Early Warning System

IFC-36627 Myingyan

# **Quick Facts**

Countries	Myanmar
Specific Location	Taungtha, Myingyan District, Mandalay Division
Financial Institutions	International Finance Corporation (IFC)
Status	Approved
Bank Risk Rating	A
Voting Date	2015-11-19
Borrower	SEMBCORP UTILITIES PTE LTD
Sectors	Energy
Potential Rights Impacts	Healthy Environment, Housing & Property, Labor & Livelihood, Right to Food, Right to Health, Right to Water
Investment Type(s)	Loan
Investment Amount (USD)	\$ 75.00 million
Project Cost (USD)	\$ 304.00 million

# **Project Description**

Project Summary: Potentially the first of the Asian Investment Infrastructure Bank's (AIIB) investments in the Mekong region, the Myingyan project is an investment to "build, own and operate a greenfield 225 MW Combined Cycle Gas Turbine (CCGT) power plant in the Mandalay region of Myanmar." In addition to IFC, ADB, and potentially AIIB funding, A consortium of Sembcorp Utilities Pte. Ltd and MMID Utilities Pte. Ltd will develop and operate the project. The Project includes the construction and operation of the following facilities:

225MW Combined Cycle Gas Turbine Power Plant;

Gas Supply Pipeline;

230kV Overhead Transmission Line; and

Water Supply Pipeline, Wastewater Discharge Pipeline and Water Intake Pumping Station.

Project documents state that construction will begin in the first quarter of 2016, with an aim to open the project facilities for operation by the first quarter of 2018.

Location: The project is located in Taungtha, a township of the Myingyan District in the Mandalay Divison of central Myanmar. The power plant will occupy about 11.6 hectares, which will be situated within a 280 hectare government-owned and operated steel mill site (Myingyan Steel Mill No.4).

Resources needed: 8 hectares of land acquired for a 12 kilometer cooling water supply line and 3 kilometer overhead power transmission line, affecting 8 to 10 families without legal claims whose homes and small businesses may be physically displaced

### Early Warning System Project Analysis

#### Risk Assessment: Category A.

This project is co-financed by the Asian Infrastructure Investment Bank, International Finance Corporation (IFC), and the Asian Development Bank (ADB). As this is co-financed, the AIIB will apply IFC's environmental and social standards and policies. The IFC classifies the Project as a Category A project because it is a large, complex project with correspondingly significant risks and impacts on the environment. According to the IFC's environmental and social review procedure, this project has been classified as Category A "due to concerns about expansion of industrial activities in this rural area including cumulative impacts to air quality' influx of migrant construction labor, and the related community health and safety risks; and potential relocation of approximately 5 to 10 families of settlers without land titles or legal claims along the river water pipeline right of way."

#### APPLICABLE SOCIAL & ENVIRONMENTAL STANDARDS

Based on IFC documents, the following environmental and social safeguard policies are triggered:

PS 1 – Assessment and Management of Environmental and Social Risks and Impacts - triggered due to construction effects identified by project documents, including: air quality impacts, surface water quality, "noise during site preparation, ... as well as increased traffic in access roads; ...soil and groundwater from potential leaks and spills of oil, lubricants, or fuel from heavy equipment; construction waste management; and community health and safety impacts due to increased traffic and influx of construction workers." Operational effects identified by project documents include: "impacts to air quality...(mainly [nitrogen oxide] emissions); surface water quality due from domestic wastewater discharge; noise associated with the operation of the power plant;... generation of various types of non-hazardous and hazardous wastes from plant [operations & maintenance] activities; and community health and safety" in the event of a natural gas leak.

PS 2 - Labor and Working Conditions - triggered due to the workforce required for the construction and operation of this project. The average workforce during construction is 600 people, with a peak of 900 people "at the height of construction activities." The expected operational workforce is 48 people.

PS 3 - Resource Efficiency and Pollution Prevention - triggered due to issues related to noise, vibrations, dust and wastewater emissions, and hazardous waste generation during project construction and operation. Emissions may impact air quality in the project area and surrounding villages.

PS 4 – Community Health, Safety and Security - triggered due to "the risk of accidents for the general public during construction," "raw water intake from the Ayeyarwady River," which may impact other users of the river, possible community exposure to diseases with the influx of laborers, the possibility of emergencies such as a "fire or explosion due to the use of natural gas at the proposed project site," and the deployment of "unarmed security personnel" at the project site.

PS 5 – Land Acquisition and Involuntary Resettlement - triggered because "land acquisition for the approximate [12 kilometer] cooling water supply line and the approximate [3 kilometer] overhead power transmission line...will be managed by the Myanma Electric Power Enterprise (MEPE) and will involve an area of about 8 [hectares]." Additionally, approximately 8 to 10 "families of settlers without land titles or legal claims occupying the irrigation canal [right-of-way] will be affected with the potential effects including physical displacement of small businesses (i.e tea shop or food stores), homes, and removal of small plantations of fruit trees."

