



Project Light: Phu Tho Thermal Power Plan

600 MW Coal Fired Power Plant

Strictly Private and Confidential



Contact:

Johnathan Thorn
ceo@elgan-investments.com
www.elgan-investments.com
+1 (408) 721-5198

Investment Opportunity

- The investment opportunity is to secure a significant majority equity position in a 600 MW advanced coal fired power plant development in the rapidly growing Vietnamese energy market.
- The indicative capital structure comprising of 25-30% equity and 70-75% debt finance, results in a total equity requirement of approximately US\$ 300 million to US\$ 350 million.

Investment Overview

- This document provides potential investors with some initial high level insights into the 600 MW coal fired power plant project development (“Project Light”).
- The Company commenced development of the project in 2007. It has now reached a pivotal stage, having been granted a number of critical approvals, and is now seeking a strategic equity partner with deep power development sector experience.
- The power project is currently envisaged to be completed on a Build, Own and Operate (“BOO”) basis.
- The local project developer offers the investment opportunity in equity stake from 70% to the strategic investor.
- The expected start date of construction is 1Q 2013 and the commissioning of Project Light will be on a staged basis, with the first power generation by 3Q 2016.
- Power Engineering Consulting Joint Stock Company 1 (“PECC 1”), the local feasibility consultant used in many of the Vietnam Electricity Group (“EVN”) projects, completed a pre-feasibility study of Project Light in 2008. This study was submitted by the project developer to the Ministry of Industry and Trade (“MOIT”) and accepted as part of the approval process.
- A detailed feasibility study is currently being completed by PECC 1 and will be used for submission to obtain a power generation license from the MOIT.

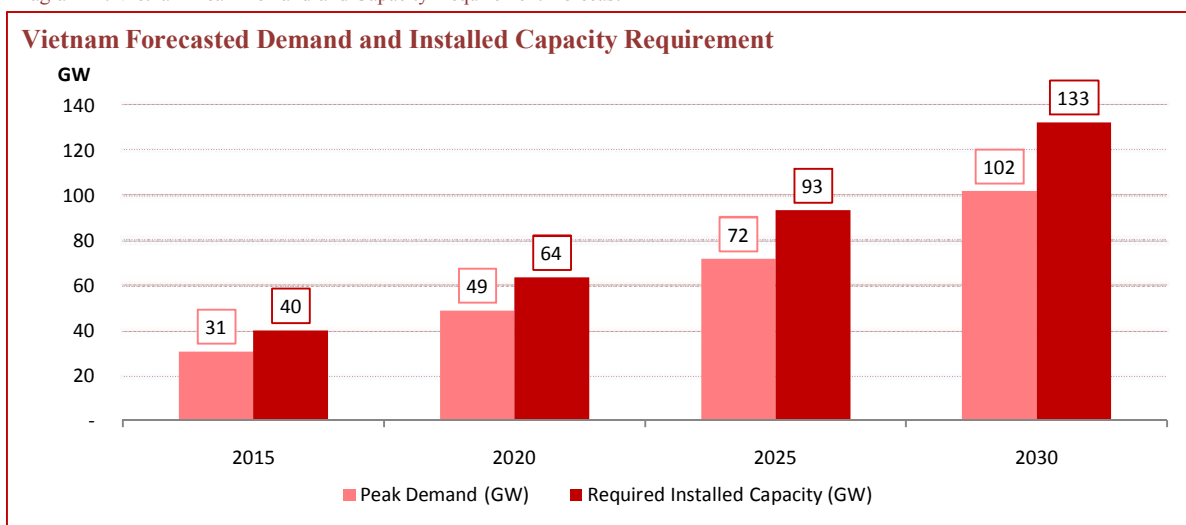
Key Investment Highlights

- **Overview of the Power Sector in Vietnam** – It is forecasted that average power demand growth will be approximately 9% to 10% per annum between 2011 to 2030. Over a 100 GW of installed capacity will need to be added during this period in order to meet Vietnam’s power demand requirements. The majority of this capacity increase is expected to come from coal fired generation plants.
- **Vietnam’s Power Development Master Plan VII** – Project Light has been selected for inclusion in the strategic development of the North West Region in Master Plan VII (“PDP 7”) which sets out the planned development of the electricity sector between 2011 and 2030.
- **Investment Cost** – The estimated total investment cost for the power plant is approximately US\$ 950 million to US\$ 1.2 billion based on Circulating Fluidized Bed (“CFB”) technology.
- **Management Team** – Internationally experienced management team with extensive understanding of the local Vietnamese market and proven ability to negotiate timely advancement of the project with the various local governmental agencies.

