



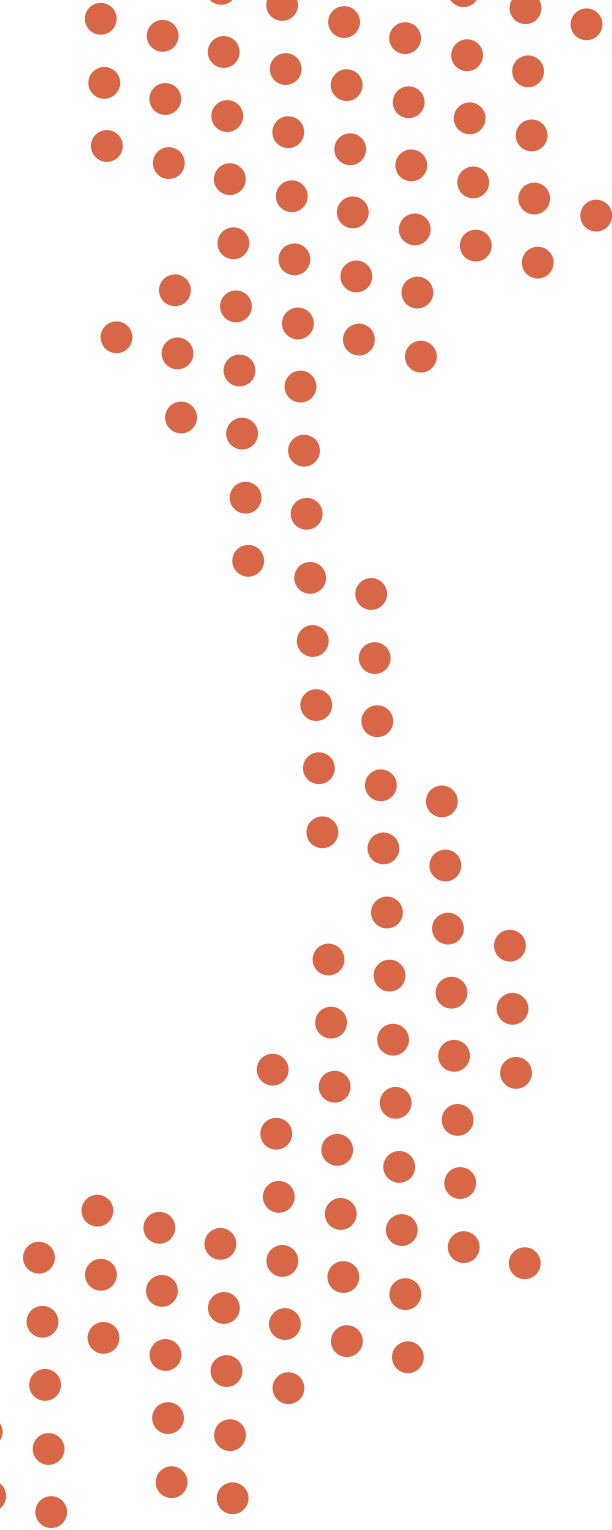
GOING GLOBAL

Series of China's "Going Global"

Global Environmental Institute

Overseas Investment, Trade and the Environment Program Team

Vietnamese FDI Policy and Management System: Analysis of Chinese Investments and Contracting in Vietnam



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Authors: Chang You, Rong Zhu, William J. Schulte, Shuting Gao, Qijia Yang
Edited by William J. Schulte and Kendall Bitonte
Proofread by Kendall Bitonte and Joyce Tang

About GEI

The Global Environmental Institute (GEI) is a leading Chinese non-governmental organization (NGO) established in Beijing in 2004. GEI's mission is to design and implement market-based models to solve environmental problems and realize sustainable development in China and overseas. GEI provides policy suggestions to governments and promotes best environmental practices on investment, trade, energy and climate change, biodiversity protection and capacity building. Since its establishment, GEI has been engaging in research and demonstration projects in more than 20 provinces, cities, and municipalities in China as well as in Southeast Asian and African countries.

Through its Investment, Trade, and Environment program, GEI is dedicated to encouraging and supporting the Chinese government to formulate foreign investment and trade-related environmental policies that regulate and guide the environmental conduct of enterprises investing overseas; build up the environmental governance capacity of host countries, including the development of appropriate environmental policies that regulate environmental conduct of investors; and improve the capability of Chinese enterprises to comply with environmental policies and regulations, better manage investment risks and fulfill their environmental and social responsibilities.

GEI has successively pushed forward and participated in the development of *A Guide on Sustainable Overseas Silviculture by Chinese Enterprises* and *A Guide on Sustainable Overseas Forest Management and Utilization by Chinese Enterprises* issued by the State Forestry Administration and the Ministry of Commerce (MOC) in 2007 and 2009 respectively, as well as the *Guidelines for Environmental Protection in Foreign Investment and Cooperation* released by MOC and the Ministry of Environmental Protection in 2013. GEI has also carried out demonstration projects, conducted research and led local capacity building activities on sustainable investment in Laos, Myanmar, Mozambique, Congo (DRC) and other Southeast Asian and African countries.

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Preface

Since the Chinese government's pronouncement of a "Going Global" strategy in 2000, Chinese Outward Foreign Direct Investment (OFDI) and international business cooperation has soared. In the past fifteen years, domestic and international bodies alike have acknowledged Chinese enterprises' contributions abroad as they have fortified host-country infrastructure, stimulated local economic growth and increased employment opportunities. Chinese enterprises have also achieved economic influence as Chinese OFDI has ranked the third in the world for the past three consecutive years. As Chinese firms meet new opportunities and continue to achieve success, however, the expectations for these firms – particularly the standards of corporate responsibility - have risen. Meeting these expectations requires that the Chinese firms improve their sustainable development overseas, establish more harmonious labor relations, and enhance their management of local societal and environmental concerns. Moreover, by addressing these tasks, the 'going-out' process may not only be a new lucrative business opportunity for Chinese firms, but may also be a means to strengthen their corporate governance. All in all, through enhanced policy and governance, Chinese enterprises abroad can help balance the economic, social and environmental development of host countries while also achieving their own market success.

In addition to the international pressure, the Chinese government's 13th Five-Year Plan also emphasizes the mutual benefits and joint development strategies of Chinese companies 'going-out' and gives stronger requirements for globalization efforts. In fact, the government showed initiative and support for national economic and social development by issuing Vision and Actions on Jointly Building the Silk Road Economic Belt and 21st-Century Maritime Silk Road on March 28, 2015. In this way, there is a great opportunity for China's outward investment and economic cooperation to begin new strategic development.

While the initiative to enhance Chinese investment abroad is positive, the process to transform policy into an operational strategy requires research and on-the-ground analysis. In 2014, Global Environmental Institute (GEI)'s Investment, Trade and the Environment team along with the Chinese Academy for Environmental Planning (CAEP), supported by The Wildlife Conservation Society (WCS) South East Asia Office and Vermont Law School's US-China Partnership for Environmental Law (VLS) launched a series of scoping studies on the Chinese Investment in Myanmar, Laos, Cambodia and Vietnam.

Recognizing the need for research on real cases of Chinese investment abroad, GEI, WCS, VLS, and CAEP cooperated extensively on the studies to investigate the decision-making processes, challenges, and successes of Chinese firms in these four Southeast Asia countries. GEI designed the project to be useful for policy makers as the project provides analysis of the investment management system of each country alongside discussion of its environmental policy. Each country section also details case studies of Chinese firms' operation in sectors with potentially significant environmental and social impacts, such as hydropower, mining, and infrastructure. The main findings of these studies are published as GEI Publication Series of China's "Going Global".

The following is the *Vietnamese FDI Policy and Management System: Analysis on Chinese Investments and Contracting in Vietnam*, which is the Vietnamese study within the series. This report consists of a thorough country summary, analysis of investment and environmental policies, as well three case studies, which highlight the problems and challenges that Chinese firms face when investing and contracting in Vietnam. The three cases are:

1. the contracting of Vinh Tan Phase II coal power plant construction;
2. construction of the Tan Rai bauxite mining and aluminum refinery project;
3. the Long Giang Industrial Park.

The case studies are supported by extensive first-hand work by the GEI research team and our preparation included conducting interviews with management both over the phone and face-to-face and arranging site visits with local stakeholders. It is duly noted that due to limitations of time, stakeholder access and other complications, this report analyzes the case studies from the environmental and social perspective.

GEI hopes that the project's subsequent 'Going Global' reports can be a reference for policymakers and usher in a new era of more responsible Chinese overseas investment.

Global Environmental Institute
July 2016

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Executive Summary

[1] Data Source: UNCTAD STAT.

[2] Vietnam Ministry of Planning and Investment, “Brief on Foreign Direct Investment in 12 months of 2014,” January 16, 2015. Available at <http://www.mpi.gov.vn/en/Pages/tinbai.aspx?idTin=26445&idcm=289>.

