

REQUEST FOR EXPRESSIONS OF INTEREST CONSULTING SERVICES

Selection # as assigned by e-Tool: #RG-T3553-P003

Selection Method: Full Competitive

Country: Chile

Sector: Infrastructure and Energy

Funding – TC #: RG-T3553

Project #: ATN/CF-18025-RG

TC name: Reducing Carbon Emissions and Building Resilience through Smart Sustainable Procurement Practices - PROADAPT PROGRAM

Description of Services: Support to the decarbonization and decontamination of mining refining and smelting processes

[Link to Technical Cooperation document](#)

The Inter-American Development Bank (IDB) is executing the above mentioned operation. For this operation, the IDB intends to contract consulting services described in this Request for Expressions of Interest.

Expressions of interest must be delivered using the IDB Portal for Bank Executed Operations (<http://beo-procurement.iadb.org/home>) by: October 26 2021, 5:00 P.M. (Washington D.C. Time).

The consulting services (“the Services”) will support decarbonization efforts in the mining industry in Chile, in line with national environmental commitments and corporate efforts, through identification of technical solutions (technological pilots) for the reduction of emissions in specific smelting-refining processes in the CODELCO-Ventanas complex in Chile and design a financing solution for the decarbonization of the smelting and refining facility, with a focus on dephasing fossil-fuel use and enhancing efficiency. For the technological pilots, solutions will be formulated for: (i) utilization of metallurgical gases in the Electric Furnace for use in a copper concentrate drying process, and use of hydrogen in the smelting-refining process (e.g. burners) (ii) preparation of a strategic plan for diversification and decarbonization of the facility’s fuel matrix, through displacement of natural gas and fossil fuels in favor of cleaner alternatives. Proposals are expected in Spanish, language of use in day-to-day activities with local counterparts. Consulting Firms will need to secure adequate permits and accreditations from CODELCO to conduct on-site activities (additional information available from CODELCO: [link](#)).

Eligible consulting firms will be selected in accordance with the procedures set out in the Inter-American Development Bank: [Policy for the Selection and Contracting of Consulting firms for Bank-executed Operational Work](#) - GN-2765-4. All eligible consulting firms, as defined in the Policy may express an interest. If the Consulting Firm is presented in a Consortium, it will designate one of them as a representative, and the latter will be responsible for the communications, the registration in the portal and for submitting the corresponding documents.

The IDB now invites eligible consulting firms to indicate their interest in providing the services described above in the [draft summary](#) of the intended Terms of Reference for the assignment. Interested consulting firms must provide information establishing that they are qualified to perform the Services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Eligible consulting firms may associate in a form of a Joint Venture or a sub-consultancy

agreement to enhance their qualifications. Such association or Joint Venture shall appoint one of the firms as the representative.

Interested eligible consulting firms may obtain further information during office hours, 09:00 AM to 05:00 PM, (Washington D.C. Time) by sending an email to: Martin Walter, team Leader (martinw@iadb.org, INE/CCH), cc Christiaan Gischler Blanco, alternate team leader (CHRISTIAANG@iadb.org, INE/INE) and Nicola Brusatin Cadavid, project assistant (NICOLAB@IADB.ORG)

Inter-American Development Bank
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Summary Terms of Reference

Technological pilot – Design and support for implementation. To support industrial testing, in close collaboration with the counterpart of the smelting and refining complex, the following will be developed:

- A. Diagnosis, analysis and design. Two technical and financial feasibility studies, based on an engineering, cost-benefit and requirements analysis by the smelting and refining complex for (i) the use of residual heat in the drying process, and (ii) the introduction of hydrogen (as a replacement for natural gas) in the blister copper refining process. These studies should identify the technical conditions for conducting industrial tests and the financial requirements for their implementation. It implies an analysis of the industrial process, review of available technologies and associated costs, technical conditions and human resource capacities for the technological pilot process, regulatory framework of application (if relevant), minimum factors of socio-environmental and safety safeguards, and other factors necessary for an adequate evaluation and proposal of technological solutions.
- B. Implementation. Bidding materials to enable industrial testing, aligned with IDB policies and CODELCO corporate procurement policies, including information on technical conditions for implementation and financing modalities. The consulting firm will prioritize identification of suitable local technology that allow the generation of additional positive externalities in the implementation of pilot tests. Details will be provided on the technical conditions of implementation (insurance, warranties, licenses, etc.) and other relevant aspects.

Identification and integral improvement of the smelting and refining complex. Through the replication of the technological pilots, and to support the implementation of improvements in the productive processes to reduce the socio-environmental impact of the smelting and refining complex activities, the following will be proposed:

- A. Elaboration of a Decarbonization Plan for the complex, based on the lessons learned in the design phase of technological pilots and international best practices. A methodology will be developed to identify opportunities for process improvement (opportunities register) and preliminary cost-benefit and environmental impact analysis (GHG emissions). Opportunities will be prioritized based on their technical and financial feasibility (potential for cost reduction) and carbon footprint reduction. Along with this, the potential demand for hydrogen to implement the priority actions (opportunities register), as an alternative to the use of fossil fuels, will be sized. It will be sought to align the process

improvement effort with the corporate strategy and the national policy for the promotion of hydrogen.

- B. Financing Strategy.** A financing scheme will be proposed to leverage company resources with climate funds, sustainable bonds and other co-financing solutions, including from multilateral banks through financing with and without sovereign guarantees.