

Facts about the Hai Phong coal-fired power plant project in Vietnam

Green Innovation and Development Centre (17th April, 2015)

Project Overview

On November 15th, 2005, the Japan Bank for International Cooperation (JBIC) signed a loan agreement totaling ¥7.7bn (\$64.59 million) with Electricity of Vietnam (EVN) to construct Hai Phong I coal-fired power plant (hereafter Hai Phong I) in Tam Hung commune, Thuy Nguyen district, Hai Phong province. The loan is co-financed with Mizuho Corporate Bank acting as agent bank and Société Générale's Tokyo branch. This is the first export loan to EVN that plays a central role in the country's power sector.

On March 28, 2007, these financial organizations jointly awarded another contract for the construction of the Hai Phong II coal-fired power plant (hereafter Hai Phong II) which was built adjacent to Hai Phong I. The loan is on buyer's credit totaling up to 7.3 billion yen (\$63million). In both plants, a consortium of Marubeni Corporation (Japan) and Dongfang Electric Corporation (China) supplied and installed the power generation facilities.

During and after construction of these two power plants, the local people have suffered many negative impacts in terms of environment, health and livelihood. Admittedly, these two projects have contributed to a stable power supply to the northern part of Vietnam, but the development trade-offs are too high when its operation is causing adverse social and environmental impacts on local people nearby the coal fired power plants.

- **Power plant specifications:**

- Hai Phong I coal fired power plant: 600 MW (300 MW x 2 units) using Sub-critical technology (fuel: Vietnamese anthracite coal from Quang Ninh coal mines) with the investment cost of \$640 million¹
- Hai Phong II coal-fired power plant: 600 MW (300 MW x 2 units) using Sub-critical technology (fuel: Vietnamese anthracite coal from Quang Ninh coal mines) with the investment cost of \$623 million².

- **Project proponents:** Hai Phong Thermal Power Joint Stock Company (HPTPJSC)³

- Shareholders: Electricity of Vietnam (EVN) - 87.5% equity stake
- An Engineering, Procurement and Construction contract (hereafter referred to as EPC) was

¹ An article reported that thirty per cent of the capital investment would come from EVN, Viet Nam Coal Corporation, and Viet Nam Insurance Co, the co-founders of the Hai Phong Thermal Power Joint Stock Co., and that the remaining 70 per cent of capital investment would be borrowed from Vietnamese and foreign banks, including the JBIC and the China Exim Bank. (<http://vietnamnews.vn/economy/144787/hai-phong-to-receive-coal-fired-power-plant.html>)

² An article reported the project cost would be consisted of approximately 15% from investment and 85% from loan. (<http://vietnamnews.vn/industries/159233/hai-phong-power-plant-deal-signed.html>)

