

PROJECT ABTRACT

MAY 21, 2015

Country: Mexico

Sector: Energy Efficiency and Renewable Energy

Project Name: Optima Energia Energy Efficient Roadway Lighting

Project Number: ME-L1166

Borrower: CELSOL S.A.P.I. de C.V (Optima Energia)

Proposed A Loan: Up to US\$ 9.25 Million

PROJECT OVERVIEW

The Project consists of the installation of an energy efficient municipal public lighting system located in Ensenada, Baja California, Mexico. The overall objective is to help Optima Energia finance climate change mitigation projects in the public lighting sector while providing operational savings and improved public safety to municipalities and the communities they serve. The estimated total cost of the Project is US\$18.5M. The Project's financial plan includes an IDB A loan for up to US\$9.25M.

The Project will be developed by Optima Energia, a Mexican energy service company (ESCO) established as CELSOL S.A.P.I. de C.V. in 1988. The company develops integrated energy efficiency projects using innovative financing structures. Optima Energia is one of the few true ESCOs in Latin America that develops and finances energy efficiency projects under results-based contracts. Optima Energia has diverse experience in energy efficiency performance projects ranging from hotels to roadway lighting.

PROJECT DESCRIPTION

The proposed Project financing will be for the installation of a municipal roadway lighting system to replace existing sodium vapor lamps with more efficient LED technology, which will reduce electricity consumption and greenhouse gas emissions. Furthermore, the Project will increase the quality of lighting, which contributes to improving public safety. Under the performance contract, the municipality will benefit from more energy efficient lighting and lower maintenance expenses without an upfront capital investment. The cash flows generated through energy savings will enable the municipalities to carry out other socially beneficial projects in the community.

DEVELOPMENT IMPACT

The Project will reduce greenhouse gas emissions by replacing 25,000 luminaires in the municipality of Ensenada, therefore reducing the consumption of electricity by at least 59%. These efficiency improvements are expected to result in annual savings of approximately 13 million kilowatt-hours in electricity consumption and a reduction of emissions by 7,400 tons of

CO₂ per year. Furthermore, the Project will improve the quality of public street lighting and foster safe communities, while lessening municipal lighting expenses which represent the second highest expenditure for the municipality.

IDB's ADDITIONALITY

The IDB is able to mobilize the additional co-financing required for the Project directly from the Canadian Climate Fund (C2F) to ensure the financial viability of the Project. The co-financing is expected to consist of a tranche from the Canadian Climate Fund for up to US \$6.5M. The IDB's participation is therefore critical to the financial feasibility of the Project by providing financing for which there is limited volume and at terms not generally available in the commercial market. The Project will also benefit from a 25 percent donor guarantee from CTF which mitigates credit risk and helps ensure the financial viability of the Project. Furthermore, the Project will help Optima Energia to continue to demonstrate the viability of investments in LED street lighting, which will allow the company to further scale up and replicate the business model with additional municipalities.

PROJECT CONTRIBUTION TO IDB OBJECTIVES

The project supports article 3.42 of the Mexico Country Strategy GN-2749, by which the Bank's NSG windows will look for opportunities in the financing and operation of investments that reduce climate impacts and foster adaptation through renewable energy, energy efficiency, and adopting technology to reduce emissions. The project will also support articles 2.9 and 2.12 of the IDB Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (GN-2609), by implementing energy efficiency technologies for climate mitigation and programs in large cities that help reduce energy demand and CO₂ emissions.