

SELECTION PROCESS # RG-T4442-P001 (COMPONENT 1)

TERMS OF REFERENCE

REGIONAL

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 1: STRENGTHENING MINING SECTOR GOVERNANCE

STRATEGIES FOR PLANNING AND PUBLIC POLICY FOR THE MINING SECTOR

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.

- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals and metals required by clean energy technologies (solar panels, wind turbines, electric vehicles, energy storage systems, etc.). The value of the energy transition minerals market reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade. Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021¹. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing².
- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.³ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production⁴ while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. Improving and modernizing regulatory and investment frameworks, oversight, and monitoring capabilities requires sector planning instruments and policy tools to make them more efficient and create a business climate conducive to responsible mining investments. To that end, this component will finance three main activities: (i) consolidate strategies for planning and public policy for the mining sector with instruments that allow for compliance with national climate and sustainable development goals; (ii) strengthen investment promotion capacities embodied in sector investment plans, developing and/or fostering mining contract negotiating capacities, and strengthening the institutional capacities of mining municipalities in fiscal matters, project monitoring and evaluation, and territorial planning; and (iii) enhance

¹ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

² [IEA \(2023\) Critical Minerals Market Review 2023](#)

³ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

⁴ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

accountability mechanisms to ensure that sector revenues are managed effectively, and standards, like the EITI, are complied with, also promoting digitization and implementation of more transparent information management systems and more agile procedures

2. Objective

- 2.1. The objective of the consultancy is to support regional mining authorities in the design and implementation of sector strategic planning processes and formulation of public policies aligned with the strategy, including the design and implementation of participatory processes and documentation of consensus of key stakeholders from the public sector, industry and civil society.

3. Scope of Services and Key Activities

- 3.1. The selected firm will carry out the following activities:
 - 3.1.1. **Methodological design and identification of key actors.** Based on the scope of the strategic planning and public policy formulation support processes agreed with the sectoral authorities, the processes and their implementation methodology will be designed and key stakeholders will be identified.
 - 3.1.2. **Facilitation of multi-stakeholder relationships.** Interaction processes will be designed and facilitated among the identified key stakeholders. These will be structured in a series of workshops with plural representation of voices. Detailed results reports will be prepared to synthesize and communicate the main results, according to the defined methodology, which will be integrated into a final document agreed upon by the participants.
 - 3.1.3. **Support for knowledge management and communication activities.** In coordination with the specialized teams of the IDB and sectoral authorities, a cross-cutting communication strategy (including media management plan, social networks and public relations) will be developed and implemented to ensure public visibility and transparency of the executed processes. The communication strategy will provide key inputs for communication risk management for all stakeholders involved in the process. These activities will also support the regional transfer of best practices and knowledge generated within the framework of the project.

4. Expected Outcome and Deliverables

- 4.1. A detailed workplan and methodology to carry out activities 3.1.1, 3.1.2 and 3.1.3.
- 4.2. A first report containing the scope of the strategic planning and public policy formulation agreed with the sectoral authorities and a map of key stakeholders identified (3.1.1).
- 4.3. A first draft of conclusions and detailed results of the workshops executed (3.1.2).
- 4.4. The full report to include – adding to 4.1 and 4.2 – the strategy and policy recommendations for review and approval by the IDB (3.1.2).
- 4.5. Support materials for knowledge and communication activities and presentation of the final report to IDB and selected regional authorities (3.1.3).

5. Project Schedule and Milestones

5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
7 days from contract signature	Deliverable 4.1 (Workplan and methodology)
30 days from contract signature	Deliverable 4.2 (Scope and key stakeholders)
90 days from contract signature	Deliverable 4.3 (First draft of conclusions)
110 days from contract signature	Deliverable 4.4 (Full report)
120 days from contract signatura	Deliverable 4.5 (Knowledge and communication - Presentation)

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.
- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
- 6.3. The product will not be considered accepted until the Bank expresses it electronically.

7. Supervision and Reporting

- 7.1. For proper supervision of the reports, they must be delivered electronically to Natascha Nunes da Cunha (INE/ENE, nataschan@iadb.org), Martin Walter (ENE/CAR, martinw@iadb.org) and Carlos Sucre (INE/ENE, csucre@iadb.org) in Word, Excel, PowerPoint, JPG, PNG format, or PDF, depending on what the parties agree is more appropriate for each product. All methodologies, assumptions, and data sources used must be clearly outlined.

8. Schedule of Payments

- 8.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Deliverable 4.1 (Workplan and methodology)	10
Deliverable 4.2 (Scope and key stakeholders)	20
Deliverable 4.3 (First draft of conclusions)	30
Deliverable 4.4 (Full report)	30
Deliverable 4.5 (Knowledge and communication - Presentation)	10
Total	100

SELECTION PROCESS # RG-T4442-P002 (COMPONENT 1)

TERMS OF REFERENCE

REGIONAL

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 1: STRENGTHENING MINING SECTOR GOVERNANCE

STRENGTHENING INVESTMENT PROMOTION CAPACITIES

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.
- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals and metals required by clean energy technologies (solar panels, wind turbines, electric

vehicles, energy storage systems, etc.). The value of the energy transition minerals market reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade. Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021⁵. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing⁶.

- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.⁷ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production⁸ while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. Improving and modernizing regulatory and investment frameworks, oversight, and monitoring capabilities requires sector planning instruments and policy tools to make them more efficient and create a business climate conducive to responsible mining investments. To that end, this component will finance three main activities: (i) consolidate strategies for planning and public policy for the mining sector with instruments that allow for compliance with national climate and sustainable development goals; (ii) strengthen investment promotion capacities embodied in sector investment plans, developing and/or fostering mining contract negotiating capacities, and strengthening the institutional capacities of mining municipalities in fiscal matters, project monitoring and evaluation, and territorial planning; and (iii) enhance accountability mechanisms to ensure that sector revenues are managed effectively, and standards, like the EITI, are complied with, also promoting digitization and implementation of more transparent information management systems and more agile procedures

⁵ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

⁶ [IEA \(2023\) Critical Minerals Market Review 2023](#)

⁷ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

⁸ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

2. Objective

- 2.1. The objective of this project is to strengthen investment promotion capacities embodied in sector investment plans, developing and/or fostering mining contract negotiating capacities, and strengthening the institutional capacities of mining authorities in fiscal matters, project monitoring and evaluation, and territorial planning.