- **Fuel Procurement Strategy** – A pre-feasibility report on the fuel strategy for domestic coal supply has concluded that it is economical to use the river network to transport coal to the site with an alternate supply route being rail transport. Formal notice has been issued by the Vietnamese Government instructing state-owned coal producer, Vietnam National Coal and Mineral Industries Group (“Vinacomin”), to agree commercial terms to supply coal to Project Light. In accordance with this instruction, Vinacomin has agreed to deliver to the site the correct specification and the required quantity of coal for the 600 MW power plant. The coal supply agreement negotiation has been completed and outstanding for review of the final drafted agreement for signature.
- **Project Light Location** – A site with an area of 100 ha located in Phu Ninh, Phu Tho province, about 30 km away from the City centre, has been secured for the project. River access for coal supply is only 0.3 km from the Project Light site.
- **Load Factor & Generation Output** – The expected load factor for Project Light is approximately 70% per annum resulting in a generation output level of c.3,600 GWh.
- **Connectivity to Transmission Grid** – Connection to the national grid is via a 20 km high voltage (HV) line to supply power onto the 220 kV electricity transmission network.
- **Advanced Power Technology** – The proximity of Project Light to a historic site in Vietnam, with particular environmental sensitivity, has guided the developer’s technology choice. The intended solution is currently to use CFB technology, which is an environmentally advanced form of coal fired technology. It offers reduced sulfur oxide (SO_x) and nitrogen oxide (NO_x) emissions compared to conventional coal power station technology.

Vietnam Power Sector Development

Diagram 1: Vietnam Peak Demand and Capacity Requirement Forecast



Source: Association of the Electricity Supply Industry of East Asia and the Western Pacific, Goldbook 2011

- The installed capacity in Vietnam as of 2009 stood at c.18 GW, with hydro-powered plants and gas-fired plants accounting for c.37% of installed capacity.
- During the period 2006 to 2009, approximately 1.5 GW of new power generation plants per annum was put into operation. The required capacity to be added over the 2011 to 2015 period is approximately 3.5 GW per annum, to be increased to approximately 5 GW per annum over the 2016 to 2020 period, in order to meet Vietnam’s power demand requirements.

Phu Tho Thermal Power Plant – Project Highlights

<i>Master Development Plan</i>	Project Light is in Master Plan VI and VII (PDP No. 6 and No.7) for the strategic development of the North West Region of Vietnam
<i>Installed Capacity</i>	2 x 300MW
<i>Load Factor Generation Output (estimated)</i>	c. 70% c. 3,600 GWh
<i>Location</i>	Phu Tho Province (River access for coal supply is along the Project site)
<i>Land area</i>	Approximately 100 hectares (including ash disposal site) Land clearance to be started in Q3 2012
<i>Advanced Power Technology</i>	Circulating Fluidized Bed (CFB)
<i>Coal supply / PPA</i>	Guaranteed by Vinacomin to deliver to the site the correct specification and the required quantity of coal. In discussion with EVN on a long term off-take arrangement
<i>Connection to Grid</i>	Connection to national grid via 20km high voltage line to supply power onto 220 kV electricity transmission network
<i>Estimated Project cost</i>	USD 950 million to USD 1.2 billion
<i>Expected Commissioning</i>	2015
<i>Proposed Capital Structure</i>	20% to 30% Equity, 80% to 70% Debt
<i>Preliminary Technical Feasibility Study - Conducted by PECC 1</i>	Completed
<i>Technical Feasibility Study - Conducted by PECC 1</i>	To be completed in 2 months
<i>Investment Certification</i>	Obtained
<i>Approval and Implementation of the Plan for Construction of the Phu Tho Thermal Power Plant – Phu Tho province</i>	Obtained