[3] Ministry of Commerce of the People's Public of China, National Bureau of Statistics of China, State Administration of Foreign Exchange, *2013 Statistical Bulletin of China's Outward Foreign Direct Investment*.

[4] Vietnam Ministry of Planning and Investment, “Brief on Foreign Direct Investment in 12 months of 2014,” January 16, 2015. Available at <http://www.mpi.gov.vn/en/Pages/tinbai.aspx?idTin=26445&idcm=289>.

[5] Data Source: authors' visit to Economic and Commercial Counselor's Office of the Embassy of China, May 2015, Hanoi.

Vietnam is located southeast of the Indochina peninsula and borders China to the north, Laos to the west, and adjacent to both Cambodia and the South China Sea. The modestly sized country has a land surface area of approximately 330,000 square kilometers and is home to 93,420,000 people. Vietnam introduced market-oriented economic reforms in 1986, and as a result the past 30 years have been a time of great development. In fact, since 1986, annual income per capita rose from USD 100 to USD 2,000, an amount which is higher than many underdeveloped and developing countries. Furthermore, in 2014, Vietnam's gross domestic product (GDP) ranked 8th out of the 11 Southeast Asia countries^[1]. Much of Vietnam's economic growth can be attributed to lucrative foreign investment that was facilitated by economic policies including low taxes and low labor costs. Vietnam's foreign investment is primarily concentrated in processing and manufacturing as well as real estate, which together account for 75% of all of Vietnam's foreign investment.

Vietnam's growth process was not without trouble. From 2009 to 2014, Vietnam's foreign investment decreased from USD 2.56 billion to USD 2.02 billion, causing a drop in the country's foreign investment ratio from 26.3% to 10.8%^[2]. To address this problem and to further encourage and facilitate investment, the Vietnam government took a critical step: in 2015, the government amended its previous laws and promulgated its new *Law on Enterprise and Law on Investment*. Together these laws expanded industry access to foreign investment, simplified investment approval proceedings, and improved operational autonomy.

China has been increasing its investment in Vietnam in recent years. From 2009 to 2013, China increased investment from USD 1.1 billion to USD 4.8 billion^[3]. By the end of 2014, China had invested in 1,089 projects worth about USD 7.95 billion^[4]. Despite this significant increase, China's investment in 2014 comprised only 2.1% of Vietnam's total foreign investment and thereby illustrates a great potential for future activities. Of these projects, China's investment areas in Vietnam are largely aligned with Vietnam's economic trends: 70% in manufacturing, 10% in real estate, and the remaining 20% divided between logistics, agriculture, and other industries^[5].

The methods of Chinese investment in Vietnam, for instance as direct investment or via partnership, are largely dependent on the industry in which the investment is being made. In fact, for the infrastructure and energy resource industries, China engages in considerably less direct investment and instead contracts projects to achieve economic cooperation. For example, China's investment in the power industry in 2014 was mostly concentrated in thermal energy construction and less so with hydropower. As for mining, Chinese enterprises only enter into this sector through a contract with Vietnamese companies. Middle- to large-scale projects, which usually concern oil and

[6] Bui QB, Le TH, Tran VH, et al, *The Extractive Industries Transparency Initiative and the Implementation Perspective of Vietnam*. May 2011, pgs. 20-21. Available at <https://eiti.org/files/Vietnam-scoping.pdf>.

gas refining as well as coal, iron, gold and aluminum metal mining, are mostly invested by Vietnamese state-owned enterprises^[6].

Because the hydropower, mining and refining industries have not received much direct Chinese investment, there are few environmental disputes and social conflicts connected with Chinese investors in these industries. In recent years, however, Chinese contractors in these industries have encountered great social risks and stirred environmental controversy within Vietnam's population. Two examples of the disruptive projects are the Vinh Tan coal power plant phase II and the Tan Rai bauxite mining and processing project, which were both subject to environmental protests on environmental issues such as causing air pollution. These two projects demonstrate that as Vietnam has experienced economic development, certain social and environmental issues have also entered Vietnam's public consciousness. In fact, analysis of these two events has shown that even if a project has the support of the Vietnam government, social or environmental awareness can raise a significant amount of questions, opposition, and resistance. Importantly, even though the Chinese companies do not bear primary responsibility as the project owner, in these situations, the firm will face criticism from workers, lose trust in its technology, and likely suffer a loss in revenue and reputation.

As China's "One Belt, One Road" initiative and other policies further open up investment opportunities in Vietnam, it is expected that an increasing number of Chinese enterprises will engage in partnerships and investment in Vietnam's infrastructure construction, energy resources development and other industries. Additionally, it is also expected that given the increasing public awareness and involvement in these issues, Vietnam will strengthen its environmental policies to develop environmentally-friendly investment opportunities.

We recommend that when Chinese companies accelerate their economic cooperation in Vietnam, they should obey strict compliance with the laws, and actively adhere to high environmental standards. By conducting business in accordance with the laws and environmental standards, the company will anticipate the stakeholder's demands and enable an open response to any area of questioning. All in all, by following regulations and focusing on the environmental sustainability of their projects, Chinese corporations in Vietnam will distinguish themselves from other foreign investments and build a win-win investment scenario for the environment, local communities, and investing parties.





An Introduction to Vietnam

1.1 Country Profile

1.2 China's Investment in Vietnam

Authors of this section: Chang YOU & Rong ZHU, the Global Environmental Institute

1.1 Country Profile

Vietnam is located in the southeast corner of Indo-China peninsula. The country itself is in the shape of a long and narrow “S” with a land area of 330,000 square kilometers, making it the 65th largest country in the world. Vietnam shares borders with China to the north, and Laos and Cambodia to the west, with a long coastline over 3,260 kilometers along the South China Sea^[1].

[1] Nations Online, “Vietnam Country Profile.” Available at <http://www.nationsonline.org/one-world/map/vietnam-administrative-map.html>.

Vietnam has very diversified geography, with mountain ranges running through both the northern and southern parts of the country and several plateau regions. In fact, Vietnam contains a plateau and the flat Red River Delta in the north, a plateau in the northwest, mountainous areas in its central region and a fertile delta at the southern tip of the Mekong River. The topography of Vietnam has often been compared to a bamboo pole (narrow and mountainous regions in the central region) carrying two rice baskets (the two Deltas in north and south). Vietnam can be divided into eight geographic regions comprising a total of 58 provinces and 5 municipalities which are of the same administrative levels. (Figure 1-1).

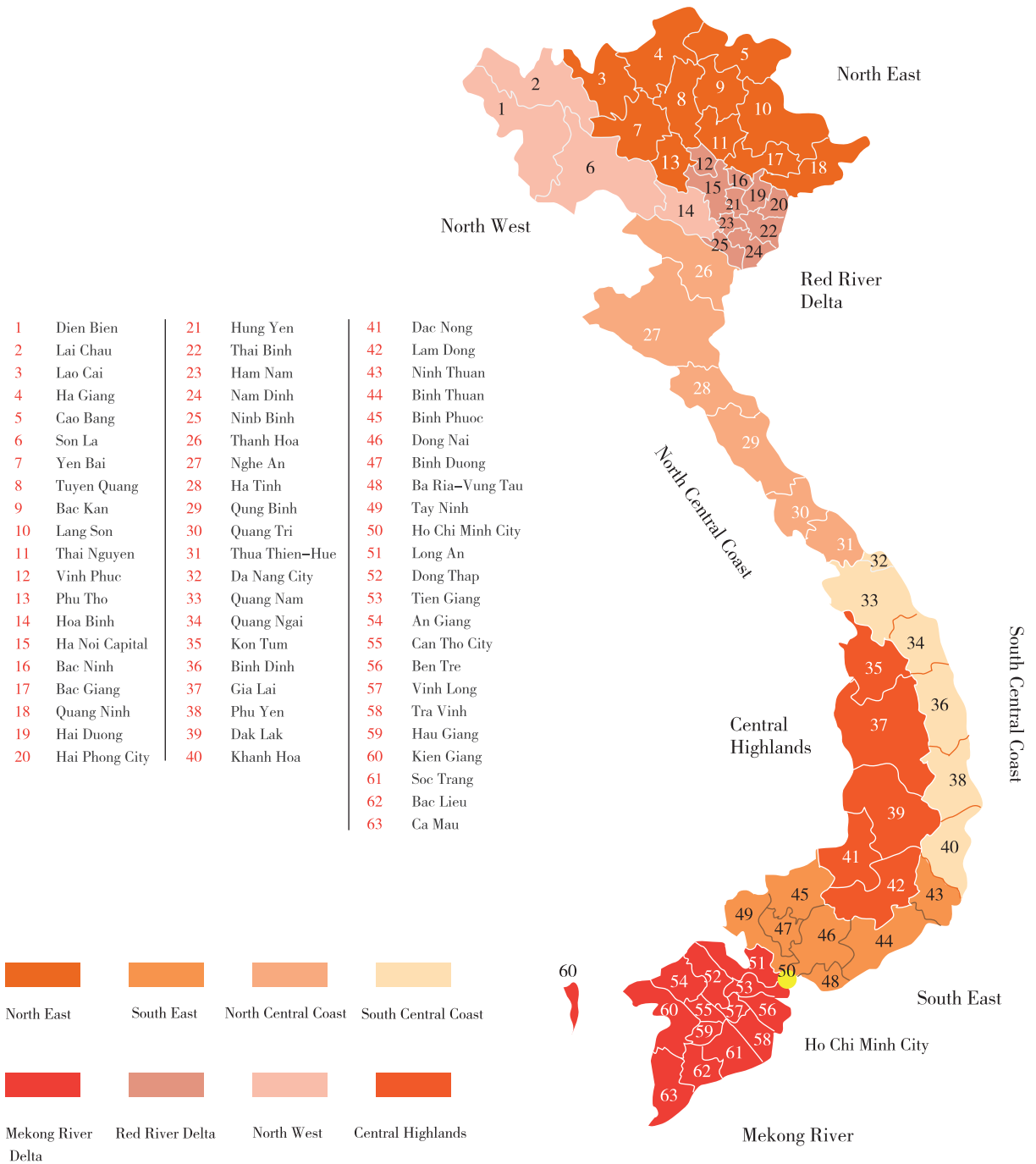
[2] United States Central Intelligence Agency, “The World Fact Book: Vietnam.” Available at <https://www.cia.gov/library/publications/the-world-factbook/geos/vn.html>.