3. Scope of Services and Key Activities

- 3.1. **Comprehensive Institutional Diagnostic Report**, which should contain an analysis of the sectoral governance of the institutions under study, based on an analysis of their organizational and functional structure and flow charts of critical processes related to investment promotion, institutional negotiation capacities, environmental assessment and oversight, project monitoring, and territorial planning. This diagnostic will include:
 - 3.1.1. a synthetic evaluation of the current legal and regulatory framework;
 - 3.1.2. a study of technical, financial and human capital capacities-considering budgets, profiles by functional positions and skills/staff gaps;
 - 3.1.3. a review of relevant on-going policies and initiatives;
 - 3.1.4. analysis of technological and operational systems (relevant to key issues such as permit and records management, environmental and social monitoring, etc.), availability and gaps in the environmental and social monitoring systems, etc.); and
 - 3.1.5. review of the technical and operational systems (relevant to key issues such as permit and records management, environmental and social monitoring, etc.), availability and gaps in the environmental and social monitoring systems, availability and gaps in the tools available for the execution of functions of regulation, evaluation and control of the exploration and exploitation of mining resources,
 - 3.1.6. analysis of infrastructure and mobility equipment, instruments for socio-environmental analysis and monitoring, among others. In addition, a comparative analysis will be carried out based on references with countries with similar political and social situations, and evidence from specialized literature, with the objective of offering a series of examples and references on regulations, methodologies and work initiatives that will allow the formulation of solutions adapted to the local context and promote best practices.
- 3.2. **Conclusion and Roadmap** which will detail, based on the analysis and evidence gathered, concrete and implementable actions to reduce gaps in the quality of governance in the mining sector, with attention to opportunities for improving institutional capacities for investment promotion, negotiation, environmental assessment and oversight, territorial development, project monitoring, human capital strengthening, legal framework reform and fiscal matters. For the identified actions the following will be included: (i) Detailed description, (ii) Estimated cost and breakdown; (iii) Tentative schedule (execution time) and (iv) Technical profiles for execution (experience, areas of expertise).

4. Expected Outcome and Deliverables

- 4.1. A detailed workplan and methodology to carry out activities 3.1 and 3.2.
- 4.2. A first draft report presenting advances on the institutional diagnostic report (3.1) for review and approval by the IDB.
- 4.3. A second draft report presenting the full institutional diagnostic report (3.1) and conclusions based in the analysis and evidence gathered (3.2)
- 4.4. Draft of the full report – adding to 4.3 – the roadmap and description of prioritized actions for review and approval by the IDB.

4.5. Presentation of the final report to IDB and selected regional authorities.

5. Project Schedule and Milestones

5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
7 days from contract signature	Deliverable 4.1 (Workplan and methodology)
60 days from contract signature	Deliverable 4.2 (Advances on institutional diagnostic report)
90 days from contract signature	Deliverable 4.3 (Institutional diagnostic report and conclusions)
120 days from contract signature	Deliverable 4.4 (Draft of full report)
150 days from contract signatura	Deliverable 4.5 (Final report)

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.
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- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Deliverable 4.1 (Workplan and methodology)	10
Deliverable 4.2 (Advances on institutional diagnostic report)	25
Deliverable 4.3 (Institutional diagnostic report and conclusions)	25
Deliverable 4.4 (Draft of full report)	30
Deliverable 4.5 (Final report)	10
Total	100

SELECTION PROCESS # RG-T4442-P003 (COMPONENT 1)

TERMS OF REFERENCE

REGIONAL

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 1: STRENGTHENING MINING SECTOR GOVERNANCE

ENHANCED ACCOUNTABILITY MECHANISMS FOR THE MINING SECTOR

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
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⁹ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

¹⁰ [IEA \(2023\) Critical Minerals Market Review 2023](#)

¹¹ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

¹² In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

2. Objective

- 2.1. The objective of this project is to enhance accountability mechanisms to ensure that sector revenues are managed effectively, and standards, like the EITI, are complied with, also promoting digitization and implementation of more transparent information management systems and more agile procedures.

3. Scope of Services and Key Activities

3.1. **COMPONENT 1: Analysis and strengthening of accountability and transparency mechanisms. It includes the following activities:**

- 3.1.1. **Diagnosis**, which will include: (i) preliminary analysis of the existing sectoral transparency instruments and the information available in the mining authorities and public agencies and other relevant complementary sources, (ii) analysis of linkage and potential of such information to contribute to the sectoral public policy objectives defined by the authorities (iii) comparative analysis on generation and use of sectoral information for the formulation of public policies for mining development in countries such as Australia, Canada, and others that may be relevant.
- 3.1.2. **Roadmap for the improvement of accounting and transparency mechanisms and their linkage with sectoral public policies**, including: (i) Identification of opportunities for improvement for the strengthening and development of existing accounting and transparency instruments (ii) Proposal of public policies oriented to the identified opportunities for improvement. The proposals must contain at least: a. Diagnosis and justification, b. General and specific objectives, c. Scope, d. Instruments for implementation and roadmap, e. Associated indicators.
- 3.1.3. **Socialization of results and final report**, including: (i) Identification of authorities and sectoral referents for the development of spaces for socialization of the results of component 2, proposal for the design and implementation of the mentioned spaces; (ii) Condensation of observations and suggestions resulting from the socialization processes of the previous point and making them available to the authorities for review; and (iii) Preparation of a final report containing a synthesis of the work developed and the proposals for sectoral public policies formulated.

3.2. **COMPONENT 2: Support for the implementation of the EITI initiative**

- 3.2.1. **Current situation analysis**: (i) Review of the state of implementation of the EITI standard, and identification of opportunities to optimize the generation and systematization of information, as well as the contribution of the Multi-Stakeholders Group to the implementation process. (ii) Preparation of a roadmap for the improvement of national and sub-national work plans (where applicable) contributing to the alignment with the EITI and the fulfillment of planned milestones.
- 3.2.2. **Support for the implementation of activities**: (i) Support the coordination of Multi-Stakeholders Group meetings to ensure greater and better communication and collaboration among the members of the Group and compliance with its work plan. (ii) Technical assistance to public sector authorities in the implementation of the initiative based on technical guidelines for the establishment and execution of work plans. (iii) Proposal of actions aimed at greater effectiveness and agility in the implementation of the standard and support in its implementation. (iv) Preparation of guidelines for consistency between information required by EITI and information reported by existing accountability and transparency instruments. (v) Design and execution of workshops to raise awareness and visibility of the efforts to implement the standard.

4. Expected Outcome and Deliverables

- 4.1. A detailed workplan and methodology to carry out activities 3.1 and 3.2.
- 4.2. A first draft of diagnosis and roadmap report (3.1.1. and 3.1.2.)
- 4.3. A final report of diagnosis, roadmap and socialization activities results (3.1.1, 3.1.2 and 3.1.3)
- 4.4. A report of current situation analysis regarding to EITI standard implementation (3.2.1)
- 4.5. A final report on the execution of activities in support of the implementation of the EITI standard (3.2.2)

5. Project Schedule and Milestones

- 5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
7 days from contract signature	Deliverable 4.1 (Workplan and methodology)
60 days from contract signature	Deliverable 4.2 (Diagnosis and roadmap draft)
60 days from contract signature	Deliverable 4.4 (Current situation regarding EITI implementation)
120 days from contract signature	Deliverable 4.3 (Component 1 - Final report)
120 days from contract signature	Deliverable 4.5 (Component 2 - Final report)

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.
- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
- 6.3. The product will not be considered accepted until the Bank expresses it electronically.

