

Doug Norlen
JUNE 2017



INTRODUCTION

Vietnam intends to build an additional 40 gigawatts (GW) of coal power by 2030. This push for dirty power comes despite the country's vast wind and solar alternatives identified by the World Bank and others.¹ According to World Bank President Jim Kim. "If Vietnam goes forward with 40GW of coal, if the entire region implements the coal-based plans right now, I think we are finished...That would spell disaster for us and our planet."2 The actualization of this dangerous trajectory rests on many factors, including whether proposed projects can secure funding. This funding, in turn, depends on whether project sponsors can demonstrate compliance with bank environmental and social policies meant to safeguard against some of the risks these dubious projects pose. An important test case is PetroVietnam's Long Phu 1 project, the first of three coal plants proposed for the Long Phu Power Center.³ This memo documents non-compliance with a number of key policies applicable to most of the public and private banks considering financing the Long Phu 1 project.⁴

> "Long Phu 1 violates a number of key policies applicable to most of the ECAs and private banks involved"

PetroVietnam (PVN) seeks financing for Long Phu 1 from a number of foreign government export credit agencies (ECAs), including those of Italy (Sace), Germany (Euler Hermes), United States (US Ex-Im Bank), United Kingdom (UKEF), Czech Republic (Egap), Korea (Kexim), and Russia (Exiar). PVN also seeks Long Phu 1 financing from several private

multinational banks including HSBC, JP Morgan, MUFG, and Cathay Bank.⁵ Long Phu 1 violates a number of key policies applicable to most of the ECAs and private banks involved,⁶ including the:

- OECD Sector Understanding on Export Credits for Coal-Fired Electricity Generation Projects (OECD Coal Sector Understanding), November 27, 2015.⁷
- OECD Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence (OECD Common Approaches), as revised in 2016.8
- Equator Principles, as revised in 2013.9

Specifically, this memo demonstrates that Long Phu I fails and will fail to meet the requirements of the OECD coal sector understanding and other applicable standards because:

- The Long Phu 1 units cannot be reclassified from supercritical to ultra-supercritical.
- The environmental and social impact documents provided by PVN do not comprise a "fully completed technical feasibility study and environmental and social impact assessment" issued prior to 1 January 2017.
- The project sponsors will not be able to demonstrate that less-carbon intensive alternatives are not possible.
- The project is incompatible with the host country's national energy policy and climate mitigation policy and strategy, which is supported by a targeted policy to expand renewables and/or to enhance energy efficiency.

Pierre Audinet, World Bank Group, Exploring a Low-Carbon Development Path for Vietnam (2016), http://documents.worldbank.org/curated/en/773061467995893930/pdf/102363-PUB-VN-Low-cost-carbon-date-Jan-20-2016-9781464807190-Box-394380B-PUBLIC.pdf.

² David Brown, Vietnam Makes Big Push for Coal While Pledging to Curb Emissions, May 30, 2017, Mongabay, available at http://www.eco-business.com/news/vietnam-makes-a-big-push-for-coal-while-pledging-to-curb-emissions/.

³ Long Phu Power Center, Sourcewatch, http://www.sourcewatch.org/index.php/Long Phu Power Centre.

⁴ Id

⁵ Market Forces, Long Phu 1 research, available at https://www.marketforces.org.au/research/vietnam/long-phu-1/. See also Funders Appointed to Long Phu 1, PFI Issue 584, Sept. 7, 2016, Project Finance International. HSBC, JP Morgan, MUFG, and Cathay Bank are reported to be the mandated lead arrangers, with HSBC acting as Global Coordinator. Gazprombank is advising Russian EPC contractor OJSC Power Machines.

⁶ ECAs reportedly considering financing of Long Phu 1, with the exception of Russia's Exiar, are from OECD countries that have agreed to the OECD Coal Sector Understanding and the OECD Common Approaches. They are referred to in this memo as Participant ECAs.

⁷ Sector Understanding on Export Credits for Coal-Fired Electricity Generation Projects, Nov. 27, 2015, Participants to the Arrangement on Officially Supported Export Credits, negotiated at the Organization for Economic Cooperation and Development, http://www.oecd.org/officialdocuments/publicdisplaydocumentpd-f/?cote=TAD/PG(2015)9/FINAL&docLanguage=En.

⁸ OECD Common Approaches, updated Apr. 7, 2016, Trade and Agriculture Directorate, Organization for Economic Cooperation and Development, http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/ECG%282016%293&doclanguage=en.

⁹ See Equator Principles, http://equator-principles.com/.

- Vast non-compliance with applicable international environmental and social policies, including those defined as "high risk" and "legal non-compliance."
- Non-compliance with applicable private bank policies of the Equator Principles.

In light of these stark violations of key applicable funder policies, these public and private financiers cannot support Long Phu 1 without inflicting substantial damage to their institutional credibility and to international agreements and industry standards with which they are required to comply.