³ <http://ndhp.com.vn/?page=introduction&portal=ndhp>

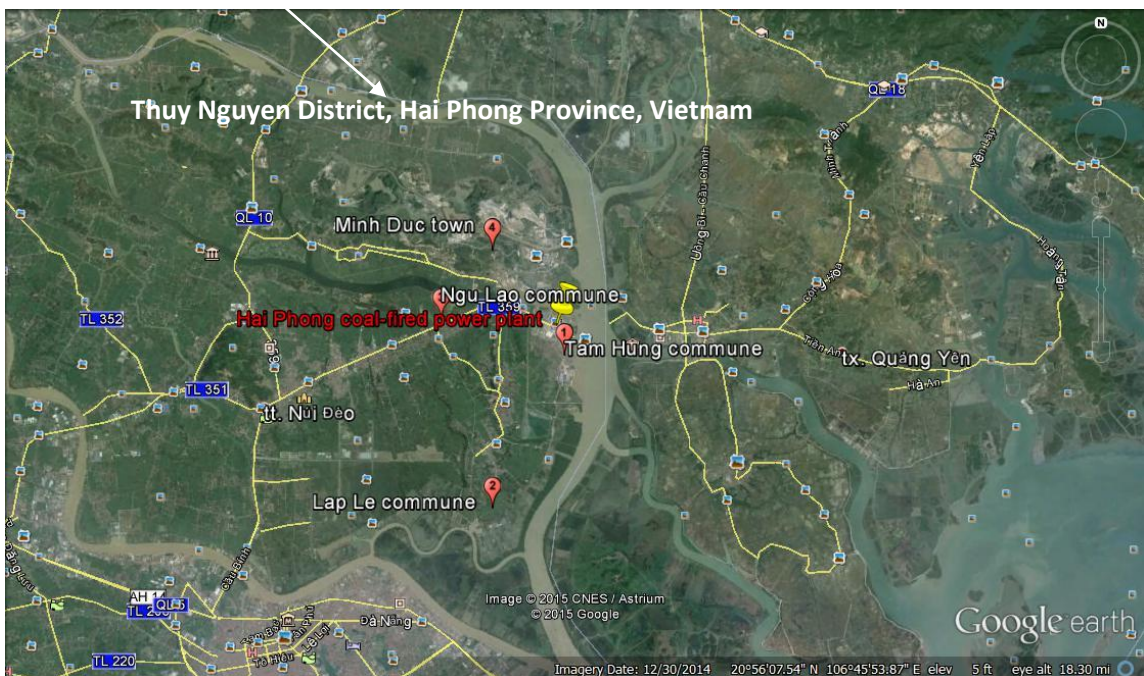
signed between HPTPJSC and a consortium of Marubeni Corporation (Japan) and Dongfang Electricity-Gas Group (China) under Build – Transfer (BT) scheme.

- **Lending Agency:**

- Japan Bank for International Cooperation (JBIC) signed loan agreements with the total amounts of 7.7 billion yen in 2005 and 7.3 billion yen in 2007 with EVN. Mizuho Corporate Bank (agent bank) and Societe Generale, Tokyo Brance were 2 co-financers for the loans⁴.
- In addition, an export loan was provided by the Export-Import Bank of China for exporting Dongfang Electric Corporation’s power generation facilities.

- **Project site location:**

- Tam Hung commune, Thuy Nguyen district, Hai Phong province (Hai Phong I + Hai Phong II: 317 hectare)



- **Affected people :** 262 households had to resettled

Main sequence of events

1999	July	Environmental Impact Assessment Report of Hai Phong I coal-fired power plant was approved by Ministry of Science, Technology and Environment
2002	October	Hai Phong Thermal Power Joint Stock Company was established by Electricity of Vietnam (EVN), the majority owner
2005	July	Japan's Marubeni Corporation and China's Dongfang Electric Corporation were awarded the construction contract for Hai Phong I (Unit 1 & Unit 2)

⁴ <http://www.jbic.go.jp/en/information/press/press-2006/0329-6983>

	November	EVN signed loan agreement with JBIC (Mizuho Corporate Bank acting as agent bank and Société Générale's, Tokyo branch) to construct Hai Phong I coal-fired power plant
	November	Started construction
2006	November	Environmental Assessment Report of Hai Phong 2 coal-fired power plant was approved by Ministry of Natural Resources and Environment ⁵
	November	Hai Phong Thermal Power JSC signed a contract, again with Marubeni Corporation and Dongfang Electric Corporation, to build Hai Phong II coal-fired power plant (Unit 3 & Unit 4)
2007	March	EVN signed loan agreement with JBIC (on behalf of Mizuho Corporate Bank acting as agent bank and Société Générale's Tokyo branch) to construct Hai Phong II coal-fired power plant
2009	September	Hai Phong 1 started operating for testing
	October	Unit 1 of Hai Phong 1 encountered trouble with super-heaters, water recirculating system
2010		A Chinese contractor asked Hai Phong thermal power JSC for an additional \$100 million since equipment cost is increased compared with the beginning estimations, but this was refused ⁶ .
	July	A gas explosion occurs in Hai Phong 1, leading to 2 deaths and 2 injuries ⁷
	August	A chemical explosion occurs in Hai Phong 1, leading to 2 deaths and 5 injuries ⁸
2011	July	Unit 1 of Hai Phong I was officially put into operation ⁹
	November	Hai Phong I was caught red-handed when disposing untreated waste water to Bach Dang river ¹⁰
	November	Unit 2 of Hai Phong I was put into operation ¹¹
2013	July	2 women died of burns when cleaning the funnel of the boiler in Unit 2 ¹²
	August	Unit 3 of Hai Phong II was put into operation ¹³