According to July 2014 CIA Factbook estimates, Vietnam’s population is approximately 93.42 million people, which is 13th highest in the world. Moreover, Vietnam’s large youth demographic - the country’s median age is 29 years old - suggests the country has huge market potential. More than two-thirds of its population live in the fertile flat Delta regions in the north and south of the country^[2]. The population is densely concentrated in Ho Chi Minh City, the largest city in the south with a population of 7.1 million, and Hanoi, in the north, which has a population of 3.47 million. All in all, Vietnam has a total of 54 ethnic groups and the majority ethnic group is the Jing (Vietnamese), which accounts for 86% of the country’s population^[3].

[3] Central Population and Housing Census Steering Committee, *The 2009 Vietnam Population and Housing Census*, June, 2010. Available at http://unstats.un.org/unsd/demographic/sources/census/2010_phc/Viet%20Nam/Vietnam-Findings.pdf

Due to its vast differences in latitude from the north to the south, Vietnam’s climate tends to vary considerably from place to place. However, Vietnam generally has a tropical monsoon climate, with abundant sunshine, high temperatures, and humidity. Most regions of the country have an average annual temperature of 22 degrees Celsius. In fact, temperatures vary less in the southern plains, which experience only a wet and dry season over the course of the year. Comparatively, the northern region has distinct seasons and both the north and central regions suffer extensively during the hurricane season, which lasts from July to September each year.

Figure 1-1 Map of Vietnam



[4] The REDD Desk, "REDD in Vietnam." Available at <http://theredddesk.org/countries/vietnam>.

[5] The World Bank, "Arable Land." Available at <http://data.worldbank.org/indicator/AG.LND.ARBL.ZS>.

[6] United Nations Industrial Development Organization and International Center on Small Hydropower, *World Small Hydropower Development Report: Vietnam*, 2013. Available at http://www.smallhydroworld.org/fileadmin/user_upload/pdf/Asia_South_Eastern/WSHPDR_2013_Viet_NAM.pdf.

[7] The World Bank, "Vietnam Overview." Available at <http://www.worldbank.org/en/country/vietnam/overview>.

[8] EU-Vietnam Business Network, *Vietnam Economy Research Report, 2014*. Available at <http://evbn.org/publications/market-studies/>. (subscription).

[9] The World Bank, "GDP Ranking," April 14, 2015. Available at <http://data.worldbank.org/data-catalog/GDP-ranking-table>.

[10] Vietnam Ministry of Planning and Investment, "Brief on Foreign Direct Investment in 12 months of 2014," Jan 16, 2015. Available at <http://www.mpi.gov.vn/en/Pages/tinbai.aspx?idTin=26445&idcm=289>.

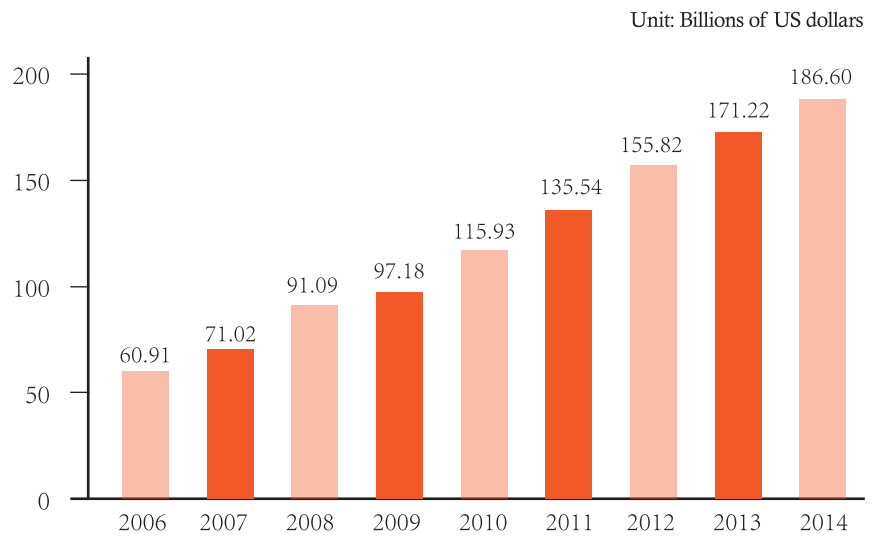
[11] A. Nayyer Shamsi, "Chinese Direct Investment in Vietnam in Past 10 Years," News Dawn, March 22, 2010. Available at <http://newsdawn.blogspot.co.uk/2010/03/chinese-direct-investment-in-vietnam-in.html>.

According to the REDD desk, as of 2011, Vietnam's forest covered approximately 39.7% of the country's land area^[4]. The World Bank reported in 2013 that approximately 20.7% of Vietnam is arable land^[5]. The forests are mainly located in the Central Highlands and the north, with timber resources of over 600 million cubic meters and numerous tree and animal species. Vietnam has 2,360 rivers and creeks stretching over 10 kilometers, which make the country rich in hydropower resources that provides one-third of its electricity supply^[6]. Vietnam is rich in oil and gas - its oil reserves rank 3rd in Southeast Asia – and has many mineral resources, including world-class bauxite (7% of world reserves), tungsten, rare metals, titanium and iron ore. Other mineral resources include copper, gold, nickel, zinc, tin, lead, chromium, iron and magnesium. Finally, Vietnam's 3,260 km coastline hosts large seafood and tourism industries.

Vietnam presents a case of successful economic development. In 1986, Vietnam introduced economic and political reforms (Doi Moi) that transitioned the country from a planned economy to a market-oriented economy. In the approximately 30 years that followed, Vietnam's per capita income increased from below USD 100 to over USD 2,000 in 2014^[7]. Another important moment was in 2007 when Vietnam formally joined the World Trade Organization (WTO), causing its economy to develop even more rapidly. In 2014, the country's GDP had increased to USD 186.6 billion dollars^[8], ranking 6th in the Southeast Asia and 58th the World^[9]. Vietnam's GDP in the past 10 years averaged an annual growth of 15%, slowing down in recent years to 9% in 2014.

As one of Asia's most open economies, Vietnam attracts overseas investors with its low labor costs and low tax rates along with other concession policies. For these reasons, it is an emerging destination for global enterprises establishing offshore manufacturing plants and other ventures. However, from 2009 to 2014, the annual flow of foreign investment to Vietnam decreased slightly from USD 25.6 billion to USD 20.2 billion^[10]. Among all industries, processing and manufacturing attracted the most foreign investment: in 2014, processing and manufacturing alone accounted for USD 14.5 billion, which is 71.6% of the total annual foreign investment. After processing and manufacturing, real estate ranks second and accounts for USD 2.54 billion and a share of 12.6% in 2014. Construction ranks third, attracting USD 1.05 billion foreign investment, with a share of 5.2%^[11]. In addition, other industries that receive overseas investment include hotels and catering services, health and social assistance, wholesale and retail, transportation, warehousing, agriculture, forestry, fisheries, and mining.

