IADB-CH-L1067

Alto Maipo Hydroelectric Power Project



## Alto Maipo Hydroelectric Power Project

### **Quick Facts**

Countries Chile

Specific Location Cajon del Maipo

Financial Institutions Inter-American Development Bank (IADB)

Status Active Bank Risk Rating A

Voting Date 2013-10-16
Borrower Alto Maipo, SpA
Sectors Hydropower

Potential Rights Impacts Healthy Environment, Labor & Livelihood, Marginalized Groups, Right to Health, Right to Water

Investment Type(s) Loan

Investment Amount (USD) \$ 270.00 million

Project Cost (USD) \$ 2,053.30 million



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### **Project Description**

The Alto Maipo Hydroelectric Power project consists of the design, construction, operation and maintenance of two run-of-theriver hydroelectric plants (in hydraulic series) for a total of 531MW, to be located in the Maipo River Basin, 50 km southeast of Santiago, Chile in the San José de Maipo district.

### **Early Warning System Project Analysis**

Currently under construction, the Alto Maipo Hydropower Project (PHAM) is described as a run-of-the-river (ROR) project, which uses the natural flow of a river to generate electricity without the construction of a dam. In this case, however, the impacts on the watershed will be immense, at a scale unheard of for a typical ROR project. The waters of the Maipo's three principle tributaries will be diverted for more than 100 kilometers, passing through 67km of tunnels bored through the Andes Mountains. This will dramatically affect the water flows of the Maipo River, of its major tributaries and the underground aquifers, and cause large-scale damage to water access, farming, tourism and the environment.

The construction period was supposed to be approximately five-years, but has been extended repeatedly; estimated costs are now more than four times greater than when the project began. Major investors and contractors pulled out of the project in 2017, and the company faces a series of sanctions for violations of environmental regulations.

In recent years, more than 15,000 people, representing close to 100 community organizations, marched demanding the project's cancellation, calling instead for the protection, conservation and restoration of this critical watershed. The No Alto Maipo campaign has become Chile's second largest environmental cause due to its broad media outreach and the diversity of participating organizations.

Complaints have been filed at the accountability mechanisms of the IDB and the IFC.

### **People Affected By This Project**

The Maipo river basin is east of Santiago and the Maipo river is the most important river for the capital city. Despite being promoted as a project to serve the public interest, the project will cause extreme hardship for the residents of the Cajón del Maipo and for Santiago's population of 7 million. The project's severe – and likely irreversible – impacts were not properly evaluated. This includes:

- -Dramatic limitations on water access: As a very large-scale 'run-of-the-river' project, it is estimated to reduce the Yeso, Volcán and Colorado Rivers by up to 60%. These rivers, the main tributaries in the upper reaches of the Maipo river watershed, are the main source of drinking water for the residents of Santiago, and irrigate more than 120,000 hectares of farmland.
- -Significant erosion: The project will cause significant erosion to the riverbed, affecting private and public infrastructure, including many intakes for drinking water, irrigation, bridges, and other waterways.
- -Desertification: In the last 10 years, Chile has suffered long-term historic droughts so extreme that the country's northern and central regions are now experiencing a process of desertification a process exacerbated by mining, construction, cattle-rearing, plantations, firewood extraction, and other activity. The Maipo watershed serves a unique and indispensible role in regulating local climate and alleviating air pollution in Santiago. The Alto Maipo project, in further diminishing the flow of water, is likely to accelerate the region's desertification process.
- -Impacts on protected areas and tourism: Chile's Cajón del Maipo is home to the Glacial Natural Monument (1994), two Nature Sanctuaries (1995 and 2008) as well as other protected areas. There is concern that highly valued ecological and cultural assets could be at risk, as well as their rich paleontological and archeological elements. Furthermore, the project could cripple the valley's value as one of the most important recreational and tourist areas in Chile, receiving millions of national and foreign visitors a year.
- -Human rights at risk: According to the Chilean National Institution of Human Rights and international experts, the project puts several human rights at risk including the right to water, the right to live in a healthy and clean environment, the right to develop sustainable local economic activities, the right to information and participation, among others.

