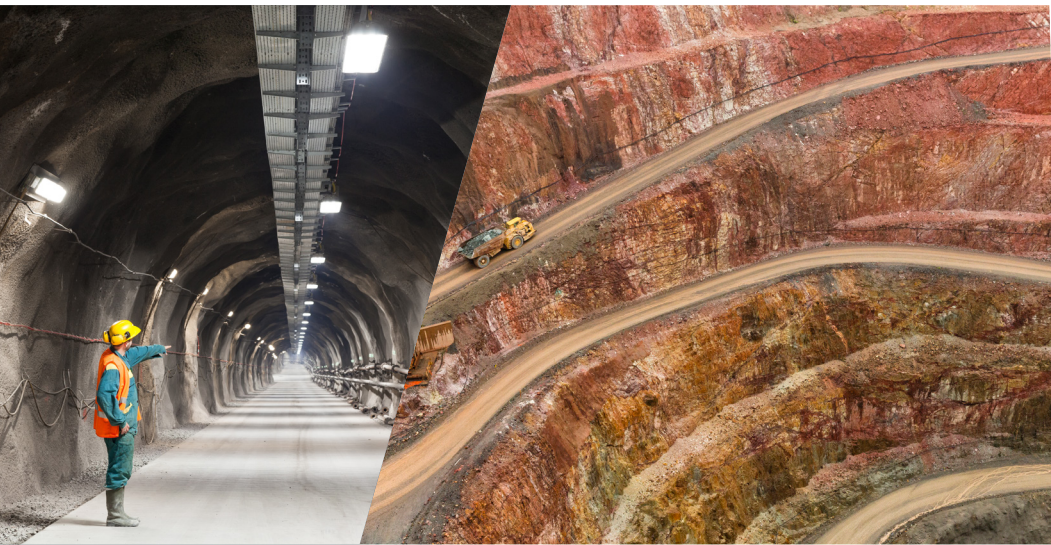
- > Design of acid water and wastewater treatment plants(WWTP)
- > Design of passive systems for the treatment of contaminated water

Social Studies

- > Social baseline survey
- > Community Relations Plan
- > Citizen Participation Plan
- > Communications and information plan
- > Social monitoring

Legal Assessment

- > Interpretation of compliance standards
- > Licensing processes
- > Regulatory process for properties and concessions



Cardno Latin America is committed to sustainable development, continuous improvement, safety and high-quality products and services.

We work to develop customized solutions, offering services that add value, complementing the efforts of our clients, and support the fulfillment of their social and environmental objectives.

Regional Experience

Cardno has been working with all types of clients—private, industrial, national, international, and public—for more than 20 years in the region.

Cardno's Zero Harm

Cardno is committed to a rigorous approach to the security of all our operations.

We are committed to achieving our "Zero Harm" goal by continuously improving our security systems and surveillance in our workplaces through solid leadership, employee participation and practical actions.

Cardno
ZERO
HARM
EVERY JOB. EVERY DAY.

Our Clients:

- BHP - Cerro Quebrado
- Lundin Gold
- Buenaventura
- Cornerstone
- Codelco
- ENAMI EP
- San Luis Minerales
- Minera Rio Blanco
- Ecuacorriente
- INV Minerales
- Minera Cachabi

About Cardno

Cardno is a professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Contact

Cardno Latin America - Regional Office

Calle Miguel Ángel E6-111 y Alberti,
Urbanización la Primavera I
Cumbayá, Quito, Ecuador
PBX: +593 2 355 0110 Ext. 100

Cardno Colombia

Cra. 7B Bis No. 126-36
Barrio Santa Bárbara
Bogotá, Colombia 07603
PBX: +057 1 795 3853

Cardno Peru

Calle Francisco Masías Nro. 516
Urb. Jardín, San Isidro
Lima 27, Peru
+51 1 624 3133