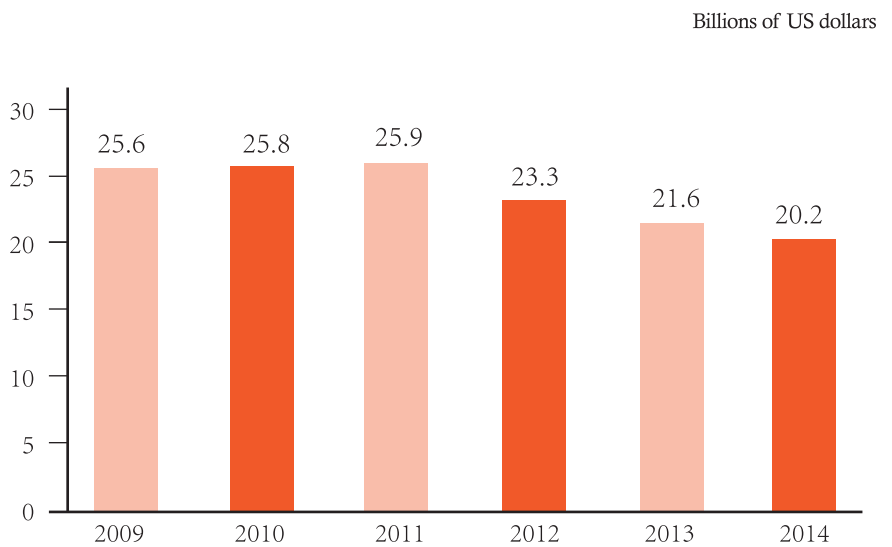
Figure 1-2 Vietnam GDP



Source: UNCTAD STAT

[12] The Socialist Republic of Vietnam Online Newspaper of the Government, "FDI Densities in Total Investment and GDP in 2002-2012," March 28, 2013. Available at <http://news.chinhphu.vn/Home/FDI-densities-in-total-social-investment-and-GDP-in-20022012/20133/17458.vgp>.

Figure 1-3 Inflow of Foreign Direct Investment, 2009-2014^{[12][13]}



[13] Vietnam Ministry of Planning and Investment, "Brief on Foreign Direct Investment in 12 months of 2014," January 16, 2015. Available at <http://www.mpi.gov.vn/en/Pages/tinbai.aspx?idTin=26445&idcm=289>.

1.2 China's Investment in Vietnam

[14] UNCTAD Investment Policy Hub, "Vietnam." Available at <http://investmentpolicyhub.unctad.org/IIA/CountryBits/229>.

[15] Data Source: author's visit to Economic and Commercial Counsellor's Office in the Embassy of China in Vietnam, May 2015.

[16] "Vietnam Ministry of Planning and Investment, "Brief on Foreign Direct Investment in 12 months of 2014," Jan 16, 2015. Available at: <http://www.mpi.gov.vn/en/Pages/tinbai.aspx?idTin=26445&idcm=289>.

[17] *Ibid.*

[18] Data Source: author's visit to Economic and Commercial Counsellor's Office in the Embassy of China in Vietnam, May 2015.

[19] *Ibid.*

While China supported North Vietnam during the Vietnam War, a border dispute between the two countries erupted in 1979 and lasted until 1990. After the *Doi Moi* political and economic reforms in 1986, Vietnam began opening its doors to the world, including the 1991 normalization of diplomatic relations with China and re-establishment of connections with China. China subsequently enhanced bilateral diplomatic and economic cooperation with Vietnam and in 1992, China and Vietnam signed a bilateral investment agreement, clarifying mutual interests and reciprocal trade^[14]. As the political situation in Vietnam became more stable and Sino-Vietnamese relations normalized, direct investment from China grew rapidly. Investment grew from one project in 1991 to 76 projects in 1999 totalling USD 120 million worth of investment, and finally, by the end of 2014 there were 1,089 Chinese companies registered in Vietnam, with investment amounts totalling about USD 7.95 billion^{[15][16]}.

Although Chinese investment in Vietnam has experienced rapid growth, investment of Chinese companies in Vietnam is still in the initial stage. According to the Vietnam Investment Review published on March 16, 2014, as of February 20, 2014, Vietnam attracted a total of 16,053 foreign direct investment (FDI) projects with a total registered capital of USD 234.7 billion^[17]. Japan, Singapore, and South Korea ranked the top three. China ranked 9th with a total of 998 projects and total registered capital of USD 7.29 billion, taking only 3% of foreign investment in the country^[18].

According to statistics collected by the Chinese embassy in Vietnam, over 90% of the 1100 registered Chinese companies are small to medium enterprises (SMEs). In terms of project scale, average funding for each project is slightly more than USD 7 million, far below than the average project size of about USD 14 million. Finally, in terms of industry, 70% of Chinese companies in Vietnam invest in processing and manufacturing sectors, such as machinery, electronics, agriculture, and light industry, while another 10% are in real estate, with the remaining firms in logistics, catering, and other service sectors^[19].

[20] Yos Santosombat, *The Impact of China's Rise on the Mekong Region 64* (2015).

[21] *Ibid.*

[22] Bui QB, Le TH, Tran VH, et al, *The Extractive Industries Transparency Initiative and the Implementation Perspective of Vietnam*, May 2011, pgs. 20-21. Available at <https://eiti.org/files/Vietnam-scoping.pdf>.

[23] Yos Santosombat, *The Impact of China's Rise on the Mekong Region 64* (2015).

It is important to note that in the infrastructure, power production and extractive industries in Vietnam, direct Chinese investment is relatively low when compared with other countries in the lower Mekong region. In fact, the involvement of Chinese enterprises in these industries is usually carried out via engineering procurement and construction (EPC) contracts, which are generally supported by concessional loans to the Vietnam government by China, rather than direct investments^[20]. It has been reported that these concessional loans often include conditions that require hiring Chinese companies and/or workers^[21].

All coal-fired power plant projects involving Chinese enterprises, including the Vinh Tan Phase II plant discussed below in Section 4, are done through EPC contracts. In the mining sector, most large- and medium-sized projects, including the Tan Rai Bauxite project discussed below in Section 5, are invested and owned by Vietnam state-owned enterprises (SOEs) and Chinese enterprises become involved through EPC contracts^[22]. Among the hydropower projects in collaboration with Chinese enterprises, only one small hydro project was invested by a Chinese company. By contrast, there are seven hydropower projects in Cambodia in operation or under construction that are direct investments of Chinese SOEs.

While reliable data on the accumulated value of EPC projects are hard to come by, at least one source suggested that Vietnam has the highest value of EPC projects among Southeast Asian nations whose value of Chinese EPC contracts in Vietnam may actually be greater than the value of direct investments by Chinese enterprises.^[23]

With China implementing the “One Belt One Road” initiative and Vietnam further opening its investment policies, it is expected that an increasing number of Chinese enterprises will expand their services overseas, and start economic collaborations in the infrastructure and energy resource extraction sectors in Vietnam.

2



Vietnam Investment Management System

2.1 Legal Framework

2.2 Government Departments on Investment Management

2.3 Permitted and Encouraged Investment

2.4 Investment Registration and Permit

Author: Chang YOU, the Global Environmental Institute

2.1 Legal Framework

Prior to 2006, Vietnam had different laws for local and foreign investors. In preparation for entry into WTO in 2007, Vietnam formally implemented the *Law on Enterprises* and *Law on Investment* in July 2006 in order to provide a uniform legal framework for domestic and foreign investors.

[1] *Law on Investment*, No. 59/2005/QH11, November 29, 2005. Available at <http://www.vietnamlaws.com/freelaws/Lw59na29Nov05CIL> [10Apr06]. pdf.

[2] Russin & Vecchi International Legal Counsellors, "Setting Up and Operating in Vietnam." Available at <http://www.amchamhanoi.com/wp-content/uploads/2014/02/Setting-Up-and-Operating.pdf>.

[3] *Law on Enterprises*, No.68/2014/QH13, November 26, 2014. Available at http://bross.vn/images/advertise/AEUEO012_68_2014_QH13_Enterprise%20Investment.pdf.

[4] *Law on Investment*, No. 67/2014/QH13, November 26, 2014. Available at http://moc.gov.vn/web/guest/legal-documents/-/legal/TB4r/en_US/18/250755/55213. (hereinafter 2014 *Law on Investment*).

The *Law on Investment* regulates all investment activity in Vietnam, including the process, incentives, and protection of investors' interests, as well as the management of Vietnam's outward foreign investment. In particular, Article 4 of the *Law on Investment* makes it clear that: "the government will provide equal treatment for domestic and foreign investors from various economic sectors^[1]." The *Law on Enterprises* regulates foreign and domestic business conducted in the country, oversees foreign-owned enterprises and local enterprises and offers a variety of business structures available to domestic and foreign investors^[2].

During the implementation of *Laws on Enterprises and Investment*, the Vietnam Government concurrently announced the following decrees and notices:

- *Decree 101/2006/ND-CP*, according to Corporate Law and Investment Law, provides detail guidance for foreign-invested companies to re-register or transform investment permit;
- *Decree 108/2006/ND-CP*, on the provisions of the Investment Law providing detailed descriptions and implementation guidance;
- *Decree 102/2010/ND-CP*, on the provisions of the Corporate Law providing detailed descriptions and implementation guidance;
- *Decree 43/2010/ND-CP*, providing detailed guidance for enterprise registration;
- *Notice 14/2010/TT-BKH*, providing detailed elaboration regarding application and process stated in Decree 43/2010/ND-CP.