DISCUSSION

1 Violations of the OECD Coal Sector Understanding and OECD Common Approaches

The OECD Coal Sector Understanding contains a number of prohibitions, exceptions and procedural requirements. Here we focus on four key provisions:

- 1.1 A prohibition rendering supercritical coal plan units over 500 megawatt (MW) ineligible for financing.
- 1.2 An exemption for projects for which a proposal was issued prior to 1 January 2017 based on a "fully completed" environmental and social impact assessment.
- 1.3 An evaluation that demonstrates that a less carbon intensive alternative is not available.
- 1.4 Project compatibility with the host country's national energy policy and climate mitigation policy and strategy, which is supported by a targeted policy to expand renewables and/or to enhance energy efficiency.

1.1 Prohibition rendering supercritical coal plant units over 500 MW ineligible for financing

Friends of the Earth U.S. has retained Bruce C. Buckheit, former Director of EPA's Air Enforcement Division and an expert in coal plant environmental impacts, to conduct a detailed analysis of the available

documents to determine whether Long Phu 1 would be eligible for financing under the OECD Coal Sector Understanding (analysis attached).¹⁰

"The Supplementary Environmental Assessment's assertion that the expected carbon intensity of the project soars to the level of ultra-supercritical is unfounded"

As background, the proposed 1,200 MW Long Phu 1 project consists of two 600 MW units. The OECD Coal Sector Understanding states that supercritical coal plant units larger than 500 MW are categorically ineligible for financing, while ultra-supercritical units larger than 500 MW are eligible (assuming other policy provisions are met). Thus, a determination of whether the Long Phu 1 units are supercritical or ultra-supercritical is one key determining factor of whether most ECAs can finance the project.¹¹

Mr. Buckheit's analysis documents that the Supplementary Environmental Assessment's assertion that the expected carbon intensity of the project soars to the level of ultra-supercritical is unfounded. These assertions contradict the manufacturer's (GE) identification of the turbine technology as supercritical. The purported four percent efficiency gain is highly unrealistic; no credible technical data has been provided to support these assertions, and no evidence has been provided that such an increase has previously been achieved anywhere. The assertions of ultra-supercritical performance are based in part on supposedly forthcoming yet unidentified efficiency improvements. Even if theoretical improvement existed, they would be considered too late to be realistically implemented and likely only "considered" after financing decisions for the project have been made.

1.2 Exception for Fully Completed ESIA

The OECD Coal Sector Understanding has an exception to the application of its terms and conditions for those projects for which a request for proposals was issued prior to January 1, 2017, on the basis of a "fully completed technical feasibility study and environmental and social impact assessment." The

¹⁰ US Ex-Im Bank have not fulfilled requests by Friends of the Earth U.S. for the Fichtner Greenhouse Gas Emissions Study.

¹¹ See supra note 8.

OECD Coal Sector Understanding includes the "fully completed" clause to prevent project sponsors from rushing forward in haste with incomplete environmental analysis in an attempt to beat the letter and the intent of the January 1, 2017 deadline. Information disclosed by the U.S. Export-Import Bank to Friends of the Earth U.S. demonstrates that PVN has not yet provided prospective ECA financiers with a fully completed environmental and social impact assessment, much less one by the January 1, 2017 deadline. 12 The U.S. Ex-Im Bank disclosed a Preliminary Feasibility Study¹³ dated March 10, 2011, and a Supplemental Environmental Analysis (with Annexes)¹⁴ dated Dec. 9, 2016; both completed prior to the January 1, 2017 exemption deadline. However, as demonstrated below, neither of these documents, taken separately or together, comprise the required fully completed environmental and social assessment.

> "PVN has not yet provided prospective ECA financiers with a fully completed environmental and social impact assessment, much less one by the January 1, 2017 deadline"

The Supplementary Environmental Analysis states that one of its basic "objectives" is to "develop a Scoping report for conducting an Environmental. Social and Health Impact Assessment (ESHIA) and Environmental and Social Management Plan (ESMP), and regular reporting regime for implementation of the ESAP." In other words, one of main purposes of the Supplementary Environmental Analysis was to conduct a scoping exercise to determine what is necessary in order to eventually conduct a fully completed environmental and social impact assessment. Given that the publication date of the Supplementary Environmental Analysis is December 9, 2016, there is no way any eventual "fully completed environmental and social impact assessment" could have been conducted before the January 1, 2017 exemption deadline (essentially three weeks). Hence, PVN cannot credibly argue that conditions necessary to meet the exemption have been fulfilled.

Also, to conduct this scoping exercise the *Supplemental Environmental Analysis* reviews gaps between two local EIAs that were developed to Vietnamese standards and ESIAs that meets OECD Common Approaches standards. In contrast to Vietnamese standards, the OECD Common Approaches incorporate International Finance Corporation (IFC) Performance Standards (PS) and Environmental Health and Safety Guidelines (EHS). These require project environmental and social impact assessments to contain a set of minimal elements *inter alia:*

- Provision of baseline information.
- Examination of alternatives (in this case including renewable energy).
- Identification of cumulative and associated risks and impacts (in this case including the Long Phu Power Center's two additional coal power plants and coal port, as well as impact of coal extraction and transport from Australia or Indonesia).