7. Supervision and Reporting

- 7.1. For proper supervision of the reports, they must be delivered electronically to Natascha Nunes da Cunha (INE/ENE, nataschan@iadb.org), Martin Walter (ENE/CAR, martinw@iadb.org) and Carlos Sucre (INE/ENE, csucre@iadb.org) in Word, Excel, PowerPoint, JPG, PNG format, or PDF, depending on what the parties agree is more appropriate for each product. All methodologies, assumptions, and data sources used must be clearly outlined.

8. Schedule of Payments

- 8.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Deliverable 4.1 (Workplan and methodology)	10
Deliverable 4.2 (Diagnosis and roadmap draft)	25
Deliverable 4.4 (Current situation regarding EITI implementation)	25
Deliverable 4.3 (Component 1 - Final report)	20
Deliverable 4.5 (Component 2 - Final report)	20
Total	100

SELECTION PROCESS # RG-T4442-P004 (COMPONENT 2)

TERMS OF REFERENCE

REGIONAL

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 2: AMPLIFYING GEOLOGICAL KNOWLEDGE

CAPACITY-BUILDING PROGRAM ON GEOLOGICAL SURVEYS AND MAPPING

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.
- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals and metals required by clean energy technologies (solar panels, wind turbines, electric

vehicles, energy storage systems, etc.). The value of the energy transition minerals market reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade. Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021¹³. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing¹⁴.

- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.¹⁵ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production¹⁶ while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. This action area includes resources up to €500,000 to (i) complement the investment loan in execution in Ecuador aimed at increasing responsible investments in the mining sector by strengthening institutional capacities and developing geological maps in areas of interest to overcome an insufficiency of geological knowledge. These funds will be used to prepare technical reports and materials, to deploy technological solutions, and to acquire relevant tools and equipment needed for geological mapping activities. By the same token, a further €500,000 will be made available to geological services in Argentina, Bolivia, Brazil, and Chile to strengthen their institutional capacities and to acquire technological tools to carry out the geological mapping of key areas. The component will also (ii) support a capacity-building program on conducting geological surveys and mapping underexplored regions using cutting edge technologies and practices such as machine learning, artificial intelligence, and satellite imagery, while establishing a network of data sharing and collaboration among mining companies, governments, and researchers to improve access to geological information and promote knowledge exchange. This program will allow for the identification of knowledge and

¹³ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

¹⁴ [IEA \(2023\) Critical Minerals Market Review 2023](#)

¹⁵ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

¹⁶ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

capacity gaps and will put forth a series of recommendations to enable faster and more efficient mineral exploration and mapping.

2. Objective

- 2.1. The objective of this project is to carry out a program of training sessions and dialogue meetings aimed at improving the knowledge base of national geological services throughout Latin America and the Caribbean by training and exposing them in state-of-the-art geological practices through a well-defined academic program and exchanges with peers from the industry, within and without the region. This project looks to expand the number of exchange opportunities available to professional and government officials tasked with regulating the mining sector and to reduce the space between technological advancements in the industry and regulatory capacity of the state.

3. Scope of Services and Key Activities

- 3.1. The selected candidate/organization/consultant must carry out (1) a training program composed of no less than 2 and no more than 4 sessions per year, attended by no less than 10 and no more than 20 participants per session during the 3 years of program execution; and (2) organize annual meetings for national geological services during the 3 years of program execution.
- 3.2. The selected candidate/organization/consultant must provide the IDB with a detailed schedule of work for delivery for activities, as well as curriculum, faculty selection, site location, list of participants, and duration of the training program, and site location, theme, list of participants, and speakers/panelists for the annual meetings.
- 3.3. The faculty, participants, speakers and panelists for both activities must be approved and authorized by the IDB.
- 3.4. During the implementation and for every step of each activity, close coordination/authorization from the IDB must be obtained before contacting authorities and other government actors.

4. Expected Outcome and Deliverables

- 4.1. The expected outcome of this project is a cadre of regulators from throughout the region – particularly from mining countries – better exposed to the latest trends in global mining industry regulatory practices and with a capability to leverage their enhanced network when in the process of designing policy.
- 4.2. **Training Program:** The selected candidate/organization/consultant must deliver the following items for approval by the IDB:
 - 4.2.1. *Syllabi & Faculty Selection Report:* This report must include the syllabi for each training session, including audiovisual materials, subjects, readings, and themes to be discussed, and the selection of faculty to impart the courses, including biographies and curriculum vitae of selected faculty. There will be one report per session delivered ahead of the training session for approval by the IDB.
 - 4.2.2. *Training Session Report:* This report must include a list of participants (30% of whom must be female), topics discussed, outstanding events during the session, relevant opinions/comments expressed during the session. It must also include images of the event. There will be one report per session delivered after the training session for approval by the IDB.
- 4.3. **Annual Dialogue Meeting:** The selected candidate/organization/consultant must deliver the following items for approval by the IDB:
 - 4.3.1. *Location & Participants Report:* This report must include the site location selected for the

annual meeting, including all logistical and venue details, and a list of proposed participants, including speakers and panelists. It must also include a proposed agenda for the one-day meeting. There will be one report per meeting delivered ahead of the training session for approval by the IDB.

4.4. *Annual Meeting Report*: This report must include a list of participants (30% of whom must be female), topics discussed, outstanding events during the meeting, relevant opinions/comments expressed during the meeting. It must also include images of the event. There will be one report per meeting delivered after the annual meeting for approval by the IDB

5. Project Schedule and Milestones

5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

	Y1	Y2	Y3	Y4
JAN				
FEB		Syllabi & Faculty Selection Report Due	Syllabi & Faculty Selection Report Due	Final Report Due
MAR		Training Session 2	Training Session 4	
APR		Training Session Report Due	Training Session Report Due	
MAY	Syllabi & Faculty Selection Report Due			
JUN	Training Session 1	Syllabi & Faculty Selection Report Due	Syllabi & Faculty Selection Report Due	
JUL	Training Session Report Due	Training Session 3	Training Session 5	
AUG		Training Session Report Due	Training Session Report Due	
SEP	Location and Participants Report Due			
OCT	Annual Meeting 1	Location and Participants Report Due	Location and Participants Report Due	
NOV	Meeting Report Due	Annual Meeting 2	Annual Meeting 3	
DEC		Meeting Report Due	Meeting Report Due	

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.
- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
- 6.3. The product will not be considered accepted until the Bank expresses it electronically.