After the two laws had been implemented for several years, many issues requiring attention began to emerge. For example, the process, procedures and application requirements for investors were overly complex and the support measures were insufficient. In response to these and other problems, Vietnam published a revised *Law on Enterprises*^[3] and *Law on Investment*^[4] in November 2014, which were formally implemented on July 01, 2015. These revised laws aimed to address the problems exposed over the ten-year duration of previous versions, improve Vietnam's investment environment, and incentivize individuals and enterprises to invest more heavily in Vietnam.

The most significant change to the new Law on Investment was the expansion of industries open to foreign investment. In fact, the previous law limited which industries were open to investment while the new law only listed which industries were prohibited to investors, thereby expanding the investment pool. All in all, the 2014 *Law on Investment* reduced the number of prohibited industries from 51 to 6. Additionally, the two new laws reduced business establishment cost and improved transparency. By September 2015, supportive decrees on the implementation of these two laws were still in development.

2.2 Government Departments on Investment Management

[5] Vietnam's Government structure is enclosed in the government structure diagram in the Appendix.

The Ministry of Planning and Investment (MPI) is responsible for the supervision of investment activity in Vietnam^[5]. MPI is responsible for drafting legislation and policies, providing guidance and advice to investors, and coordinating with other government agencies on investment-related issues. For investment projects that must be approved by the Prime Minister or the National Assembly, MPI is headquartered in Hanoi, has a representative office in Ho Chi Minh City and in other regions of the country.

At the local level, the Provincial People's Committee of Foreign Investments directly manage foreign investment activities within their respective provinces, and issue investment permits to all non-industry zone projects in their region. The Office of Planning and Investment (DPI) manages investment projects executed by the provincial and municipal people's committees and oversees the licensing process. DPI may carry out registration for investment activities, or evaluation. Registration is a simple licensing process for small-scale investment while evaluation is required for large-scale projects or restricted projects; the evaluation process is listed in more detail in section 2.4. MPI's evaluation and recommendation, as well as approval from the Prime Minister or the National Assembly, are needed for certain large or restricted projects.

If a foreign company is located in an area classified as an industrial zone, then it is under the management of that industrial zone's Management Committee. The Industrial Zone Management Committee is entitled to issue investment permits for projects within the industrial zone. The operation of foreign-funded enterprises in the industrial zone, in addition to complying with the general requirements of the government and MPI, must also comply with the import and export regulations, environmental regulations and labor rules, etc. of the industrial zone.

2.3 Discouraged and Encouraged Investment

The 2006 *Law on Investment* listed discouraged or banned industries as ‘prohibited industries,’ ‘restricted industries,’ and ‘foreign investment prohibited industries.’ The 2014 *Law on Investment* no longer explicitly restricts foreign investment in certain industries; rather, the “restricted foreign investment industries” in the 2006 version has basically changed to industries that require the permission of the Prime Minister to receive foreign investment.

Discouraged industries according to the 2014 *Law on Investment* are as follows:

- *Prohibited Industries* include sales of illegal drugs listed in Appendix 1; sales of chemical reagents and minerals listed in Appendix II; trafficking flora and fauna species stated in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, as well as species stated in Group I of Appendix 3 to the Law on Investment; participation in prostitution activities; human trafficking activities, and sales of human tissue and organ; businesses pertaining to human cloning^[6].
- *Restricted industries* include those that are related to national defense, national security and social order, social security, social ethics, and public health projects. Restricted trade listed in Appendix IV of the Law on Investment^[7].

[6] 2014 *Law on Investment*, Art.6.

[7] 2014 *Law on Investment*, Appendix IV.

On the contrary, for investments in encouraged industries, the Vietnamese government will offer preferential policies, including income tax exemptions, import duty relief, and land-use tax exemptions. Investors may apply for such incentives in the following industries: high technologies, new materials, and new energy; information science production, software and digital content; electronic products production, and key mechanical products production; providing production service for textile, shoes and industry sectors listed above; agricultural production and processing, forest products and aquatic products production; collection, and processing, and recycling or reuse of wasted products; public transportation development in urban cities; education and medical research related fields; committed to improve elderly life quality and rescue Centre, trust funds, micro-finance institutions, etc^[8].

[8] 2014 *Law on Investment*, Art. 16(1).

[9] 2014 *Law on Investment*, Art. 16(2).

Investments in certain administrative areas are also eligible for incentives, including social difficulty regions; industrial parks, export processing zones and high-tech area and the economic zone^[9]. However, these incentives do not include investment in mining or other industries that in accordance with the law are subject to excise tax.

2.4 Investment Registration and Permit

An investment permit is required if foreign investors own more than 51% of the project. In the case that foreign investment accounts for less than 51%, or is invested in capital injections, share purchase, and other investments, a permit is not required but the investment must be registered.

The investment registration process is relatively simple: investors submit the application to the relevant authorities (such as the Provincial Planning and Investment Department, Management Committees of the industrial zone etc.), and the authorities will issue investment registration within 15 days, or a written notice stating the reasons if the application is denied.

Certain investment projects may need to be submitted and processed by the National Assembly, the Prime Minister or the Provincial committees for approval based on the project nature, impact and investment scale, irrespective of the level of foreign investment. These projects are listed in Articles 30, 31, and 32 of the Law on Investment, respectively.

Investment Permit Approval Authority

Projects must be approved by the National Assembly if they:

- 1) Have significant impact on the environment or potential significant impact; such investments include a) nuclear power plants, b) over 50 hectares land usage changes in national parks, national natural reserves, and protected landscape areas; changed over 500 hectares of windbreaks, sand dunes, coastal erosion; over 1,000 hectares of artificial forest;
- 2) Change over 500 hectares of rice fields land use;
- 3) Involved the resettlement of over 20,000 people in mountain area, or over 50,000 people in other areas;
- 4) The project requires a special policy by the National Assembly^[10].

[10] 2014 Law on Investment, Art. 30.

Projects that require the Prime Minister's approval are:

- 1) Investments of more than 5 trillion Vietnam Dong;
- 2) Environmental and social projects:
 - a) resettlement of over 10,000 people in the mountain region, or resettlement in other areas of more than 20,000 people;
 - b) development of air transport;
 - c) development of port;
 - d) oil and gas exploration, mining;
 - e) casino;
 - f) tobacco production;
 - g) infrastructure development in industrial zones, export processing zones and economic development zones;
 - h) golf course development;
- 3) Marine transport, mobile communication services, including network infrastructure, forest restoration, publishing, journalism, science and technology organization 100 % owned by foreign capital;
- 4) Other investment projects as required by law should be decided by the Prime Minister^[11].

[11] 2014 Law on Investment, Art. 31.

Projects that require the approval by the Provincial People's Committee are:

- 1) License required in accordance with the law but are neither in the bracket for the National Assembly nor the Prime Minister approval, that projects like: a) national land projects through auction, bidding or transfer or lease that need to change land use purpose; b) technology transfer in accordance with the law, all those listed on the technology transfer control list;
- 2) Construction in industrial zones, export processing zones, hi-tech parks and related projects in economic zones are planned and decided by the Provincial People's Committee^[12].

[12] 2014 Law on Investment, Art. 32.

File Contents of Investment Permit Application

Project information that must be filed for decision by the provincial People's Committees include:

- a) Written applications for the project;
- b) Applicant's basic information;
- c) Project basic information, including project investment, investment target, investment scale, funds operation plans, locations, time frame, labor requirement, investment incentive measures, effect assessment, ROI etc.,
- d) Investors' financial information, including the most recent two years' financial reports; mother company commitment of financial support; financial support by financial institutes; investors financial capacity guarantees and proof documents;
- e) Land-use requirements and proof of right to use the land, such as rental contracts;
- f) Technical description used by the project, including technical name, source, programs, special, mainly machinery and equipment;
- g) Business investment and commercial cooperation agreement.

If approval by the Prime Minister or National Assembly is required, further documentation must be submitted, including a “preliminary assessment” of the project's environmental impacts and an assessment of the socio-economic impacts of the project.

Investment Approval Process

Projects for the approval of the Provincial People's Committee will proceed as follows within 35 days from receipt of the investments application:

- DPI submits specific contents to relevant departments for assessment within 3 days upon application receipt;
- Relevant departments provide feedback within 15 days upon receipt of the assessment application;
- Relevant land management authorities provide maps and proceed for assessment within 5 days upon receipt of requirement from DPI;
- Within 25 days of receipt of the application, DPI submits evaluation report to the provincial people's Committee, including items of basic information and assessment of the various elements in the application file;
- Within 7 working days upon receipt of the application file, the Provincial People's Committee shall make a decision on the investment application, should the project be rejected, a written notice with clear reason is required.
- Similar procedures are applied for projects submitted to the Prime Minister or the National Assembly, however, a longer process and decision-making period is required^[13].

[13] 2014 Law on Investment, Arts. 34.2-34.6, 35.2-35.8.

3



Environmental Policy

3.1 Legal Framework

3.2 Government Departments for Environmental Protection

3.3 Environment Impact Assessment and Environment Protection Plan

Authors of this section: William J. Schulte, U.S.-China Partnership for Environmental Law at Vermont Law School; Chang YOU, the Global Environmental Institute

[1] 1992 *Constitution of the Socialist Republic of Vietnam*, Article 112(5).