Yet, the Supplemental Environmental Analysis states:

The two EIAs do not sufficiently cover the following key risks and impacts as required by IFC PSs and EHS guidelines:...

• Gaps of baseline and/or impact assessment (including cumulative impacts) as identified in Gaps 3.5,3.6 (air quality), 3.9 (wastewater), 3.14 (noise), 3.18 (dredging waste), 5.1 (socioeconomic conditions of displaced people), 6.1 and 6.3 (biodiversity).

Moreover, the *Supplemental Environmental Analysis* documents the two Vietnamese EIAs' vast noncompliance with the IFC PS and EHS, characterizing these breaches as "high risk," "medium risk," and "low risk," including those of "legal non-compliance." "High risk" and "legal non-compliance" breaches will result in significant cost and project delay, related to:

- Emergency preparedness and response
- Monitoring and review of environmental impacts
- Labor and working conditions
- Pollution prevention

¹² The U.S. Ex-Im Bank is required to make such project environmental and social impact assessment documents publicly available.

¹³ Long Phu 1 Thermal Power Plant Feasibility Study, PDF creation date Mar. 10, 2011, provided by U.S. Ex-Im Bank to Friends of the Earth US.

¹⁴ Environmental and Social Due Diligence - Long Phu 1 Thermal Power Plant, Dec. 9, 2016, provided by U.S. Ex-Im Bank to Friends of the Earth U.S.

- Waste management
- Community health, safety and security
- Involuntary resettlement
- Biodiversity conservation and sustainable management of living natural resources

The Supplemental Environmental Analysis recommends a vast number of plans and procedures to potentially remedy these compliance gaps, few if any of which could have been completed and analyzed for compliance between the December 9, 2016 publication date and the January 1, 2017 exemption deadline. As a result, the Supplemental Environmental Analysis is not a "fully complete" environmental and social assessment.

1.3 Proof that a less polluting alternative is unavailable

The OECD Coal Sector understanding contains a requirement that "an evaluation of less carbonintensive energy alternatives has been carried out and such alternatives are demonstrated as not viable." Far from finding alternatives not viable, a World Bank options analysis of the energy sector explicitly *recommends* the displacement of new coal-fired generation with alternatives such as wind and solar. ¹⁵

1.4 Compatibility with the host country's national energy and climate policies

The OECD Coal Sector Understanding requires that Participant ECAs considering financing for eligible projects must provide other Participant ECAs with a "demonstration that the project is compatible with the host country's national energy policy and climate mitigation policy and strategy, which is supported by a targeted policy to expand renewables and/or to enhance energy efficiency." It would be hard for PVN to demonstrate this in the face of World Bank President Jim Kim's concerns about the probable "disaster" that will occur if Vietnam's proposed coal plant buildout proceeds. Moreover, Long Phu I and the plans for two other coal projects are incompatible with Vietnam's national climate mitigation and energy policies. Vietnam's national climate and energy policy,

known as the Green Grown Strategy, established the pathway for Vietnam to reduce its emissions by 845 million tons of CO2 emission by 2030 by increasing the use of renewable energy and improving energy efficiency.¹⁶

2 Equator Principles Violations

The Supplemental Environmental Analysis also reviews Vietnamese EIAs and associated activities for compliance with the Equator Principles, 16 which 90 Equator Principles Financial Institutions have adopted. including HSBC, JP Morgan, MUFG, and Cathay Bank, which are private banks considering financing for Long Phu 1.17 Similar to the violations of OECD policies, the Supplemental Environmental Analysis found vast gaps in compliance with the Equator Principles. The Supplemental Environmental Analysis presents tables summarizing the future actions that may result in eventual compliance with the Equator Principles applicable standards. The timeframe for potential completion of most of these actions is in 2017 or sometime prior to project commissioning, long after the January 1, 2017 exemption deadline for a "fully completed" environmental and social impact assessment.

CONCLUSION

The Long Phu 1 coal plant in Vietnam violates environmental and social policies with which most ECAs and private banks considering the project must comply. This includes, in particular, a precedentsetting OECD agreement to restrict ECA financing for coal plants -- one of the most important public finance institution climate change policy advancements. In light of these violations, financing of Long Phu 1 will undermine international credibility of the ECAs involved, potentially encouraging other ECAs to violate these policies as well, undermining this precedent-setting agreement. In light of Equator Principles violations, financing will undermine international credibility of private banks involved and undercut the progress of peer Equator Principles Financial Institutions worldwide.

¹⁵ Pierre Audinet, World Bank Group, Exploring a Low-Carbon Development Path for Vietnam (2016), http://documents.worldbank.org/curated/en/773061467995893930/pdf/102363-PUB-VN-Low-cost-carbon-date-Jan-20-2016-9781464807190-Box-394380B-PUBLIC.pdf; Jan. 18, 2017 letter to U.S. Ex-Im Bank President Fred Hochberg from eighteen civil society organizations.

¹⁶ See supra note 9.

¹⁷ See supra note 5.