7. Supervision and Reporting

- 7.1. For proper supervision of the reports, they must be delivered electronically to Natascha Nunes da Cunha (INE/ENE, nataschan@iadb.org), Martin Walter (ENE/CAR, martinw@iadb.org) and Carlos Sucre (INE/ENE, csucre@iadb.org) in Word, Excel, PowerPoint, JPG, PNG format, or PDF, depending on what the parties agree is more appropriate for each product. All methodologies, assumptions, and data sources used must be clearly outlined.

8. Schedule of Payments

- 8.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of Total
Delivery and approval of work plan and methodology	5%
Delivery and approval of training session reports (percentage to be divided by the number of training sessions agreed between the IDB and the consulting firm)	15%
Delivery and approval of training session syllabi and faculty selection (percentage to be divided by the number of training sessions agreed between the IDB and the consulting firm)	25%
Delivery and approval of annual meeting reports (percentage to be divided by the number of annual meetings agreed between the IDB and the consulting firm)	15%
Delivery and approval of annual meeting participants & speaker/panelist reports (percentage to be divided by the number of annual meetings agreed between the IDB and the consulting firm)	25%
Delivery and approval of the final report	15%
Total	100%

SELECTION PROCESS # RG-T4442-P005 (COMPONENT 3)

TERMS OF REFERENCE REGIONAL RG-T4442 MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 3: BUILDING LOW-CARBON AND TECHNOLOGICAL SOLUTIONS FOR SUSTAINABLE MINING PRACTICES

SUPPORT DEVELOPMENT AND TESTING OF STRATEGIES AND INSTRUMENTS TO REDUCE GHG EMISSIONS AND FOSTER LOW CARBON/CIRCULAR ECONOMY SOLUTIONS IN THE MINING SECTOR

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.
- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals and metals required by clean energy technologies (solar panels, wind turbines, electric

vehicles, energy storage systems, etc.). The value of the energy transition minerals market reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade. Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021¹⁷. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing¹⁸.

- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.¹⁹ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production²⁰ while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. Under this area, the project will support the deployment of low-carbon technologies in the mining sector, the elaboration and implementation of climate change mitigation and adaptation plans for the mining sector and the adoption of circular models that promote resource efficiency and reduce waste in the mining value chain through, for example, reuse and recycling schemes that permit minerals to rejoin the value chain. It will also support the deployment of solutions that contribute to more environmentally sustainable extraction and production methods. This will help to reduce the carbon footprint of mining activities and promote sustainable resource management, bolstered by studies and analyses aimed at: (i) supporting the development and testing of strategies, policy-instruments, and technical support to reduce GHG emissions and foster low carbon/circular economy solutions in the mining sector; (ii) developing training programs and providing technical assistance to help the public sector and mining companies promote and adopt sustainable mining practices, such as energy-efficient mining and water management; and (iii) identifying and prioritizing

¹⁷ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

¹⁸ [IEA \(2023\) Critical Minerals Market Review 2023](#)

¹⁹ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

²⁰ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

financing mechanisms for low-carbon and circular economy solutions.

2. Objective

- 2.1. The objective of this consultancy is to support development and testing of strategies and instruments to reduce GHG emissions and foster low carbon solutions in the mining sector.

3. Scope of Services and Key Activities

- 3.1. The scope of the services will include: (i) analysis of current scope 1, 2, and 3 footprints of the mining industry vs other relevant sectors with emphasis in the LAC region; (ii) analysis current and emerging scope 3 emissions trends (including global regulatory, political, social, and corporate sustainability trends) impacting the mining sector over the next two decades; (iii) surveys experts and key stakeholders in the mining value chain to develop and define a mining value chain that would be aligned to a Paris Targets, projecting scope three emissions reduction pathways to 2030 and 2050; (iv) overview of the emerging solutions and key levers to transform the mining value chain to meet climate goals; and (v) development of instruments to measure GHG emissions (GHG emissions calculator) and support on the design and implementation of strategies to reduce emissions.
- 3.2. The key activities of the services comprise:
 - 3.2.1. Develop methodology outlining rationale and comparing LAC mining industry to other industrial sectors and LAC to other regions.
 - 3.2.2. Quantify the current scope 1, 2, and 3 emissions in the copper, lithium and other mining value chains, comparing LAC to other regions and the value chains to other relevant industries.
 - 3.2.3. Analyze current and emerging scope 3 emissions trends (including global regulatory, political, social, and corporate sustainability trends) impacting the mining sector over the next two decades. Analyze the extent to which the mining industry is currently on an abatement pathway consistent with a Paris 1.5C / 2C scenarios and the scale of any shortfall. This should provide a clear sense of the scale of exposure and the work that lies ahead.
 - 3.2.4. Engage leading companies' commitments and actions – including non-mining – to catalogue their current level of ambition, targets, and scope 3 strategies. Surveys other experts and key stakeholders in the mining value chain to develop and define a mining value chain that would be aligned to a Paris Targets, projecting scope three emissions reduction pathways to 2030 and 2050. Explore links between circular economy business models and scope 3 emissions reduction strategies in the mining value chain.
 - 3.2.5. Provide an overview of the emerging solutions and key levers to transform the mining value chain to meet climate goals. Include an assessment of: (i) policy levers, (ii) technology levers, (iii) finance levers, (iv) business model and commercial levers. Include an analysis of levers current state of maturity, potential in enabling emissions reduction, and key barriers to their success in the short, medium, and long term.
 - 3.2.6. Analyze possible impact of these trends and strategies on LAC's mining sector and related fiscal implications, if any. Explore potential new opportunities for LAC economies presented by new business models necessary to meet global climate goals.
 - 3.2.7. Design and support implementation of instruments to measure GHG emissions (e.g. GHG emissions calculator) and strategies to reduce emissions.

4. Expected Outcome and Deliverables

- 4.1. A detailed workplan and methodology to carry out activities (3.2)
- 4.2. A first draft of the full report presenting the results of activities 3.2.1 to 3.2.4. for review and approval by the IDB.

- 4.3. A second draft of the full report – adding to 4.2 – the results of activities 3.2.5 and 3.2.6 for review and approval by the IDB.
- 4.4. Draft of the full report to include – adding to 4.2 and 4.3 – the design of instruments, strategies and policy recommendations for GHG emissions reduction resulting from activity 3.2.7 for review and approval by the IDB.
- 4.5. Presentation of the final report to IDB and selected regional authorities.