#### Read more at:

http://www.ciel.org/project-update/alto-maipo-hydroelectric-project-threat-chiles-environment/http://www.riosdelmaipo.cl/



## **Investment Description**

• Inter-American Development Bank (IADB)





## Alto Maipo Hydroelectric Power Project

Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	AES Corporation	Parent Company	-
-	-	-	-	AES Gener S.A.	Client	-
-	-	-	-	Strabag SE	Contractor	-



#### **Contact Information**

#### ACCOUNTABILITY MECHANISM OF IADB

The Independent Consultation and Investigation Mechanism (MICI) is the independent complaint mechanism and fact-finding body for people who have been or are likely to be adversely affected by an Inter-American Development Bank (IDB) or Inter-American Investment Corporation (IIC)-funded project. If you submit a complaint to MICI, they may assist you in addressing the problems you raised through a dispute-resolution process with those implementing the project and/or through an investigation to assess whether the IDB or IIC is following its own policies for preventing or mitigating harm to people or the environment. You can submit a complaint by sending an email to MICI@iadb.org. You can learn more about the MICI and how to file a complaint at http://www.iadb.org/en/mici/mici,1752.html (Spanish).



### Alto Maipo Hydroelectric Power Project

#### **Bank Documents**

- AA Informe CPG2 Sitios protegidos [Original Source]
- AA Informe CPG5 Sitios protegidos [Original Source]
- Alternative, Climate Change Impact and Cumulative Impact Assessment [Original Source]
- Alto Maipo AA Informe CPG2 Sediments [Original Source]
- Alto Maipo Chile ESS [Original Source]
- Alto Maipo ESMR [Original Source]
- Alto Maipo Informe CPG4 Servidumbres y Tierras [Original Source]
- Alto Maipo Project Abstract [Original Source]
- Alto Maipo\_Informe Tecnico [Original Source]
- AM Transmission RCA Ndeg 443 [Original Source]
- Analisis de Alternativas [Original Source]
- Cambio Climatico y su Impacto en la disponibilidad de Recursos Hidricos [Original Source]
- CPG5 Sitios protegidos-ANEXOS [Original Source]
- Informe CPG1 Usos y Usuarios de Agua [Original Source]
- Informe Tecnico Anexo A-Alto Maipo. pdf [Original Source]
- Informe Tecnico Anexo C-Alto Maipo [Original Source]
- Informe Tecnico-Anexo B (Alto Maipo) [Original Source]
- PHAM BASE 2 [Original Source]
- PHAM BASE 3 [Original Source]
- PHAM BASE 4 [Original Source]
- PHAM BASE 5 [Original Source]
- PHAM BASE 6 [Original Source]
- PHAM COMP 10 [Original Source]
- PHAM Efectos Acumulativos [Original Source]
- PHAN BASE 1 [Original Source]
- Proyecto Hidroelectrica Alto Maipo Consolidado. Trichomycterus areolatus [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Alsodes nodosus [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Estimacion de emisiones. [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Estimaciones de gasto solido [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Gasto Solido en suspension [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Inventario de gases Efecto Invernadero [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Memoria de Calculo Emisiones PHAM [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Memoria de Calculo GEI [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Pristidactylus volcanensis [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Programa de Monitoreo de biota acuatica [Original Source]
- Proyecto Hidroelectrica Alto Maipo. Spalacopus cyanus [Original Source]
- Proyecto Hidroelectrica Alto Maipo.Trichomycterus areolatus\_V0 [Original Source]
- Proyecto Hidroelectrica Alto Maipo: Memoria de Calculo Emisiones PHAM\_Final [Original Source]
- Proyecto Hidroelectrico Alto Maipo. Evaluación de Efectos Acumulativos [Original Source]
- Resumen CG6 Cumulative Impact [Original Source]
- Resumen CG7 Alternative Analysis [Original Source]



## **Other Related Projects**

• IFC-31632 Alto Maipo