

## **Initial Project Summary – Atome Fertilizer Plant**

Project Location: Villeta, Paraguay

Name of Applicant: Atome Paraguay S.A.

**Project Description:** The Project involves development, construction, and operation of a large-scale Calcium Ammonium Nitrate (CAN) fertilizer production plant (260,000 tons/year). To produce the CAN granulated fertilizer, the plant will include a Nitric Acid Plant, an Ammonium Nitrate Solution Plant and a Granulation Plant. The CAN fertilizer will be produced by combining ammonium nitrate solution with crushed dolomite and a coating agent. The plant will require up to 124 MW of power and 172 tons/day of dolomite. Power will be provided through a long-term PPA with ANDE, the national utility using 100% hydropower. Dolomite will be provided through a local supplier in Northern Paraguay, still yet to be determined. The Project consists of the following components:

- A large-scale fertilizer production plant of granulated Calcium Ammonium Nitrate (CAN).
- A 220 kV electric transmission line of approximately 550 m in length with four towers and substation.
- A water intake, pumping house and approximately 2 km pipeline for the provision of water from the Paraguay River.
- An effluent discharge pipeline to be installed in the same right-of-way as the water intake pipeline.

The Project will entail several main processes: generation of hydrogen from water and electricity; generation of nitrogen from the ambient air; ammonia synthesis from H<sub>2</sub> and N<sub>2</sub> molecules; nitric acid production from NH<sub>3</sub> and water; calcium ammonium nitrate solution from NH<sub>3</sub> and HNO<sub>3</sub>; CAN production from NH<sub>4</sub>NO<sub>3</sub> and dolomite; and packaging and storage. Project scope does not include transportation; the Project will have a long-term offtake contract with Yara. Yara will come into the facility to collect the final product and is fully responsible for the product once it leaves the boundary of the Project site.

The Project is located in Puerto Sara, south of the city of Villeta, Paraguay, 60 km south of the capital city of Asuncion, near the east bank of the Paraguay River. The 30-hectare Project site is in an area that has been declared by Presidential Decree No. 651 as an industrial and service free trade zone. The ANDE Buey Rodeo electrical station that will be the source of electricity to operate the plant is located 500 meters from the site. Villeta, where the Project will be located, is an industrial city with over 70 industries, including ports, fertilizer mixing plants, and logistics warehouses and a population of approximately 44,000 inhabitants. Land for the Project site was acquired through a voluntary market transaction with the former owner. The Project's area of influence does not overlap with any protected wildlife areas, nor with indigenous territories, although it is located partially in natural habitat.

During construction, the Project labor needs will fluctuate between 200 and 1,100 workers. Operation activities will require about 100 workers.

**Environmental and Social Categorization and Rationale:** The Project has been reviewed against DFC's categorical prohibitions and determined to be eligible. The Project is screened as Category A because the Project is an integrated chemical installation that manufactures, on an industrial scale, nitrogen-based fertilizer. The major environmental and social risks associated with the Project

include the potential for ammonia and particulate matter releases, occupational health and safety risks during construction and operations, including the handling of hazardous materials (hydrogen and ammonia) during operations, contaminated water and wastewater, conversion of habitat that supports priority biodiversity features (e.g., natural habitat per PS 6), the need for appropriate stakeholder engagement, and labor management.

Environmental and Social Standards: DFC's preliminary environmental and social due diligence indicates that the Project will have impacts that must be managed in a manner consistent with the following of the International Finance Corporation's (IFC) 2012 Performance Standards (PS):

- PS 1: Assessment and Management of Environmental and Social Risks and Impacts;
- PS 2: Labor and Working Conditions;
- PS 3: Resource Efficiency and Pollution Prevention;
- PS 4: Community Health, Safety, and Security; and
- PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

There are no known Indigenous Peoples, cultural heritage sites, or inhabitants within the Project site, and no resettlement or economic displacement is anticipated. Therefore, PS 5, 7, and 8 are not triggered at this time.

Environmental Guidelines applicable to the Project include: International Finance Corporation's (IFC) General Environmental, Health, and Safety (EHS) Guidelines (April 2007), IFC's Nitrogenous Fertilizer Production EHS Guidelines (2007), and IFC's Electric Power Transmission and Distribution Guidelines (2007).

Location of Local Access to Project Information: A copy of the Environmental and Social Impact Assessment (ESIA) may be found at the following location:

Municipality of Villeta Office  
Presbítero Enrique Schoenfeld y Mariscal Estigarribia,  
Distrito de Villeta, Paraguay