5. Project Schedule and Milestones

- 5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
7 days from contract signature	Deliverable 4.1 (Workplan and methodology)
30 days from contract signature	Deliverable 4.2 (Current situation analysis)
60 days from contract signature	Deliverable 4.3 (emerging solutions and key levers)
110 days from contract signature	Deliverable 4.4 (Final report)
120 days from contract signature	Deliverable 4.5 (Presentation)

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.
- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
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8. Schedule of Payments

- 8.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Deliverable 4.1 (Workplan and methodology)	10
Deliverable 4.2 (Current situation analysis)	25
Deliverable 4.3 (emerging solutions and key levers)	25
Deliverable 4.4 (Final report)	30
Deliverable 4.5 (Presentation)	10
Total	100

**SELECTION PROCESS # RG-T4442-P006 (COMPONENT 3)
TERMS OF REFERENCE
REGIONAL
RG-T4442
MINING FOR THE ENERGY TRANSITION (MET)
SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING
REGIONAL DEVELOPMENT**

**COMPONENT 3: BUILDING LOW-CARBON AND TECHNOLOGICAL SOLUTIONS FOR
SUSTAINABLE MINING PRACTICES**

TRAINING PROGRAMS FOR SUSTAINABLE MINING PRACTICES

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.
- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals and metals required by clean energy technologies (solar panels, wind turbines, electric vehicles, energy storage systems, etc.). The value of the energy transition minerals market reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade.

Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021²¹. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing²².

- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.²³ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production²⁴ while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. Under this area, the project will support the deployment of low-carbon technologies in the mining sector, the elaboration and implementation of climate change mitigation and adaptation plans for the mining sector and the adoption of circular models that promote resource efficiency and reduce waste in the mining value chain through, for example, reuse and recycling schemes that permit minerals to rejoin the value chain. It will also support the deployment of solutions that contribute to more environmentally sustainable extraction and production methods. This will help to reduce the carbon footprint of mining activities and promote sustainable resource management, bolstered by studies and analyses aimed at: (i) supporting the development and testing of strategies, policy-instruments, and technical support to reduce GHG emissions and foster low carbon/circular economy solutions in the mining sector; (ii) developing training programs and providing technical assistance to help the public sector and mining companies promote and adopt sustainable mining practices, such as energy-efficient mining and water management; and (iii) identifying and prioritizing financing mechanisms for low-carbon and circular economy solutions.

²¹ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

²² [IEA \(2023\) Critical Minerals Market Review 2023](#)

²³ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

²⁴ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

2. Objective

- 2.1. The objective of this project is to carry out a program of training sessions and dialogue meetings aimed at mining sector officials throughout Latin America and the Caribbean by training and exposing them in state-of-the-art sustainable mining practices through a well-defined academic program and exchanges with peers from the industry. This project looks to expand the number of exchange opportunities available to professional and government officials tasked with regulating the mining sector and to reduce the space between technological advancements in the industry and regulatory capacity of the state.

3. Scope of Services and Key Activities

- 3.1. The selected candidate/organization/consultant must carry out (1) a training program composed of no less than 2 and no more than 4 sessions per year, attended by no less than 10 and no more than 20 participants per session during the 3 years of program execution.
- 3.2. The selected candidate/organization/consultant must provide the IDB with a detailed schedule of work for delivery for activities, as well as curriculum, faculty selection, site location, list of participants, and duration of the training program
- 3.3. The faculty, participants, speakers and panelists for both activities must be approved and authorized by the IDB.
- 3.4. During the implementation and for every step of each activity, close coordination/authorization from the IDB must be obtained before contacting authorities and other government actors.

4. Expected Outcome and Deliverables

- 4.1. The expected outcome of this project is a cadre of mining sector officials from throughout the region better exposed to the latest trends in global mining sustainability practices and with a capability to leverage their enhanced network when in the process of designing policy.
- 4.1.1. *Syllabi & Faculty Selection Report*: This report must include the syllabi for each training session, including audiovisual materials, subjects, readings, and themes to be discussed, and the selection of faculty to impart the courses, including biographies and curriculum vitae of selected faculty. There will be one report per session delivered ahead of the training session for approval by the IDB.
- 4.1.2. *Training Session Report*: This report must include a list of participants (30% of whom must be female), topics discussed, outstanding events during the session, relevant opinions/comments expressed during the session. It must also include images of the event. There will be one report per session delivered after the training session for approval by the IDB.
- 4.1.3. *Final report*: Encompassing the two above

5. Project Schedule and Milestones

- 5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
7 days from contract signature	Deliverable 4.1.1 (<i>Syllabi & Faculty Selection Report</i>)
90 days from contract signature	Deliverable 4.1.2 (<i>Training Session Report</i>)
100 days from contract signature	Deliverable 4.1.3 (Final report)

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.
- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
- 6.3. The product will not be considered accepted until the Bank expresses it electronically.

7. Supervision and Reporting

- 7.1. For proper supervision of the reports, they must be delivered electronically to Natascha Nunes da Cunha (INE/ENE, nataschan@iadb.org), Martin Walter (ENE/CAR, martinw@iadb.org) and Carlos Sucre (INE/ENE, csucre@iadb.org) in Word, Excel, PowerPoint, JPG, PNG format, or PDF, depending on what the parties agree is more appropriate for each product. All methodologies, assumptions, and data sources used must be clearly outlined.

8. Schedule of Payments

- 8.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Deliverable 4.1 (Workplan and methodology)	10
Deliverable 4.2 (Global review)	25
Deliverable 4.3 (LAC review)	25
Deliverable 4.4 (Final report)	30
Deliverable 4.5 (Presentation)	10
Total	100

SELECTION PROCESS # RG-T4442-P007 (COMPONENT 4)

TERMS OF REFERENCE

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 4: LOCAL DEVELOPMENT AND INFRASTRUCTURE SERVICES

NATIONAL STRATEGIES TO MAXIMIZE ECONOMIC ACTIVITY THROUGHOUT THE VALUE CHAIN

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.
- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals and metals required by clean energy technologies (solar panels, wind turbines, electric vehicles, energy storage systems, etc.). The value of the energy transition minerals market

reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade. Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021²⁵. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing²⁶.

- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.²⁷ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production²⁸ while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. Activities in this area will be geared towards supporting: (i) national strategies that maximize economic activity throughout the value chain, thus expanding sector links with the national productive apparatus and human capital creation with, for example, pre-investment studies to strengthen the downstream chain, developing, for example, greater refining, processing and industrialization capacities for domestically produced mineral resources; (ii) public investment programs in social infrastructure, including the development of shared-use facilities that serve mining operations and the local community, reducing costs and increasing efficiency; and (iii) technical assistance, training, and access to financing for local small and medium-sized enterprises in the mining supply chain (this could help tackle gender imbalances through a pilot technical training program to enhance entrepreneurship and employability skills for women-led businesses).

2. Objective

- 2.1. The objective of this consultancy is to (i) diagnose productive infrastructure development gaps

²⁵ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

²⁶ [IEA \(2023\) Critical Minerals Market Review 2023](#)

²⁷ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

²⁸ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

and identify opportunities for strengthening local economic value chains, ii) develop a participatory roadmap with technical development milestones for infrastructure development and local capacity building, iii) provide directed technical assistance program to local entrepreneurs and SMEs, (iv) facilitate conceptual design for strategic local infrastructure projects.