[2] *Law on Environmental Protection*, No. 29-L/CTN, December 27, 1993. (*hereinafter* “1993 LEP”).

[3] 1993 LEP, Art. 6.

[4] *See, e.g.*, Ministry of Natural Resources and the Environment, *National Strategy for Environmental Protection Until 2010 and Vision Toward 2020*, December, 2003. Available at http://thereddesk.org/sites/default/files/national_env_strategy_1.pdf.

[5] *Law on Environmental Protection*, No. 52/2005-QH11, November 29, 2005. Available at https://danang.eregulations.org/media/Luat%20Bao%20ve%20moi%20truong_E.pdf. (*hereinafter* “2005 LEP”).

[6] In the Vietnamese legal system, a Decree is a document issued by the national government to providing guidelines on the implementation of a given law.

[7] In the Vietnamese legal system, a Circular is a document issued by a Ministry-level Agency providing guidelines on the implementation of a given law.

[8] *See, e.g.*, Decree No. 80/2006/ND-CP, available at <http://faolex.fao.org/docs/pdf/vie68029.pdf>; Decree No. 21/2008/ND-CP, available at <http://faolex.fao.org/docs/pdf/vie79328.pdf>; Decree No. 29/2011/ND-CP, available at http://faolex.fao.org/docs/pdf/vie_107003.pdf.

[9] *Law on Environmental Protection*, No. 55/2014/QH13, June 23, 2014. (*hereinafter* “2014 LEP”).

Vietnam's rapid economic growth over the last three decades, fuelled in large part by foreign direct investment, has been accompanied by increasing levels of environmental pollution and degradation and their associated impacts on local communities. As explained in the following section, the government of Vietnam has attempted to design an institutional and legal framework for environmental protection to address these issues. Foreign investors wishing to be responsible partners in the healthy and sustainable development of Vietnam's economy should become familiar with the country's environmental protection framework and should design a protocol to implement its requirements.

3.1 Legal Framework

Ever since the introduction of economic reforms in 1986 (Doi Moi) that transitioned Vietnam from a centrally-planned economy to a market-oriented economy, the Vietnamese government has continually updated and improved its environmental protection system. In 1992, Vietnam issued a revised Constitution that placed a duty on the government to “take measures to protect the environment^[1].” Accordingly, Vietnam adopted its first Law on Environmental Protection (LEP) on December 27th, 1993^[2]. The LEP laid the foundation for Vietnam’s environmental protection legal framework. Of particular relevance for foreign investors, the 1993 LEP made clear at the outset that “foreign organizations and individuals working in Vietnam have the obligation to comply with the [LEP]^[3].”

After a decade of rapid economic growth the Vietnamese government realized that the LEP had to be substantially updated in order to keep pace with the environmental costs associated with this growth^[4]. In November 2005, the National Assembly of Vietnam promulgated the first significant amendments to the LEP^[5]. Among other things, the 2005 LEP introduced a registration system for entities handling hazardous wastes, innovative community “right to know” provisions, and a more detailed system for environmental impact assessment (EIA), including a requirement to conduct strategic environmental assessments (SEA). In subsequent years the Vietnamese government sought to improve the administration and implementation of the 2005 LEP by issuing a number of decrees^[6] and circulars^[7] that clarify definitions, responsibility, and obligations^[8]. Nevertheless, after nearly a decade of implementing the 2005 LEP, it became apparent that the law needed amendments in order to account for the country’s economic development impact on the environment. To that end, in June 2014 the National Assembly passed another round of substantial amendments to the LEP which came into effect on January 1, 2015 (2014 LEP)^[9].

[10] 2014 LEP, Art. 141.

[11] 2014 LEP, Art. 39(1).

[12] 2014 LEP, Arts. 29-34.

[13] 2014 LEP, Art. 146.

[14] 2014 LEP, Art. 146(1) & (2).

[15] 2013 *Constitution of the People's Republic of Vietnam*, Art. 43. (hereinafter "2013 Constitution").

[16] 2013 Constitution, Art. 30(1).

[17] *Land Law*, No. 13/2003/QH11, November 26, 2003. Available at http://moj.gov.vn/vbpq/en/Lists/Vn%20bn%20php%20lut/View_Detail.aspx?ItemID=8269.

[18] *Law on Forest Protection and Development*, No. 29/2004/QH11, December 3, 2004. Available at http://thereddesk.org/sites/default/files/law_on_forest_protection_and_development_-_vietnam_2.pdf.

[19] *Law on Chemicals*, No. 06/2007/QH12, November 21, 2007.

[20] *Law on Biodiversity*, No. 20/2008/QH12, November 13, 2008. Available at <https://data.opendatacommons.org/dataset/law-on-biodiversity-2008-vietnam>.

[21] *Mineral Law*, No. 60/2010/QH12, November 17, 2010.

[22] *Law on Environmental Protection Tax*, No. 57/2010/QH12, November 11, 2010. Available at http://www.moj.gov.vn/vbpq/en/Lists/Vn%20bn%20php%20lut/View_Detail.aspx?ItemID=10487.

[23] *Law on Economical and Efficient Use of Energy*, No. 50/2010/QH12, June 17, 2010. Available at http://www.moj.gov.vn/vbpq/en/Lists/Vn%20bn%20php%20lut/View_Detail.aspx?ItemID=10481.

[24] *Law on Water Resources*, No. 17/2012/QH13, June 21, 2012.

The 2014 LEP contains several notable new provisions that pertain to foreign investors. For example, Article 141 clarifies MONRE's authority as the sole agency responsible for "unifying state management of environmental issues^[10]." It also contains an entirely new chapter on climate change, requiring that all environmental protection activities (which would include EIA) to be "harmoniously connected with the response to climate change^[11]." The 2014 LEP improves upon the 2005 LEP's scheme for "environmental protection commitments," for projects that do not need to conduct an EIA, by requiring them to draft new "environmental protection plans," for such projects, as discussed in more detail below^[12]. And finally, the new law provides for strengthened roles for the public in environmental protection activities. Article 146 guarantees local communities various specific rights with regard to access to information and participation in specific environmental protection activities^[13]. Local communities are empowered to request information on environmental protection from owners of projects that impact them, as well as from the state environmental management agencies^[14]. Article 146 also guarantees local communities the right to take part in the evaluation of environmental protection tasks by "production, business and service entities."

Approximately one year prior to the promulgation of the 2014 LEP, Vietnam adopted a revised Constitution that reiterates the government's duty to take measures to protect the environment while enshrining several other rights that are important in the environmental protection context and repeated in the 2014 LEP. The new Constitution guarantees "everyone" the right to live in a "clean" environment, while at the same time stating that "everyone" has the obligation to protect the environment^[15]. Articles 3 and 14 state that human rights, which include public participation in government decision-making and access to information, shall be recognized, respected and protected. And finally, the new Constitution guarantees "everyone" the right to "lodge complaints or denunciations about illegal acts of agencies, organizations, or individuals^[16]."

In addition to the LEP and the Constitution, Vietnam also promulgated a number of other laws that contain environmental protection requirements that are relevant for foreign investors. These include but are not necessarily limited to: 2003 *Land Law*^[17]; 2004 *Law on Forest Protection and Development*^[18]; 2007 *Law on Chemicals*^[19]; 2008 *Law on Biodiversity*^[20]; 2010 *Mineral Law*^[21]; 2010 *Law on Environmental Protection Tax*^[22]; 2010 *Law on Economical and Efficient Use of Energy*^[23]; and 2012 *Law on Water Resources*^[24].

3.2 Government Departments for Environmental Protection

This section provides a brief summary of Vietnam's institutional framework for environmental protection. The 1993 LEP initially placed the government's environmental protection responsibilities under the Ministry of Science and Technology.^[25] In 2002, the government established the Ministry of Natural Resources and the Environment (MONRE) as a stand-alone ministry-level agency in order to further elevate the importance of environmental protection.^[26]

[25] 1993 LEP, Art. 40.

[26] See, Asian Environmental Compliance and Enforcement Network, "Vietnam Ministry of Natural Resources and the Environment." Available at <http://www.aecen.org/stories/vietnam-ministry-natural-resources-and-environment>.

[27] See generally, 2014 LEP, Arts. 139-143.

MONRE is a major central government agency that is responsible for unifying environmental protection activities in Vietnam. MONRE's duties include^[27]:

- Establishing environmental policies: draft relevant legal documents, policies, plans and technology regulations etc.; incorporate environmental protection into national strategies on natural resource exploitation; establish a system for assessment standards; monitor compliance with the LEP; conduct environmental education activities; provide recommendations to the Government on signing international environmental agreements and cooperating on international environmental protection initiatives.
- Settlement of environmental disputes: act as a liaison between government departments or provinces dealing with environmental issues; handle and manage environmental-related lawsuits, petitions, etc.; perform its role of duties in the national environmental monitoring system, environmental information and communications.
- Evaluating and approving environmental assessment documents and environmental protection plans, including managing environmental licences and certificates.

