Early Warning System

IFC-30417

Etileno XXI

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Quick Facts

Countries	Mexico
Specific Location	Nachital de Lazaro Cardenas
Financial Institutions	International Finance Corporation (IFC)
Status	Closed
Bank Risk Rating	A
Voting Date	2012-01-30
Borrower	Braskem Idesa, S.A.P.I.
Sectors	Construction, Energy
Potential Rights Impacts	Labor & Livelihood, Right to Food, Right to Health, Right to Water
Investment Type(s)	Loan
Investment Amount (USD)	$ 300.00 million
Project Cost (USD)	$ 4.30 million

Project Description

Etileno XXI (the Project) is the result of a joint venture between Brazilian and Mexican petrochemical companies Braskem and Idesa, which were incorporated as Braskem Idesa S.A.P.I. (B-I, or the Company) in 2011. The Project, which entails the construction and commercial operation of an integrated petrochemical complex expected to be ready for operation in 2015.

The Project will specifically involve the construction and operation of (1) an ethane cracker with a nominal capacity of approximately 1 million tons per annum (tpa) of ethylene production, (2) a high-density polyethylene (HDPE) plant with a capacity of approximately 400 thousand tpa, (3) a HDPE plant with a capacity of roughly 350 thousand tpa, and (4) a low-density polyethylene plant (LDPE) with a capacity of approximately 300 thousand tpa. The ethylene to be produced at the cracker will be used as raw material for the three polyethylene plants.

In addition to the abovementioned facilities, the following additional infrastructure will also be built to support the Project:

- An underground 3.7 km pipeline to source water from the PEMEX La Cangrejera water system (located north of the project site)
- An underground 1.6 pipeline for ethylene
- An underground 1.6 pipeline for pipeline for natural gas to be supplied from PEMEX
- A 5 km electricity transmission line from the substation that will furnish 400 MW

The Project's facilities will be located in the municipality of Nanchital de Lozaro Cordenas del Rio, in the southeastern Mexican state of Veracruz, only 3.5 km east of the city of Nanchital (27,000 inhabitants) and approximately 7 km southeast of the city of Coatzacoalcos (305,000 inhabitants) in the Coatzacoalcos municipality, the main petrochemical producing region in Mexico. In addition to the two cities, seven small rural communities are located within a 5 km radius of the facilities. The IFC claims that the members of these communities - are familiar with - industrial installations given the prevalence of the petrochemical industry in the region.

The IFC reports that the size of the Project's land parcel is 192 hectares, 61% of which will be used by the Project. According to the IFC, 9% of the area will be used during construction and then re-vegetated, and an additional 16% (approximately 30 ha) will be set aside as a permanent conservation area. The remaining 14% is apparently already used by right-of-ways of the pre-existing PEMEX pipelines located within the Project site (though not related to the Project).

Early Warning System Project Analysis

RISK CATEGORIZATION

The IFC classifies Etileno XXI as a Category A project according to its Environmental and Social Review Procedure. The IFC claims that the Project will be a source of *significant diverse environmental and social impacts* during both the construction and operation phases. These impacts include the loss of highly modified critical habitat, social impacts resulting from labor sourcing during construction, and the possible unintended influx of job seekers to the area.

APPLICABLE IFC PERFORMANCE STANDARDS

According to the IFC, the Project will have impacts that must be managed in a manner consistent with the following Performance Standards:

- PS1: Social and Environmental Assessment and Management Systems
- PS2: Labor and Working Conditions
- PS3: Pollution Prevention and Abatement
- PS4: Community Health, Safety, and Security
- PS5: Land Acquisition and Involuntary Resettlement
- PS6: Biodiversity Conservation and Sustainable Natural Resource Management
- PS8: Cultural Heritage

People Affected By This Project

ENVIRONMENTAL AND HUMAN RIGHTS RISK ASSESSMENT

Labor Rights

According to the IFC, plant construction will create approximately 8,000 temporary direct positions during construction (2,000 indirect). Operations will require up to 700 direct workers with 2,000 indirect workers. Odebrecht, the construction contractor, will handle the recruiting and hiring of direct and indirect employees. IFC is requiring the Company to develop and implement a Local Hiring Plan with which Odebrecht must comply that ensures prioritization for employment of members of directly affected communities especially those communities identified as vulnerable.