3. Scope of Services and Key Activities

3.1. The selected consulting firm will conduct the following activities:

3.1.1. Diagnose productive infrastructure development gaps and identify opportunities for strengthening local economic value chains:

- Conduct surveys and interviews with local stakeholders to assess current infrastructure needs and challenges.
- Analyze existing infrastructure systems and identify gaps in their functionality or coverage.
- Evaluate the efficiency and effectiveness of current economic value chains in the local context.
- Identify potential bottlenecks or barriers hindering the smooth operation of value chains.
- Conduct comparative analyses with similar regions to benchmark infrastructure development and economic performance.

3.1.2. Develop a participatory roadmap with technical development milestones for infrastructure development and local capacity building:

- Facilitate workshops and focus groups with local stakeholders to gather input and insights.
- Synthesize findings from diagnostic assessments into a comprehensive roadmap document.
- Define clear technical development milestones for infrastructure projects and capacity-building initiatives.
- Establish key performance indicators (KPIs) to measure progress and success.
- Engage local communities and authorities in the roadmap development process to ensure buy-in and ownership.

3.1.3. Provide directed technical assistance programs to local entrepreneurs and SMEs:

- Identify specific needs and challenges faced by local entrepreneurs and SMEs through consultations and needs assessments.
- Develop tailored technical assistance programs based on identified needs, covering areas such as business development, technology adoption, marketing strategies, etc.
- Deliver training sessions, workshops, and one-on-one mentoring to support skill development and capacity building.
- Provide access to resources, networks, and expertise to facilitate business growth and sustainability.
- Monitor and evaluate the effectiveness of technical assistance programs, adjusting strategies as needed based on feedback and outcomes.

3.1.4. Facilitate conceptual design for strategic local infrastructure projects:

- Collaborate with local authorities, experts, and stakeholders to identify priority infrastructure projects.
- Determine required feasibility studies and cost-benefit analyses for selected projects.
- Develop conceptual designs and project proposals outlining scope, objectives, and expected outcomes.
- Engage in stakeholder consultations to gather feedback and refine project designs.

- Assist in securing funding and resources for project implementation through partnerships and grant applications.

4. Expected Outcome and Deliverables

- 4.1. Infrastructure Development Gap Analysis and Opportunities Report, that summarizes the findings from diagnostic assessments, surveys, and interviews, identifying gaps in productive infrastructure development and opportunities for strengthening local economic value chains. It includes an analysis comparing local value chains with benchmark regions and provides recommendations for improvement.
- 4.2. Participatory Roadmap for Infrastructure Development, outlining key milestones and objectives for infrastructure development and local capacity building. It includes technical development milestones, timelines, and targets for each stage of infrastructure projects, incorporating stakeholder input gathered through workshops and focus groups.
- 4.3. Tailored Technical Assistance Program Outlines, consisting of tailored technical assistance program outlines designed for local entrepreneurs and SMEs. It includes detailed plans for skill development sessions, capacity-building activities, and mentoring support to address specific needs identified through consultations and needs assessments.
- 4.4. Conceptual Design and Project Proposals for Priority Infrastructure Projects, which is a set of deliverables includes conceptual design documents and project proposals for priority infrastructure projects. It encompasses feasibility studies, cost-benefit analyses, and stakeholder consultation reports, outlining the scope, objectives, and expected outcomes of each project.

5. Project Schedule and Milestones

- 5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
45 days from contract signature	Partial Advance: Infrastructure Development Gap Analysis Report
80 days from contract signature	Partial Advance: Participatory Roadmap for Infrastructure Development
120 days from contract signature	Partial Advance: Tailored Technical Assistance Program Outlines
150 days from contract signature	Partial Advance: Conceptual Design and Project Proposals
210 days from contract signature	Final Document: Infrastructure Development Gap Analysis Report
315 days from contract signature	Final Document: Participatory Roadmap for Infrastructure Development
450 days from contract signature	Final Document: Tailored Technical Assistance Program Outlines
600 days from contract signature	Final Document: Conceptual Design and Project Proposals

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.
- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
- 6.3. The product will not be considered accepted until the Bank expresses it electronically.

7. Supervision and Reporting

- 7.1. For proper supervision of the reports, they must be delivered electronically to Natascha Nunes da Cunha (INE/ENE, nataschan@iadb.org), Martin Walter (ENE/CAR, martinw@iadb.org) and Carlos Sucre (INE/ENE, csucre@iadb.org) in Word, Excel, PowerPoint, JPG, PNG format, or PDF, depending on what the parties agree is more appropriate for each product. All methodologies, assumptions, and data sources used must be clearly outlined.

8. Schedule of Payments

- 8.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Partial Advance: Infrastructure Development Gap Analysis Report	10
Partial Advance: Participatory Roadmap for Infrastructure Development	15
Partial Advance: Tailored Technical Assistance Program Outlines	25
Partial Advance: Conceptual Design and Project Proposals	20
Final Document: Infrastructure Development Gap Analysis Report	30
Total	100

SELECTION PROCESS # RG-T4442-P008 (COMPONENT 4)

TERMS OF REFERENCE

REGIONAL

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 4: LOCAL DEVELOPMENT AND INFRASTRUCTURE SERVICES

PUBLIC INVESTMENT PROGRAMS IN SOCIAL INFRASTRUCTURE LEVERAGED BY THE MINING SECTOR

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.
- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals

and metals required by clean energy technologies (solar panels, wind turbines, electric vehicles, energy storage systems, etc.). The value of the energy transition minerals market reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade. Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021²⁹. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing³⁰.

- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.³¹ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production³² while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. Activities in this area will be geared towards supporting: (i) national strategies that maximize economic activity throughout the value chain, thus expanding sector links with the national productive apparatus and human capital creation with, for example, pre-investment studies to strengthen the downstream chain, developing, for example, greater refining, processing and industrialization capacities for domestically produced mineral resources; (ii) public investment programs in social infrastructure, including the development of shared-use facilities that serve mining operations and the local community, reducing costs and increasing efficiency; and (iii) technical assistance, training, and access to financing for local small and medium-sized enterprises in the mining supply chain (this could help tackle gender imbalances through a pilot technical training program to enhance entrepreneurship and employability skills for women-led businesses).

²⁹ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

³⁰ [IEA \(2023\) Critical Minerals Market Review 2023](#)

³¹ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

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2. Objective

- 2.1. The objective of this consultancy is to develop and support implementation of a strategy facilitating the promotion of public investment programs in social infrastructure, with a focus on leveraging opportunities presented by the mining sector.

