## **Environmental and Labor Issues:**

This is a category B project according to the IIC's Environmental and Social Sustainability Policy because it could produce certain effects that may be avoided or mitigated by following generally recognized performance standards, guidelines, or design criteria. The principal environmental and social issues related to this project include: efficient resource use and pollution prevention, workplace and labor conditions, and community health and safety.

The project will enable the oil company Petroamazonas Ecuador to increase its electricity-generating capacity. The first project with GP had a positive impact on air quality. It reduced the emission of air pollutants, including greenhouse gases associated with the combustion of the liquid hydrocarbons (primarily diesel and crude oil) that were previously used to generate electricity. The increase in capacity is needed because its contract with the oil company has been extended. The project site is located in an existing industrial area with oil fields (Block 15) owned by the state and operated by PAM in compliance with Ecuador's environmental and labor regulations. As a result, the project is not expected to have significant adverse environmental or social impacts.

Air and Noise Emissions: The project will increase the burning of flare gas generated in crude oil extraction operations in the project area. This will generate electricity in the four motor generators—with an aggregate capacity of some 4.2 MW—that will be installed in addition to the six current generators and operated by GP to supply electricity to PAM. In this way, gas will continue to be used to generate part of PAM's electricity for its industrial operations, instead of the diesel and crude oil it used in the past. A surplus of flare gas is generated in the oil wells and burned in flare stacks, even including the flare gas already being burned in motor generators. Flare gas is treated to make it suitable for its subsequent use as fuel in the electrical generators, thus reducing oil production costs and, in turn, the air pollution produced by operations in the project area. Compared with direct burning in the flare stacks, the process of burning gas in the generators is more efficient and reduces the emission of air pollutants. The project is registered under the Clean Development Mechanism of the Kyoto Protocol and is currently getting credits certified for reducing carbon emissions.

Noise studies have been undertaken to ensure the safety of the project's operational staff and to comply with applicable environmental regulations. No breaches of this regulation have been detected.

Good Environmental and Occupational Health and Safety Practices, and Labor

Considerations: Genser Power has operational offices in Colombia and Ecuador and has an integrated management system, as well as ISO 9001, ISO 14001, and OHSAS 18001 standard certifications for quality, environmental, and occupational health management, applicable to the operation and maintenance of energy-generating projects in Ecuador. In addition, in its operations, the company applies a specific safety, occupational health, and environment program for hydrocarbon sector contractors. Genser Power conducts its operations according to the standards defined in its integrated management system. This ensures compliance with applicable Ecuadorian regulations and best international practices with respect to the design, operation, and maintenance of power generation facilities, and assigns the human, material, and technical resources needed to prevent, control, or minimize environmental pollution and prevent accidents. The company also complies with the provisions set out in Ecuador's labor regulations.

The site where the Genser Power Company will carry out the project has a department of health, safety, and the environment that is responsible for ensuring compliance with the impact prevention and mitigation plan implemented by PAM for its crude oil extraction activities. There is also an emergency response contingency plan to protect the health and safety of employees and contractors

working at the project site. PAM's occupational health, safety, and environmental policies include a corporate social responsibility program and are publicly available on the internet. PAM has ISO 9001, ISO 14001, and OHSAS 18001 certifications.

**Monitoring and Reporting:** Genser Power periodically informs the IIC about its air emissions, noise emissions, and accidents at the workplace. With regard the expansion project, the company will draft an Environmental and Social Action Plan (ESAP) to ensure compliance with domestic regulations and the IIC's environmental and workplace safety and health guidelines. The ESAP will include an obligation to produce an annual report with information on air and noise emissions, environmental best practices, occupational health and response to emergencies, and accident reporting.