The IFC identifies several risks to the welfare of the petrochemical complex's workers, particularly health issues and the relatively high possibility of major accidents like fires or blasts (refer to the Right to Health section). To address these issues, the IFC explains that health checks will be made on workers during construction and operational phase prior to starting work to establish fitness for work. Regular worker health checks will also apparently continue through the construction and operational phase to monitor workers health. The IFC also provides that a health service facility will be provided during construction and operation phases.
The IFC states that child and forced labor is not permitted by B-I or by its contractors or suppliers.

Given the possible risks to workers, particularly with regard to their health and safety, the following survey questions related to labor rights should be raised among communities and individuals affected by B-I's activities:

- Are working conditions in your community and/or in this industry safe and healthy?
- Has the company (or any joint venture partners, subsidiaries or sub-contractors) been accused of failing to provide just and favorable conditions of work in other regions or countries?
- Does the company have a policy or program to ensure that its workers enjoy just and favorable conditions of work?
- If a worker gets injured on the job, what sort of relief can he or she expect from the company?

Right to Health

The IFC states that specific risks to the workforce as a result of major accident, such as fire or explosion at the facility, are *significant,* as determined by a coarse quantitative risk assessment. This is consistent with the observance of deadly accidents at various petrochemical sites in recent years, such the blast at the Bangkok Synthetics plant in Thailand in May 2012 which killed 12 people and wounded another 105. Although the IFC claims these risks will be mitigated with operational safety measures such as alarm systems, gas detection devices, automatic emergency shutdown systems, and emergency drills, the IFC notes that there is a need to establish additional prevention measures.

The IFC also reports that there is currently no ambient air monitoring in the project area, and that the accordingly, the baseline ambient air quality data gathered by the Company cannot be considered fully representative of the ambient air conditions in the area. The IFC has therefore ordered Braskem Idesa to design and install an ambient air quality monitoring network in accordance with international standards to measure air quality in proximity to the operations. This monitoring program is scheduled to begin mid-2012.

Furthermore, the IFC reports the arrival of large amount of workers to be hired during the construction phase will increase the risk of transmission of communicable diseases, including sexually transmitted diseases. To combat this risk, the Company will evidently hire a contractor to develop a Communicable Disease Management Plan and implement a communicable diseases awareness campaign in coordination with relevant stakeholders, such as women's groups, youth unions, health workers, and representatives from affected communities (to be determined by a prior study).

Investment Description

- International Finance Corporation (IFC)

The total Project cost is estimated at $4.3 billion. The proposed IFC investment consists of a loan of up to $300 million for IFC's own account and the mobilization of a B Loan.

Private Actors Description

The Project sponsors are Braskem S.A. (“Braskem”) and Grupo Idesa S.A. de C.V. (“Idesa”). Braskem and Idesa have established a joint venture company, Braskem Idesa, S.A.P.I. (the “Company”), to house the Project. Braskem and Idesa will hold shareholding interests of up to 65% and up to 35%, respectively, in the Company. Braskem is a listed Brazilian company and leading thermoplastic resin producer in the Americas. Idesa is a privately owned Mexican petrochemical company dedicated to the production and distribution of a variety of petrochemical products.

