

**ALTO MAIPO HYDROELECTRIC POWER PROJECT
(CH-L1067)**

PROJECT ABSTRACT

- 1.1 **Overview.** Chile’s electricity matrix highly depends on thermoelectric power (63% most of which is based on imported fossil fuels), 34% on hydroelectric power and 3% from non-conventional renewable energy sources (“NCRE”)¹ as at the end of 2012. This dependence on imported fuel sources has exposed Chile to commodity-related energy and supply risks as well as increased price volatility that dampens GDP growth. The Inter-American Development Bank (“IDB”) is currently supporting the Government of Chile (“GOC”)'s efforts to increase NCRE introduction, solar in particular². Nevertheless, beyond those long term efforts, and to meet energy demand growth of approximately 5% p.a. since 1985³, large hydroelectric power plants, especially run-of-the-river, remain vital to Chile’s energy needs for the foreseeable future. The current project seeks to increase hydroelectric capacity in Chile and reduce the country’s reliance on thermoelectric generation and fossil fuels.
- 1.2 **Project Description.** The Alto Maipo Hydroelectric Power project consists of the design, construction, operation and maintenance of two run-of-the-river hydroelectric plants (in hydraulic series) for a total of 531MW, to be located in the Maipo River Basin (“MRB”), 50 km southeast of Santiago, Chile in the San José de Maipo district (the “Project”). The Project will be developed and owned 60% by AES Gener S.A. (“AES Gener”) and 40% by Antofagasta Minerals S.A. (“AMSA”). AMSA is Chile’s fourth largest copper producer controlled by Antofagasta plc (“Antofagasta”). AES Gener in turn is 71% controlled by The AES Corporation (“AES”). Construction of the two hydroelectric power plants is expected to begin in the 4th quarter of 2013. The Las Lajas plant (267 MW) is expected to be commissioned in the 1st quarter of 2018, while the Alfalfal II plant (264 MW), is expected to be commissioned in the 4th quarter of 2018. They are expected to generate an annual average of approximately 2,320 GWh, which will be delivered to Chile’s Sistema Interconectado Central (“SIC”). The Project has also entered into a power purchase agreement (“PPA”) for the supply of up to 780 GWh per year for a term of 20 years to Minera Los Pelambres, (a mine managed and controlled by AMSA). Total Project cost is estimated at approximately US\$2.0 billion and will include ~US\$800 million in equity and up to US\$1.2 billion in debt. Debt financing will be provided via an IDB A loan structure and co-financing with IFC, OPIC, four Chilean commercial banks and one international bank.
- 1.3 **Development Impact.** The Project will have a number of positive developmental impacts such as: (i) adding 531 MW of counter seasonal renewable energy to the SIC grid, diversifying away from thermal generation reliance; (ii) displacing approximately 1,000,000 equivalent tons of carbon emissions per year; and (iii) creating around 2,500

¹ Government of Chile: “National Energy Strategy 2012-2030: Energy for the Future – Clean Secure Competitive”, February 2012

² The IDB Board approved in March 2013 a loan package for US\$41.4 million to finance the construction, operation and maintenance of three photovoltaic solar power plants in the Atacama Desert in northern Chile with a 26.5 MW generating capacity (Poza Almonte 2, 3 and Calama projects). For additional details please refer to IDB loan document CH-1069.

³ Synex: “Market Study and Revenue Projection for the Alto Maipo Hydroelectric Project”, August 2013

direct jobs during the construction phase, with at least 500 of those from the local community⁴.

- 1.4 ***IDB's Additionality.*** The IDB's participation in the Project financing has enabled both financial and non-financial additionality. As for all the hydroelectric power projects, the Bank conducted a thorough environmental and social ("E&S") due diligence analysis. In this process, IDB and the other development financial institutions ("DFIs") involved (IFC and OPIC) have contributed to enhance the Project and the Company's ability to more effectively manage key environmental and social aspects such as: (i) improved management of ecological flows; (ii) improved management of ecosystem services; (iii) improved community relations capacity and (iv) improved stakeholder engagement.
- 1.5 Taking into account current financial market conditions, the long term nature of this infrastructure and length of construction (~5 ¼ years), and considering the partial merchant nature of the Project, the participation of the Bank and its co-financiers is clearly fundamental to the financial sustainability of the Project. Availability of large volume and longer term financing is limited and is a vital aspect to financing renewable energy projects such as the Project.
- 1.6 ***Higher Level Objectives.*** The Project directly addresses two of the IDB Ninth General Capital Increase ("GCI-9") strategic objectives of fostering development through the private sector and promoting renewable energy. It is also consistent with the IDB Country Strategy with Chile, approved in December 2011, for the period 2011-2014, which seeks to increase the generation capacity from low carbon sources by 500MW by year 2014 and specifically seeks non-sovereign guarantee financing to support the priority areas of climate change (focusing on renewable energy and energy efficiency). The Project is also aligned with IDB's Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy, which aim at increasing the Bank's sustainable energy portfolio of 25% by the end of 2015. Alto Maipo will also contribute to the impact targets of the Structured and Corporate Finance Division of the Bank ("SCF") with its US\$10 billion of climate-friendly investment by 2015 and positively impacting over 702,800 electricity consumers.

⁴ It is expected that the Project will also create 27 direct jobs during the operational phase.