[28] See, Vietnam Ministry of Natural Resources and the Environment, "History of Vietnam Environment Administration." Available at <http://vea.gov.vn/en/aboutvea/history/Pages/history-achievements.aspx>.

In 2008, the Prime Minister of Vietnam issued Decision No. 132/2008/QD-TT-g, which established the Vietnam Environment Administration (VEA) under MONRE and defined its responsibilities and organization^[28]. The VEA assists MONRE with implementing and enforcing the various elements of the LEP. In 2007, the Vietnamese government established the Environmental Police Department led by the Ministry of Public Security, with offices in all provinces and centrally-controlled municipalities. The

Environmental Police Department's main duty is to supervise and examine the implementation of environmental protection by different companies and to deal with legal cases that are environment-related.

Environmental protection work at the local level is administered by the provincial-level Departments of Natural Resources and Environment under MONRE, as well as corresponding departments for the five cities under the direct administration of the central government. The Department of Natural Resource and Environment is mainly in charge of local land resources, water resources, mining resources and environmental protection. It is under the management of both the MONRE and the local government. Further, People's Committees at the provincial, district and community levels also have relevant environmental responsibilities and duties. Provincial-level People's Committees are responsible for setting appropriate levels of environmental regulations and policies, ensuring strategic and legal implementation, establishing environmental education programs, managing environmental certificate at corresponding levels and so on.^[29] People's Committees at the district level and community level are responsible for supervision and promotion of local policies and education^[30].

[29] 2014 LEP, Art. 143(1)

[30] 2014 LEP, Art. 143(2).

In addition to MONRE and the sub-national environmental protection departments, other agencies play an important role in environmental protection in Vietnam. As a general matter, the 2014 LEP directs “heads of ministerial-level bodies” to coordinate and cooperate with MONRE to issue joint circulars on environmental protection issues, cooperate with MONRE on implementing the LEP in areas within their management and report to the national government on their own environmental protection activities^[31]. The 2014 LEP also contains more detailed instruction targeted at specific agencies. For example, the Ministry of Agriculture and Rural Development is directed to “actively coordinate” with MONRE on implementing aspects of the LEP relating to “production, importing exporting, use of chemicals, plant protection chemicals, veterinary drugs, fertilizers, waste substances in agriculture and other activities in management^[32].” Similarly, the Ministry of Planning and Investment shall “actively coordinate” with MONRE to incorporate environmental protection into plans for the socio-economic development of the country, attract investment, and implement and enforce the LEP with regard to investment projects^[33].

[31] 2014 LEP, Art. 142.

[32] 2014 LEP, Art. 142(3)(b).

[33] 2014 LEP, Art. 142(3)(a).

3.3 Environment Impact Assessment and Environment Protection Plan

Environmental Impact Assessment

The Environmental Impact Assessment (EIA) process has been widely embraced around the world as “a means of identifying and managing the effects of economic development on the natural environment^[34].” As such, the EIA process presents the best opportunity for foreign investors to constructively engage with local agencies and communities in order to minimize the environmental and social impacts of their projects. If done well, the EIA process is a potential way for foreign investors to gain the confidence and support of the communities in which they will invest. As mentioned earlier, Vietnam’s impressive economic growth rates over the last two decades have been accompanied by rapidly increasing environmental pollution and damage, which has drawn the attention of the government^[35]. One of the main measures to address this issue is the EIA process. Beginning with the 1993 LEP, Vietnam embraced EIA as a tool to promote the sustainable development of its economy. The Vietnamese government later introduced significant improvements to its EIA regime in the 2005 LEP and later in the 2014 LEP^[36]. Most recently, the national government issued the Decree on Environmental Protection Planning, Strategic Environmental Assessment, *Environmental Impact Assessment and Environmental Protection Plans* (EIA Decree) on February 14, 2015^[37]. Taken together, the 2014 LEP and the EIA Decree outline the main requirements of Vietnam’s EIA system.

The 2014 LEP lays out three broad categories of projects that require EIAs:

- 1) Investment projects that are subject to the approval of the National Assembly, Government and Prime Minister;
- 2) Projects that use land in wildlife sanctuaries, national parks, historical/cultural monuments, world heritage sites, biosphere reserves, and scenic beauty areas that have been ranked;
- 3) Projects that “can cause bad effects on the environment^[38].” The EIA Decree further

[34] Alison Clausen, et al., *An Evaluation of the Environmental Impact Assessment System in Vietnam: The Gap Between Theory and Practice*, Env. Impact Assessment Review, 31 (2011), 136-143.

[35] *Ibid.*

[36] *See*, 2014 LEP, Arts. 18-34.

[37] Decree No. 18/2015/ND-CP on Environmental Protection Planning, Strategic Environmental Assessment, Environmental Impact Assessment and Environmental Protection Plans, February 14, 2015. Available at https://binhdinh.eregulations.org/media/18_2015_ND-CP_268489.pdf. (*hereinafter* “EIA Decree”).

[38] 2014 LEP, Art. 18(1).

clarifies these categories in the form of a list in Appendix II that delineates the specific types of projects and their thresholds that are required to conduct an EIA^[39].

[39] EIA Decree, Appendix II.

[40] EIA Decree, Art. 22.

[41] 2005 LEP, Art. 19(2); Decree No. 29/2011/ND-CP on Strategic Environmental Assessment, Environmental Impact Assessment, and Environmental Protection Commitment, Art. 13(1).

[42] 2014 LEP, Art. 19(2).

[43] EIA Decree, Art. 12(5).

[44] EIA Decree, Art. 12(5)(b).

[45].EIA Decree, Art. 12(6).

[46].EIA Decree, Art. 22(8).

EIA Requirements

The minimum required contents of the EIA Report are outlined in Article 22 of the 2014 LEP. Among other things, the EIA Report must evaluate all aspects of the project that may negatively impact the environment, assess the current state of the natural and socio-economic environment both at the proposed project site and adjacent areas, estimate waste production and include waste disposal measures, and assess all proposed measures (including the budget for such measures) for minimizing environmental impacts^[40].

Both the 2005 LEP and the previous 2011 *Decree No. 29 on Strategic Environmental Assessment, Environmental Impact Assessment, and Environmental Protection Commitment* required that a project's EIA be conducted concurrently with the project's feasibility study^[41]. However, the 2014 LEP states only that the EIA must be conducted during the project's "preparatory stage^[42]." Under this process, the project owner must consult with the People's Committee of the commune where the project will be carried out and "organizations under direct impact of the project" by sending the draft EIA Report to them^[43]. The People's Committee and organizations directly impacted by the project then have 15 working days to submit their comments and responses on the EIA Report^[44]. Importantly, the process requires public participation organized in a meeting "co-chaired by [the] project owner and the People's Committee of the commune where the project is carried out together with the participation of representatives of Vietnamese Fatherland Front of communes, socio-political organizations, socio-professional organizations, neighbourhoods, [and] villages convened by the People's Committee of the commune^[45]." The EIA Report must also include the results of the required People's Committee and community consultations^[46].

[47] See 2005 LEP, Art. 104; 2014 LEP Art. 131.

[48] EIA Decree, Art. 12(6).

[49] 2014 LEP, Art. 21(1).

It is worth to note that, even though both the 2005 LEP and the 2014 LEP state that EIA Reports are public documents, it seems unclear whether draft EIA Reports are required to be shared with the community before or during these consultation meetings^[47]. A failure to share the draft EIA Report with the community would obviously greatly inhibit their ability to comment substantively and meaningfully on it. Nevertheless, all of the opinions expressed by those attending the community meeting must be recorded in the meeting minutes^[48]. The LEP states that the purpose of these consultations is to “minimize the bad impacts on the environment and human beings and ensure the sustainable development of the project^[49].”

[50] 2014 LEP, Art. 19(1).

According to the 2014 LEP, the EIA may be conducted by the project owner or by an “advisory organization” hired by the project owner – in either case, the owner shall take “statutory responsibility” for the results of the EIA^[50]. Vietnam’s EIA regime sets out minimum qualifications for those entities conducting EIAs. Under the EIA Sub-Decree, the entity must have staff dedicated to EIA who have obtained at least a Bachelor’s degree and a Certificate in EIA Consultancy issued by MONRE, and offers “laboratories, inspection and calibration devices eligible for performing measurement, sampling, processing and analysis of environmental samples serving the EIA of the project; if there is not any laboratory with decent equipment for inspection and calibration, it is required to have a contract with a unit capable of carrying out inspection and calibration^[51].”

[51] EIA Decree, Art. 13.

Approval Procedures for EIA reports

[52] EIA Decree, Art. 14(1)(b).

[53] EIA Decree, Art. 14(1)(c).

[54] EIA Decree, Art. 14(1)(d).

[55] EIA Decree, Art. 14(3).

[56] 2014 LEP, Art. 24; EIA Decree, Art. 14(3).

[57] 2014 LEP, Art. 24.

