

PROJECT SUMMARY

REGIONAL

INNOVASOL-FACILITATING ACCESS TO GREEN ENERGY

(RG-L1166)

Demand for electric power in Latin America and the Caribbean has been on the rise in the last two decades. By 2020, electricity consumption reached 1.3 million gigawatt hours and was concentrated in the industrial (40%), residential (30%), and commercial and services (20%) sectors. To meet this demand, the region has developed installed generating capacity of 457,000 megawatts (2020) that has enabled it to attain an electrification rate of 97.4%. However, 39% of this energy is from *nonrenewable thermal energy* from fossil fuels (coal, natural gas, and oil), the use and production of which have trended upward in recent years.

Nonrenewable thermal energy is the main emitter of greenhouse gases (GHGs) in Latin America and the Caribbean. GHGs, in turn, are the main driver of air pollution in cities and of global warming. Accordingly, a reduction in GHG emissions associated with electricity generation and consumption has become crucial in the challenge faced by the region of mitigating the impact of climate change.

The project's objective is to increase solar energy production in the region and help to reduce GHG emissions associated with power generation and consumption. To that end, IDB Lab will grant a loan of US\$750,000 to Innovasol. Innovasol is a company established to promote the use of renewable photovoltaic energy that operates in Bolivia and plans to expand in the region. Its business model is to invest in solar photovoltaic systems and lease them to private companies and organizations (e.g., hospitals, schools, shopping centers, SMEs, etc.) under long-term contracts. This solution enables them to gain access to the benefits of solar energy without the need to make an initial investment. Innovasol offers its clients commercial plans to mitigate the technology and operating risks associated with adopting these systems.

The project will support Innovasol's efforts to strengthen its business model, broaden its scale and reach, and consolidate its operations, increasing its penetration of the Bolivian market and expanding elsewhere in the region, initially southern Peru, where interesting opportunities exist for generating photovoltaic energy due to the amount of sunlight that area receives. Once the model for international expansion has been validated in Peru, the solution can be taken to other parts of the region.

The project is expected to have different impacts: (i) **on the environmental level**, by contributing to the decarbonization of energy matrixes and a reduction in GHGs, enabling companies and organizations mainly from the private sector to replace their nonrenewable thermal energy consumption with clean, renewable energy, incorporating photovoltaic systems fed by solar energy into their power supply; (ii) **on the economic level**, by generating efficiencies that translate for Innovasol's clients (which include a large number of SMEs) into monetary savings in their operating costs, into higher tax revenues for governments, into greater productivity for economies since the cost of solar power generation is lower than that cost of nonrenewable thermal energy, and into job creation and retention; and (iii) **on the business level**, by conferring greater activity, dynamism, and economic stability on the ecosystem of EPC vendors and operation and maintenance service providers in the solar energy sector, many of which are SMEs. This dynamism will

translate into greater economic stability for those companies, positioning them to serve a larger number of solar energy projects.

The project is aligned with the relevant IDB Group's country strategies: (i) in Bolivia, where priority is placed on compliance with the Paris Agreement and the country's commitments under its Nationally Determined Contribution, with a focus on decarbonizing the economy, mainly by developing infrastructure to generate conventional and nonconventional renewable energy; and (ii) in Peru, by supporting the National Climate Change Strategy 2050, which is aligned with the Paris Agreement and supported by the IDB and prioritizes the use of nonconventional renewable energy. It is also aligned with the United Nations Sustainable Development Goals (SDGs), mainly SDG 7-Affordable and clean energy; SDG 8-Decent work and economic growth; SDG 9-Industry, innovation, and infrastructure; SDG 10-Reduced inequalities in and between countries; SDG 11-Sustainable cities and communities; and SDG 13-Climate action, since the project will help to reduce GHG emissions associated with power generation and consumption.