

Environmental and Labor Issues:

This is a category III project according to the IIC's environmental and labor review procedure because it could produce certain effects that may be avoided or mitigated by following generally recognized performance standards, guidelines, or design criteria. During project evaluation the following potential environmental and labor impacts were analyzed: liquid effluents, air emissions, solid waste, hazardous waste, good manufacturing and agricultural practices, occupational safety and health, and labor and social issues.

Central Izalco holds an operating health permit issued by El Salvador's Ministerio de Salud Pública y Asistencia Social. In December 2008 the company obtained HACCP (Hazard Analysis and Critical Control Points) certification for its food safety system for ensuring product quality and complying with client quality standards. Central Izalco thus became the first sugar mill in El Salvador to obtain international HACCP certification. The company has developed an environmental management system based on cleaner production principles. CASSA has also implemented good agricultural practices, which consist of integrated crop management and biological pest controls, disposal of empty agrochemical containers at authorized collection centers, liquid effluent and air emissions monitoring, and worker training. These practices, along with CASSA's Corporate Social Responsibility (CSR) program, enable the company to solve or mitigate the potential impacts of its operations and comply with domestic environmental, labor, and social standards, good international practices, and IIC guidelines.

Liquid Effluent Management: Washing the floors and process equipment generates liquid industrial effluents with a high organic matter content, principally in the form of sugars and solids in suspension. These effluents are delivered to a sedimentation tank where the solids in suspension are removed, the pH is neutralized, and the effluents are allowed to cool. They are subsequently used as water for irrigating the sugar cane fields near the sugar mill and meet the quality requirements for this use. Water from purging the boilers is used in the closed-cycle combustion gas scrubbing system after undergoing physical-chemical treatment. During the sugar manufacturing process, the cane juice is heated to evaporate the water. The condensed water, which is liquid, is recirculated for use at the plant itself. Any remaining water is discharged into the Ceniza River. Water discharged into the Ceniza River is monitored daily to ensure compliance with Ministerio de Medio Ambiente y Recursos Naturales (MARN) environmental standards. Wastewater is treated in septic tanks that are maintained regularly to ensure proper operation.

Air Emissions: Exhaust gases and ash from burning bagasse in the boilers to generate energy and steam are the main source of air emissions from processing sugar. To control ash emissions, CASSA invested in a wet ash separation system known as a gas scrubber. Central Izalco uses latest-generation boilers from Brazil to burn bagasse. They operate automatically, improve bagasse combustion efficiency, and shorten the time that ash is generated in the gas stream. Gases and particles emitted by the boilers are monitored regularly in order to comply with MARN requirements. The water used to remove ash from the air emissions control system is delivered to a sedimentation and filter treatment system that removes the solid particles, which are used as soil conditioner in the fields. The treated water is recirculated to the gas treatment system in a closed cycle.

In November 2007, Central Izalco's power cogeneration project was registered for carbon credits under the United Nations Framework Convention on Climate Change (UNFCCC) on the basis of the Kyoto Protocol Clean Development Mechanism (CDM). The estimated greenhouse gas emission reduction is 45,750 metric tonnes of CO₂ equivalent per year; the project is currently in validation. The IIC has offered to support CASSA with technical assistance cooperation funds that are available for such projects and to explore opportunities for cooperation.

Solid and Hazardous Waste Management: Central Izalco has implemented an integrated management system for these wastes in order to reduce, reuse, recover, recycle, remove, and dispose of them in keeping with Salvadoran environmental standards. The system consists of separating solid wastes, temporarily storing them or using them at the facilities, and disposing of them. Domestic solid wastes from the mill are collected and taken to the final point of disposal authorized by the municipal authorities. Recyclable materials are delivered to an authorized recycler. Biodegradable solid wastes are used to fertilize the soil or cogenerate energy: i) sugar mill filter cake is used to improve the soil in fields near the sugar mill; ii) all of the bagasse is used at the mill as fuel for the boilers, and the resulting ash is spread on the fields as a soil conditioner. Hazardous waste such as batteries and used oil, grease, and solvents from motor vehicles and mills are collected, trucked out, and disposed of by an authorized service provider. Throughout the life of the project with the IIC, Central Izalco will have a recyclable material storage center in order to improve its temporary storage system. The company will also work with MARN to prepare an inventory of polychlorinated biphenyls (PCBs) in the electrical equipment at its facilities, as well as an inventory of construction materials containing asbestos, in order to take corrective action as needed to ensure that they are handled and disposed of properly.

Good Manufacturing and Agricultural Practices: Central Izalco's facilities have an HACCP-based food safety system to ensure product quality and meet client quality standards. The certification audit took place from December 4 to 12, 2008. Sugar cane growers, as well as farm and co-op workers who work for CASSA, receive technical assistance and job training in good agricultural and environmental practices for the rational, efficient, and appropriate use of agrochemicals and biological pest controls in order to reduce the use of insecticides. Heavy metal (lead, copper, mercury, and arsenic) and pesticide analyses of soil, irrigation water, cane juice, and sugar samples have shown that the sugar cane delivered to Central Izalco is free of heavy metals and agrochemicals. Empty agrochemical containers are triple-washed and taken to authorized collection centers operated under the Asociación de Proveedores Agrícolas' "Limpiemos Nuestros Campos" ("Clean Fields") program.

Occupational Safety and Health: Central Izalco won the 2008 occupational health and industrial safety award granted by the Ministerio de Trabajo y Previsión Social (MINTRAB) and the Instituto Salvadoreño del Seguro Social (ISSS). Workers at the mills and plantations are provided with the appropriate personal protective equipment. The facilities are equipped with fire safety equipment and appropriate signage, and they have a preparedness and emergency response plan. CASSA has a company clinic that provides medical care and organizes health days and vaccination programs for the workers. Last year, medical equipment at the clinic was replaced and new equipment was purchased in order to improve care of the workers and efficiently respond to any emergencies. Field workers receive medical care from brigades working in conjunction with Ministerio de Salud Pública y Asistencia Social health units. Central Izalco has a worker nutrition and hydration monitoring program and has been working on understanding and finding ways to prevent Chronic Renal Insufficiency (CRI), an illness that, although widespread among rural workers in Central America, is not limited to the sugar industry nor to sugar growing regions in other countries. To reinforce early detection of this disease, the company will, at the IIC's request, have workers at high risk of developing CRI undergo regular checkups.

Labor and Social Issues: Central Izalco is in compliance with domestic labor laws. Sugar mill and agricultural workers receive social and economic benefits that exceed current domestic labor law requirements. CASSA's Corporate Social Responsibility Program ensures that no child labor or forced labor is used at its operations; the company follows International Labour Organization guidelines. Workers are free to join a union, but to date there are no unions at the company. Instead, there are two cooperatives established by the workers themselves. The "Supérate CASSA" ("Go!

CASSA") program provides support for talented young students in the sugar cane area of influence and for children of CASSA mill workers, so that they can learn computer skills, English, and values.

Supervision: CASSA will implement the corrective actions mentioned herein and will prepare monitoring reports for regular submission to the IIC. The IIC will make field visits as part of the project supervision process.