As noted, Braskem Idesa S.A.P.I. is the result of a joint venture between companies Braskem and Idesa, which was entered in 2011. Braskem is a listed Brazilian company and leading thermoplastic resin producer in the Americas, and Idesa is a privately owned Mexican petrochemical company dedicated to the production and distribution of a variety of petrochemical products. According to the IFC, Braskem and Idesa will hold shareholding interests of up to 65% and up to 35%, respectively, in Braskem Idesa S.A.PI. In 2011, the Company also contracted Paris-based Technipia leading provider of engineering, project management, and construction services for the chemical, gas, and oil industry as technology provider for the development of its ethylene cracker. Technip has also apparently been contracted for the Project facility's front-end engineering design (FEED) of the cracker and high density polyethylene plants. Other companies involved in the Project include:

- INEOS (one of world's leading chemical companies) - providing HDPE technology for the Project.
- LyondellBasell (world's third-largest independent chemical company) - licensing LDPE technology.
- Odrebrecht-ICA Fluor (a Brazilian conglomerate) - contractor for site preparation and construction phases
- Joint venture between Odrebrecht-ICA Fluor and Technip: contractor for construction and installation

PAST IFC FUNDING: Braskem Idesa was created in 2011 specifically to carry out this Project; as such, the joint venture has not received any IFC investments before this instance. Although there is similarly no record of Braskem receiving direct IFC funding in the past, the company has been involved in ventures that have received IFC loans:

- Braskem was a shareholder of Brazilian petrochemical company Copesul in 2010, when Copesul requested from the IFC a $20 million A Loan, a B Loan of up to $70 million, and a $10 million C Loan.
- Braskem provided electricity, gas, steam, and clarified water (for industrial use) to Kordsa Brasil S.A. - a leading producer of nylon and polyester yarns, cords, and industrial fabric mainly used in automotive parts' during the period Kordsa Global received an A loans amounting to $40 million for its subsidiaries in Brazil and Argentina.

There are no existing records of Idesa receiving IFC funds in the past.

PAST ENVIRONMENTAL AND HUMAN RIGHTS ABUSES:

Research to date has not found any documentation of past abuses.

Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	Braskem Idesa SAPI	Client	-
-	-	-	-	Braskem S.A.	Undisclosed	-
-	-	-	-	Grupo IDESA, S.A. de C.V.	Undisclosed	-

Contact Information

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CONSULTATION PROCESS:

B-I conducted stakeholder consultation activities that included plenary sessions and information open houses in the towns of Nanchital and Coatzacoalcos (19th and 21st of May, 2011) with an attendance of 150 people and 200 people, respectively. The public was given the opportunity to learn more about the project and proposed impact mitigation as well as to provide their opinion. Community consultations were held in the directly affected towns of Pollo de Oro (May 9, 2011 with 110 attendees) and Lozaro Cardenas del Rio (May 20, 2011 with 62 attendees). The neighboring communities of Nahualapa, El Chapo were invited to the meeting in Pollo de Oro while the community of Cinco de Mayo was invited to the consultation in Lozaro Cardenas. The purpose of these initial consultations was to inform stakeholders and affected communities about the project and to solicit feedback to be integrated into the ESIA design process. During this period baseline socio-economic data were also gathered. Follow-up consultations were held at the end of October 2011 to present the completed ESIA to the towns of Nanchital, Coatzacoalcos as well as the directly affected communities of Pollo de Oro, Lozaro Cardenas and Nahualapa. As required by Mexican law a written executive summary of the ESIA was provided to each community as part of the consultation preparation process.
IFC's team met with approximately 200 community members in 5 communities (both directly and indirectly affected) during the project appraisal. The IFC claims that the findings from these meetings revealed overall strong support for the project in anticipation of employment. However, community members expressed concern over potential environmental impacts to air and water.

ACCOUNTABILITY MECHANISM OF IFC

The Compliance Advisor Ombudsman (CAO) is the independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by an IFC or MIGA- financed project. If you submit a complaint to the CAO, they may assist you in resolving a dispute with the company and/or investigate to assess whether the IFC is following its own policies and procedures for preventing harm to people or the environment. If you want to submit a complaint electronically, you can email the CAO at CAO@worldbankgroup.org. You can learn more about the CAO and how to file a complaint at http://www.cao-ombudsman.org/

Campaign Documents

- América Latina: Metodología del Consejo Mundial de Empresas para el Desarrollo Sostenible es usada p
- Brasil: Empresas adotam políticas voltadas para LGBTs & participam de fórum com mais de 50 corporaçõ