# **People Affected By This Project**

## OUR RISK ASSESSMENT

Based on the IFC's project documents, this project poses potential risks to the following human rights:

## Right to Property & Adequate Housing:

According to the Asian Development Bank's Resettlement Framework, the project site is located within a larger site that "economically displaced about 130 villagers from the Sa Khar, Hnan Hwa, and Hpet Taw villages, in a Government-led land acquisition process" from 1998-2000. The larger 280 hectare site is fenced. However, as of 2015, "it was observed that fences were opened in some 2 places by the villagers from Sa Khar to use the site for informal fire wood collection and cattle grazing." The Asian Development Bank's Resettlement Framework states that in addition to land informally used for agriculture, "there are approximately 8 to 10 families of settlers without land titles or legal claims with the potential effects including physical and economic displacement of small businesses (i.e tea shop or food stores) and residences."

#### Right to Livelihood:

The physical displacement of small businesses due to land acquisition for the water supply and overhead power transmission line may impact the right to livelihood for the 8-10 families living in the project area. Additionally, according the IFC's Social Impact Assessment, agriculture is the main source of income for local villagers, and much of the pipeline route "typically forms a part of a large plot of land" used for seasonal crop production. To the extent that people rely on the crops and fruit trees that will be removed during project construction as a source of livelihood, that right may be impacted.

#### Right to Food:

To the extent that local villagers use the land along the water pipeline to grow crops for their households, the right to food may be impacted when this land is acquired by the project.

#### Right to Water:

Without adequate safeguards, there is a risk that hazardous waste generated by the project may contaminate surrounding groundwater and surface water sources used by local villagers for consumption and household activities.

#### Right to a Healthy Environment:

Construction is expected to create 27,803.65 tonnes carbon dioxide-equivalent, and operation of the combine cycle gas turbine will emit approximately 731,000 tonnes carbon dioxide-equivalent annually. According to project documents, the construction activities with the most significant "potential air quality impact is fugitive dust emissions from the power plant site." During the operational phase, the most significant air quality impact is "power plant stack emissions due to combustion of natural gas." Air quality is already degraded in the project area due to the adjacent presence of an operating steel mill also undergoing construction and an operating natural gas fired reciprocating engine power plan. Levels of nitrogen oxide and particulate matter are already high, and "[c]onstruction activities will temporarily contribute to increased levels of dust."

Of the anticipated sources of wastewater discharges and runoff, "the most significant by volume is considered to be sanitary wastewater which will be generated at an estimated rate of 48,000 liter/day." The most significant source of emissions during the operational phase "will be the power plant's closed circuit cooling systems blowdown which will generate approximately 70.5 m3/hr of cooling water discharge, followed by sanitary wastewater from operations (from an estimated workforce of 48 employees)."

The project documents identify four "noise sensitive receivers" that may be affected by the use of powered mechanical equipment, as well as other construction and operation noise sources: "a permanent steel mill construction worker (EPC) accommodation in Taung Tha Township (approximately 1890 m to the south of the project site); a monastery and pagoda in Taung Tha Township (approximately 2400 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Township (approximately 1960 m to the south); Hnan Ywa Village in Taung Tha Townshi

## **Investment Description**

• International Finance Corporation (IFC)

Bank financing: IFC. This project is also co-financed by the Asian Development Bank (48368-001). As of September 2016, the new China-led Asian Infrastructure Investment Bank is also considering investment in this project, which will be co-financed with IFC and ADB.

Client: Semcorp Utilities Pte. Ltd. The Project has been developed by a consortium of Sembcorp Utilities Pte. Ltd. (Singapore) and MMID Utilities Pte. Ltd. (Singapore, majority owned by Myanmar investors) under a special purpose vehicle named Sembcorp Myingyan Power Company Limited which has been established in Myanmar for the sole purpose of developing and operating the Project.



## **Private Actors Description**

The main project sponsor is Sembcorp Utilities, a leading energy and water company from Singapore with operations across six continents worldwide. It has over 8,200 megawatts of gross power capacity and over 9.5 million cubic meters of water per day in operation and under development. It is a fully owned subsidiary of Sembcorp Industries Pte. Ltd., a listed company on the Singapore Stock Exchange with a market cap of S\$8 billion. The Government of Singapore, through Singapore's sovereign wealth fund (Temasek) holds 49.5% of the shareholding of Sembcorp Industries.

The other shareholder of the Project Company is MMID, a company incorporated in Singapore and is owned by a group of investors from Myanmar.