3. Activities

- 3.1. Conduct a comprehensive analysis of existing public investment programs in social infrastructure.
- 3.2. Identify key stakeholders in the mining sector and relevant government agencies involved in infrastructure development.
- 3.3. Engage in consultations with stakeholders to understand their perspectives, needs, and priorities.
- 3.4. Assess the potential for collaboration between the mining sector and public investment programs in social infrastructure.
- 3.5. Develop a strategic framework outlining initiatives to promote synergy between the mining sector and social infrastructure investment.
- 3.6. Design targeted communication and advocacy campaigns to promote the strategy to relevant stakeholders.
- 3.7. Provide capacity-building workshops and training sessions for government officials and mining industry representatives on implementing the strategy.
- 3.8. Monitor and evaluate the implementation of the strategy, making adjustments as necessary based on feedback and outcomes.

4. Deliverables

- 4.1. Report on the analysis of existing public investment programs in social infrastructure.
- 4.2. Consultation report summarizing findings from engagements with stakeholders.
- 4.3. Strategic framework document outlining initiatives to promote synergy between the mining sector and social infrastructure investment.
- 4.4. Communication and advocacy campaign materials, including presentations, brochures, and digital content, and Workshop and training materials for capacity-building sessions.
- 4.5. Monitoring and evaluation reports tracking the implementation progress of the strategy.

5. Project Schedule and Milestones

- 5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable
Day 60	Analysis of Existing Public Investment Programs Report
Day 120	Consultation Report
Day 150	Strategic Framework Document
Day 90	Stakeholder Mapping Report
Day 210	Workshop and Training Materials
Day 240	Monitoring and Evaluation Reports

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.

- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
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8. Schedule of Payments

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- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Analysis of Existing Public Investment Programs Report	10
Consultation Report	15
Strategic Framework Document	25
Stakeholder Mapping Report	20
Workshop and Training Materials	30
Total	100

SELECTION PROCESS # RG-T4442-P009 (COMPONENT 4)

TERMS OF REFERENCE

REGIONAL

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMPONENT 4: LOCAL DEVELOPMENT AND INFRASTRUCTURE SERVICES

TECHNICAL ASSISTANCE, TRAINING, AND ACCESS TO FINANCING FOR LOCAL SMALL AND MEDIUM-SIZED ENTERPRISES IN THE MINING SUPPLY CHAIN

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
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³³ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

³⁴ [IEA \(2023\) Critical Minerals Market Review 2023](#)

³⁵ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

³⁶ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

2. Objective

- 2.1. The objective is to provide training, capacity development, and technical assistance to selected SMEs along the value chains in pre-identified mining regions. The main focus is to increase economic benefits and access to markets of selected SMEs, thus improving their competitiveness and economic performance.

3. Scope of Services and Key Activities

- 3.1. Perform analyses of baseline survey, demand and supply, main bottlenecks for growth, and definition of practical steps to address the bottlenecks in trainings.
- 3.2. Design and manage skill development activities to empower 200 SMEs in selected value chains, focused on skills and knowledge needed to improve operations and productivity, earn higher revenues, reduce operational costs, and improve quality of goods or services provided.
- 3.3. Adopt a gender lens to ensure that the program positively influences female participation and impact.
- 3.4. Develop market relationships and access to relevant and available public programs.
- 3.5. Support training participants in forming and conducting sector associations and roundtables, which, besides representing collective interests, can implement initiatives of collective benefit, enhance shared capabilities, improve negotiation power with potential clients, increase access to finance and ensure long-term sustainability of the effort.
- 3.6. Use distance learning tools, ecommerce platforms, and business intelligence applications and leverage other forms of technology to improve connections and transparency within value chain markets and to scale up effective solutions, including online training.
- 3.7. Develop collective institutional capability to improve the business environment and contribute to long-term sustainability and scaling of program benefits.

4. Expected Outcome and Deliverables

- 4.1. A detailed workplan and methodology to carry out activities.
- 4.2. Training of at least 200 SMEs. Session reports on training activities.
- 4.3. Engagement of at least 15 local/national institutions, reflected in a respective report.
- 4.4. Presentation of the final report to IDB and selected regional authorities.

5. Project Schedule and Milestones

- 5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
7 days from contract signature	Deliverable 4.1
6 months from contract signature	Deliverable 4.2
9 months from contract signature	Deliverable 4.3
1 year from contract signature	Deliverable 4.4

6. Acceptance criteria

- 6.1. The delivery of the products must be made in Spanish, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly

approved.

- 6.2. The work will be accepted and approved by the team leader, defined in section 8 of this document. Acceptance and approval will be communicated via electronic mail (e-mail). Once the approval of the team leader is received, the corresponding payment will be disbursed.
- 6.3. The product will not be considered accepted until the Bank expresses it electronically.

7. Supervision and Reporting

- 7.1. For proper supervision of the reports, they must be delivered electronically to Natascha Nunes da Cunha (INE/ENE, nataschan@iadb.org), Martin Walter (ENE/CAR, martinw@iadb.org) and Carlos Sucre (INE/ENE, csucre@iadb.org) in Word, Excel, PowerPoint, JPG, PNG format, or PDF, depending on what the parties agree is more appropriate for each product. All methodologies, assumptions, and data sources used must be clearly outlined.

8. Schedule of Payments

- 8.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Deliverable 4.1	20
Deliverable 4.2	35
Deliverable 4.3	35
Deliverable 4.4	10
Total	100

SELECTION PROCESS # RG-T4442-P010

TERMS OF REFERENCE

REGIONAL

RG-T4442

MINING FOR THE ENERGY TRANSITION (MET) SECURING A SUSTAINABLE SUPPLY OF CRITICAL MINERALS FOR ADVANCING REGIONAL DEVELOPMENT

COMMUNICATIONS AND VISIBILITY PLAN

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank Group (“IDB” or “Bank”) is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Infrastructure and Energy Sector (INE) is responsible for conceptualizing, preparing, supporting implementation, and supervising Bank operations related to infrastructure, energy, transport, and water and sanitation. INE is responsible for preparing sector policies, strategies, operational guidelines, and programs on infrastructure and the environment; conducting relevant research and analytical work, best practices, and case studies in the sector; and providing specialized sector technical support to activities and operations in borrowing member countries.
- 1.3. The Energy Division (INE/ENE) is responsible for the development of technical analyses and the identification and preparation of programs, projects, technical cooperation, studies, and sectoral notes in the energy sector. INE/ENE supports Latin American and Caribbean countries in creating mechanisms to share knowledge and best global practices in energy regulation to strengthen the technical capacity of their regulatory bodies. Energy regulators share numerous challenges and opportunities for development, which can be effectively addressed through collective action and regional cooperation.
- 1.4. In support of global decarbonization efforts and recognizing the fundamental importance of mining to climate and sustainable development goals, this project will facilitate technical assistance to Argentina, Bolivia, Brazil, Chile and Ecuador – all mineral-rich countries in the region – specifically, to foster enabling conditions for responsible investments in critical minerals and their value chains by focusing on four areas: (i) strengthening sector governance through robust regulatory and investment frameworks and socioenvironmental standards compliance; (ii) amplifying geological knowledge through technological innovation; (iii) building a portfolio of low-carbon and technological solutions that support sustainable mining extraction and production practices while reducing emissions and increasing productivity and resource efficiency; and (iv) enhancing local development and infrastructure services in mining areas to maximize benefits, while strengthening value chains and synergies with other productive sectors. Interventions will seek to strengthen collaboration between LAC and Europe for a reliable and sustainable raw materials supply.
- 1.5. The mining sector plays a critical role in the global energy transition by providing the minerals and metals required by clean energy technologies (solar panels, wind turbines, electric vehicles, energy storage systems, etc.). The value of the energy transition minerals market reached US\$ 320 billion in 2022 and is expected to continue expanding over the next decade.