⁵ Ministry of Natural Resources and Environment (MONRE) established in 2012 is a government ministry being in charge of managing and implement issues such as land, water resources; mineral resources, geology; environment; hydrometeorology; climate change; surveying and mapping; management of the islands and the sea. See more at the website: <http://www.monre.gov.vn/wps/portal/english> [accessed on May 25th, 2015]

⁶ http://www.bbc.co.uk/vietnamese/vietnam/2010/06/100629_electricity_chinese_contractors.shtml

⁷ http://www.bbc.co.uk/vietnamese/vietnam/2010/07/100718_haiphong_plant_accident.shtml

⁸ nld.com.vn/thoi-su-trong-nuoc/no-lon-tai-nha-may-nhiet-dien-hai-phong--2-nguoi-chet--5-bi-thuong-20100803025554928.htm

⁹ Unit 1 should have been put into operation in 2008 as agreed in EPC contract

¹⁰ <http://www.tinmoi.vn/nha-may-nhiet-dien-tuon-trom-chat-thai-doc-hai-ra-song-bach-dang-01624830.html>

¹¹ Unit 2 should have been put into operation in 2009 as agreed in EPC contract

¹² <http://www.baoxaydung.com.vn/news/vn/phap-luat/tai-nan-chet-nguoi-tai-nha-may-nhiet-dien-hai-phong-co-dau-hieu-lam-trai-cac-quy-dinh-ve-an-toan-lao-dong.html>

¹³ Unit 3 should have been put into operation in 2010 as agreed in EPC contract

2014	February	Unit 4 of Hai Phong II was put into operation ¹⁴
	July	Hai Phong 2 was caught red-handed when disposing wastewater from ash pond to the local lagoon and irrigation canals

Main Concerns

1. Accidents

After 4 years of operation, Hai Phong coal-fired power plant (I&II) has caused some accidents leading to a number of death and injuries as mentioned above.

2. Air pollution and impacts on human health

Many local people continually experience nuisance of coal dust and smoke released from the plant, especially the households nearby the plant. As a result, the number of patients with respiratory diseases and cancers (i.e. lung cancer, throat cancer) is on rapid increase. More importantly, in Tam Hung commune, which is the commune closest to Hai Phong coal fired power plant, coal reserve piles are very near to the kindergarten (around 10-20 meters), secondary and high school. As mentioned by the leaders of Tam Hung' People's Committee, a great amount of coal dust is blown towards the kindergartens, causing nuisance and annoyance for the teachers and children there. Currently, there is a decision on relocating this kindergarten far away from the coal fired power plant, which has been approved by provincial People's Committee (PC) in 2014.

3. Water pollution

Water resources in the district have been devastated due to waste water that is disposed from the activities of coal fired power plants and even from workers' buildings without being treated. As a consequence, the plants have contributed to destroying the health of local people. As said by the locals, there is an increase in the number of people got diseases especially cancer in recent 3 years. From the local's opinions, the health costs tend to increase over the time. However, there are a lot of cement plants, chemical factories, shipyards in this area, so not all health costs are attributed to the operation of Hai Phong coal fired power plant.

Many local people complained about the water pollution with local authorities and required to test water quality. Although there were some institutions taking water samples for testing, there is not any further information as well as results of water test for the local people so far.

4. Noise pollution and vibration

Noise and vibration during operation affects the local people's lives, especially when the power plants start up the boilers, operating turbines, and when the plants are releasing compressed air.

5. Impacts on livelihood

People's livelihoods have been negatively affected since they lost productive farmland. It has been difficult for local people to obtain jobs in the power plants due to some reasons such as age, qualifications, and capabilities. In addition, according to some local people and

¹⁴ Unit 4 should have been put into operation in 2011 as agreed in EPC contract

local government officials, if the local people want to have a job in the coal-fired power plants, they have to pay an amount of money (around 100 -300 million VND or US\$ 4,584 – 13,752) depending on different job positions.