Private Actor 1		Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	Mandalay Myotha Industrial Development Public Co., Ltd.	Client	-
-	-	-	-	Sembcorp Industries Ltd	Parent Company	-
-	-	-	-	SembCorp Utilities Pte Ltd	Client	-



## **Contact Information**

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CONSULTATIONS With respect to AIIB funding, civil society groups, such as NGO Forum on ADB, have raised concerns over the fact that this project was publicly disclosed for AIIB funding several days before board consideration. The disclosure practices for this project also circumvent other disclosure requirements of co-financiers, such as the ADB requirement for 120 days notice before board approval for high risk Category A projects. NGO Forum on ADB has also raised issues with this project going forward where the AIIB has yet to approve an energy policy. The available IFC documents provide information about existing and planned consultations. IFC documents state that, as part of the Environmental and Social Impact Assessment process, three rounds of local stakeholder consultations were conducted from June to September 2015. The purpose of the first round was to "disclose project information" and "gather stakeholder feedback," while the purpose of the next two rounds were to provide updates on issues raised previously, to "present the outcomes of the impact assessment process, including management measures," and to "gather stakeholder feedback." According to IFC - Villages and Consultation Dates (2015) were: Sa Khar - July 18, 2015; August 19; September 4 Hnan Ywa - July 16, 2015; August 19; September 4 Hpet Taw - July 17, 2015; August 19; September 3 Nyaung Kan - July 17, 2015; August 19; September 5 Gyoke Pin - July 19, 2015; August 18; September 5 Thien Ywa - July 18, 2015; August 18; September 5 Tha Pyay Thar - July 19, 2015; August 18; September 2 IFC documents note that the main concerns brought up during these consultations were: employment, availability and guality of surface and ground water, access to electricity, air emissions and health implications, and noise. Villagers in Sa Khar were particularly concerned because heat generated from the adjacent steel mill killed their crops and made their land inviable. According to project documents, "[t]his concern has been fed into the design of the Project - due to the height of the stacks on site it is not anticipated that there will be any significant heat discharged and noise management measures will be put in place," The following three villages will also be engaged moving forward: Ayea, Hia Nuang Tang, and Kaing Taung, According to the Stakeholder Engagement document, during construction villagers will receive monthly "progress updates via information distributed to the village tract leaders and/ or the relevant committee representative"; guarterly "progress updates via a face-to-face meeting"; and, as required, villagers will give "input on relevant management plans" and receive "notification in advance of undertaking noisy activities" and "transportation of heavy machinery." PUBLIC INFORMATION AND DISCLOSURE POLICY OF AIIB As noted above, this project was disclosed by AIIB several days before the board considered the project. Groups, such as NGO Forum on ADB, have raised alarm over the adequacy of notice and consultation on the part of AIIB. Based on AIIB's Public Information Interim Policy, the public has the right to access information. Such information on AllB's policies and decision-making determines the public's participation and ultimately on environmental and social sustainability and safeguards. Project information requests may be made to the AIIB at: projects@aiib.org.

#### 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/ Myingyan

## **Bank Documents**

- 0284993\_Myingyan CCGT ESIA\_00\_Executive Summary\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_01\_Introduction\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_02\_Project Description and Alternatives\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_03\_Administrative Framework\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_04\_Impact Assessment Methodology\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_05\_Baseline (Biophysical)\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_06\_Baseline (Socio-economic)\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_07\_Air Quality\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_08\_Greenhouse Gas\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_09\_Surface Water Quality\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_10\_Noise and Vibration\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_11\_Landscape and Visual\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_12\_Soils and Groundwater\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_13\_Waste\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_14\_Biodiversity\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_15\_Social Impact Assessment\_ 150915.pdf
- 0284993\_Myingyan CCGT ESIA\_16\_Stakeholder Engagement\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_17\_Cumulative Impact Assessment\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_18\_ESMP\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_19\_Disaster Risk Plan\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_20\_Conclusions\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_21\_References\_150915.pdf
- 0284993\_Myingyan CCGT ESIA\_Annex A.pdf
- 0284993\_Myingyan CCGT ESIA\_Annex B1.pdf
- 0284993\_Myingyan CCGT ESIA\_Annex B2.pdf
- 0284993 Myingyan CCGT ESIA Annex B3.pdf
- 0284993 Myingyan CCGT ESIA Annex C.pdf
- 0284993 Myingyan CCGT ESIA Annex D.pdf
- 0284993 Myingyan CCGT ESIA Annex E.pdf
- 0284993 Myingyan CCGT ESIA Annex F.pdf
- 0284993 Myingyan CCGT ESIA Annex G.pdf
- 0284993 Myingyan CCGT ESIA Annex H.pdf
- 0284993 Myingyan CCGT ESIA Annex I.pdf
- 0284993\_Myingyan CCGT ESIA\_Annex J.pdf
- 0284993\_Myingyan CCGT ESIA\_Annex K.pdf
- 0284993\_Myingyan CCGT ESIA\_Annex L.pdf
- 0284993\_Myingyan CCGT ESIA\_Annex M.pdf
- 0284993\_Myingyan CCGT ESIA\_Cover Sheets\_150915.pdf
- CSR Asia Business Barometer The State of CSR Disclosure in Asia 2008

#### **Campaign Documents**

Companies linked to Rurma

# Early Warning System

## **Other Related Projects**

- ADB-48368-001 Myingyan Natural Gas Power Project
- AllB-0007 Myanmar: Myingyan Power Plant Project
- AllB-000007 Myanmar: Myingyan 225 MW Combined Cycle Gas Turbine (CCGT) Power Plant Project