Demand for these has led to growth in investment, with a 30% year-on-year increase in 2022, following a 20% rise in 2021³⁷. Lithium-producing companies specializing have led the way, with a substantial 50% increase in spending, closely followed by companies focusing on copper and nickel. Global exploration spending to identify additional reserves has also experienced a 20% upswing³⁸.

- 1.6. Fast-growing demand for these minerals and metals has led to a new surge in mining activities in LAC, which is home to some of the world's largest reserves of copper, lithium, rare earth elements, aluminum, nickel, iron ore, zinc, and many others. For example, Chile and Peru alone account for around 40% of global copper production and in both mining accounts for over 10% of GDP and over 50% of exports. Chile and Argentina are, respectively, the world's second and fourth top producers of lithium, while Bolivia is home to one of the world's largest resources bases of lithium. Brazil is the world's top producer of niobium and the second largest of iron ore, manganese, and bauxite; it is also endowed with the second largest reserves of rare earth elements and produces other minerals, such as nickel, copper, and graphite.
- 1.7. For many LAC countries, mining is a major driver of economic growth and employment, providing revenue for governments and supporting local businesses and communities. By 2050 – in a scenario where the global temperature does not increase by more than 1.5°C – there is an economic opportunity, stemming only from supplying energy transition minerals, of about USD 50 billion per year.³⁹ However, challenges associated with mining activities have been, in many cases, exacerbated by inadequate governance and regulatory frameworks, weak institutional capacity, infrastructure gaps, poor leveraging of local value chains, and insufficient investment in environmental and social management. To meet the anticipated demand for essential minerals, it is crucial to increase mining production⁴⁰ while simultaneously creating economic opportunities and addressing environmental and social issues. Governments should focus on improving exploration incentives, permitting processes, workforce development, research and innovation, and downstream processing capabilities, among others. It is essential to ensure that the benefits of increased mining activity translate into tangible and sustainable development outcomes.
- 1.8. Activities in this area will be geared towards supporting: (i) national strategies that maximize economic activity throughout the value chain, thus expanding sector links with the national productive apparatus and human capital creation with, for example, pre-investment studies to strengthen the downstream chain, developing, for example, greater refining, processing and industrialization capacities for domestically produced mineral resources; (ii) public investment programs in social infrastructure, including the development of shared-use facilities that serve mining operations and the local community, reducing costs and increasing efficiency; and (iii) technical assistance, training, and access to financing for local small and medium-sized enterprises in the mining supply chain (this could help tackle gender imbalances through a pilot technical training program to enhance entrepreneurship and employability skills for women-led businesses).

2. Objective

- 2.1. The objective of this consultancy is to develop a Communications and Visibility Plan to raise

³⁷ [IEA \(2022\) The Role of Critical Minerals in Clean Energy Transitions](#)

³⁸ [IEA \(2023\) Critical Minerals Market Review 2023](#)

³⁹ [IDB \(2022\) Leveraging the Growth in Demand for Minerals and Metals in the Transition to a Low Carbon Economy](#)

⁴⁰ In 2021, the International Energy Agency (IEA) estimated that “the industry needs to build 50 more lithium mines, 60 more nickel mines and 17 more cobalt mines by 2030 to meet global net carbon emissions goals.” As for copper, it indicates the world will need about 2.2 times more than it does today. ([IEA 2021 The Role of Critical Minerals in Clean Energy Transitions](#)). According to a report by industry analyst Benchmark Minerals, more than 350 new mines are needed by 2035 to meet demand for EV batteries.

awareness of the EU contribution to achieve the goals of the project and its focus on developing and strengthening resilient critical raw materials value chains, leveraging LAC’s mineral wealth for sustainable development.

3. Scope of Services and Key Activities

- 3.1. The communications strategy is a cohesive messaging and outreach framework developed to ensure the effectiveness of implemented efforts and guide the production of strategic regional public goods and country-specific activities supported by the project. As such, it will contemplate outreach and awareness activities targeted at various interest groups to share information, encourage, and enable their participation in relevant processes and, when applicable, facilitate the adoption of recommendations.
- 3.2. The project will employ different communications tools and avenues to target specific groups and objectives. Target groups include public sector authorities and practitioners; private sector companies and associations; MSMEs and entrepreneurs along sector value chain; academia; investors; and the general public. Communication tools include: Press briefings and interviews; Radio broadcasting and television; Social media marketing; Bidding advertisement; and Events and dialogue tables, among others. Special messages will be crafted for each target group to ensure cohesive and evidence-based decision-making and messaging around the role of critical minerals and the broader mining sector as a catalyser for long-term socioeconomic development.

4. Expected Outcome and Deliverables

- 4.1. Work plan, with short-term and medium-term activities and targets;
- 4.2. Communications plan, including stakeholder map and key messages;
- 4.3. Edit and design of annual reports, in Spanish and English, in word and PowerPoint (executive version), about the activities and achievements undertaken by the project, complemented by infographics and social media content;
- 4.4. Design and edit of one brochure-type report summarizing the entire program, in Spanish and English, ready to be published in the IDB website;
- 4.5. Final report on activities executed by the firm.

5. Project Schedule and Milestones

5.1. The following table suggests the project schedule and milestones. The Bank and the selected candidate will agree on a final version.

Date	Deliverable or Milestone
7 days from contract signature	Deliverable 12.1
30 days from contract signature	Deliverable 12.2
60 days from contract signature	Deliverable 12.3
90 days from contract signature	Deliverable 12.4
100 days from contract signatura	Deliverable 12.5

6. Acceptance criteria

6.1. The delivery of the products must be made in Spanish and English, through the official email address of the selected candidate. Delays in delivery must be communicated to the Bank and duly approved.

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- 8.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

Deliverable	% of contract value
Deliverable 12.1	10
Deliverable 12.2	25
Deliverable 12.3	25
Deliverable 12.4	30
Deliverable 12.5	10
Total	100