Once the EIA Report is complete, the project owner will submit it along with an application for EIA review to the relevant approval authority. It is important to note that this is the stage in which MONRE and/or other agencies become involved in the process. MONRE is directly responsible for approving the EIAs of projects listed in Appendix III of the EIA Decree. Other ministerial agencies are responsible for approving the EIAs for “projects under their competence” that are not listed in Appendix III^[52]. The Ministry of National Defence and the Ministry of Public Security review and approve EIAs for “project subject to national defense and security secrets and projects under their competence,” except for those that are prescribed in Annex III^[53]. The EIAs for projects that do not fall under any of the above three scenarios are to be reviewed and approved by the People’s Committee of the province in which the project is located^[54]. Each relevant approval authority is supposed to set up an EIA report assessment council made up of at least 7 members, at least 30 percent of whom have 6 years or more of experience in the EIA field^[55]. The EIA report assessment council’s function is to provide opinions to the EIA approval authority on whether to approve the EIA^[56]. In addition, the EIA approval authority may also seek the opinions of other agencies, institutions, organizations, or experts on the EIA Report^[57].

[58] EIA Decree, Art. 14(2).

[59] *Ibid.*

[60] 2014 LEP, Art. 25(1).

[61] 2014 LEP, Art. 25(1).

[62] 2014 LEP, Art. 25(2).

The EIA Decree specifies the deadlines within which the relevant approval authority must issue its assessment of the EIA Report. MONRE has 45 working days “from the date on which the satisfactory application is received” to assess the EIA review applications of projects under its purview; all other relevant approval authorities have 30 working days^[58]. The decree further states that the periods during which the project owner makes adjustments and modifications to the EIA Report itself under the direction of the approval authority shall not be included in the assessment period^[59].

In any event, once all relevant modifications have been made by the project owner, the project owner must then submit the final EIA Report to the relevant approval authority, after which the authority has 20 days to approve or reject the report^[60]. The approval authority must issue its decision in writing, and must clearly explain any reasons for the rejection of an EIA^[61]. Other investment licenses and relevant permits that the proposed project requires may only be issued after the project’s EIA has been approved^[62].

Environmental Protection Plan

[63] 2005 LEP, Arts. 24-27.

[64] 2014 LEP, Arts. 29-34.

[65] 2014 LEP, Art. 29.

As mentioned earlier, one of the features of the 2014 LEP is that it replaces the requirement for “environmental protection commitments”^[63] in the 2005 LEP with a requirement for more robust “environmental protection plans.”^[64] Environmental Protection Plans (EPP) are required for projects that do not reach the threshold of requiring an EIA, and for “alternatives for the production, trading, and services that are not identified as objects that require the formulation of investment projects in accordance with the investment law^[65]. Because they concern projects that are generally smaller in nature, the required content and review process for EPPs are less rigorous than for EIAs.

[66] 2014 LEP, Art. 30.

The information that must be included in an EPP is as follows^[66]:

- Project site;
- Type, technology, and scale of production, trading, and service;
- Required raw materials and fuels;
- Forecast of wastes and any other substances affecting the environment;
- Measures for disposing of wastes and mitigating the bad environmental impact;
- Measures to be applied for the environmental protection.

Project owners are required to submit their EPPs to the relevant approval authority and obtain a certification of the EPP prior to commencing with the proposed project. The provincial-level environmental agencies are responsible for reviewing and certifying the EPPs for projects that:

[67] 2014 LEP, Art. 32(1).

1) Span across two or more districts within a province;

[68] 2014 LEP, Art. 32(2).

2) Projects located in “polluted marine zones” that require the shipment of wastes inland for treatment;

[69] 2014 LEP, Art. 32(3).

3) Large-scale projects that may cause “bad impacts on the environment of a province” according to MONRE^[67]. Other projects that do not meet any of these criteria must file their EPP with the district-level People’s Committee^[68]. The relevant approval authority should approve or reject the EPP within ten days of its receipt^[69].

Management Requirements

[70] 2014 LEP, Arts. 26 & 27.

[71] 2014 LEP, Art. 27(2).

[72] 2014 LEP, Art. 28(2); EIA Decree, Art. 17(2).

[73] 2014 LEP, Art. 130.

[74] 2014 LEP, Art. 146.

[75] Decree No. 117/2009/ND-CP on the Handling of Law Violations in the Domain of Environmental Protection, December 31, 2009, (*hereinafter* “Decree on Environmental Law Violations”).

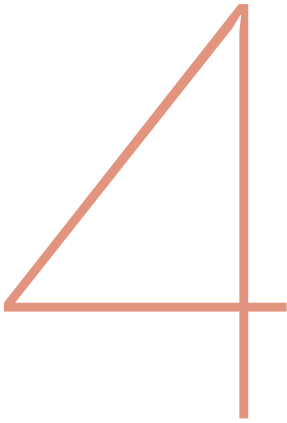
[76] Decree on Environmental Law Violations, Art. 8(6).

[77] Decree on Environmental Law Violations, Art. 8(7).

The LEP obligates project owners to comply with all of the requests specified in their approved EIA report and to apply all of the environmental protection measures and commitments agreed upon in the approval^[70]. The project owner may not commence with the operation of a project until the project’s “environmental protection works” have been completed and inspected by the EIA approval authority^[71]. The LEP gives the EIA approval authority 15 days to inspect a project’s environmental protection measures and issue a certificate of completion – this deadline is extended to 30 days for instances where “analysis of complicated environmental criteria is required^[72].”

After the project owner receives a certificate of completion of the project’s environmental protection works, the project may begin operation. After operations have begun, project owners are responsible for reporting to the relevant environmental management agencies. Specifically, “organizations, individuals managing industrial parks, export processing zones, high-tech zones, industrial complexes, trade villages and production, business and service facilities” and other entities that are required to conduct an EIA must report to the environmental management agencies of the Provincial People’s Committees “on environmental information within their authorities^[73].” Additionally, local communities impacted by a project have the right to ask the project owner for “information on environmental protection” through “direct dialogs or in writing” after a project has commenced^[74].

The Government of Vietnam has issued a series of decrees that specify the penalties and remedies for violations of environmental laws, most recently in 2009^[75]. *Decree No. 117 on the Handling of Law Violations in the Domain of Environmental Protection* lays out the penalties and remedies for violations of specific EIA requirements at Article 8. For example, a project owner may be subject to a fine between VND 200,000,000 and VND 300,000,000 (approximately between USD 8,900 and USD 13,300) for failing to have an EIA report approved in accordance with the law^[76]. It is worth noting that for very large projects, such a low administrative penalty may not be sufficient to incentivize compliance. As far as remedies are concerned, the competent authority may, among other things, force the project owner to properly operate environmental treatment facilities within a specified time frame, order the dismantlement of facilities built in contravention to the project’s approved EIA, or require the project owner to apply measures to remedy environmental pollution caused by violations of the law^[77].



Case Study of the Vinh Tan Power Plant Phase II Project

4.1 Industry Profile

4.2 Project Profile

4.3 Turmoil Triggered by Coal Dust

4.4 Responses of the Government and Enterprises

4.5 Reflections and Suggestions on Vinh Tan Incident

Author: Shuting GAO, Chinese Academy for Environmental Planning

Vinh Tan Power Plant phase II is owned by the Vietnam Electricity (EVN), the largest power generation corporation in Vietnam, and was contracted to Shanghai Electric Group (SH Electric) for design, procurement, and construction. In April 2015, after the power plant began its commercial operation, heavy winds blew up the pulverized coal dust produced from the power plant into the surrounding areas, polluting the environment and disrupting the lives of many residents nearby. A massive public protest was triggered from the area to the entire country. Even though it was the project owner EVN who was eventually found responsible for the incident, SH Electric was also negatively influenced. Not only did SH Electric receive skepticism and damage to its reputation for its design and technology, but it also suffered from economic loss due to violent activities in the protest. By understanding and analyzing the Vinh Tan coal ash incident, this case study attempts to answer questions of how Chinese companies can avoid negative perceptions, establish positive images and improve their competitiveness as they invest or contract overseas.

4.1 Industry Profile

[1] “越南煤炭资源介绍”, 煤炭网, 2011.7.18.
http://www.coal.com.cn/CoalNews/ArticleDisplay_276216.html.

[2] Data source: UNCTAD STAT.

[3] Asian Development Bank, *Sector Assessment (Summary): Energy, Ha Noi and Ho Chi Minh City Power Grid Development Sector Project*. Available at <http://www.adb.org/sites/default/files/linked-documents/46391-001-ssa.pdf>.

[4] Le Nguyen Anh and Tran Thi Hai Yen, REPDC GREEN, *Industry Overview, Energy Industry and Hydropower Industry, Legal Framework*, May 2012. Available at <http://repdc-green.com/wp-content/uploads/2012/06/ACBS-Energy-Industry-and-Hydropower-Industry-Review.pdf>.

Vietnam has abundant coal reserves. It is the third largest coal producer in Southeast Asia and the world's third largest anthracite coal producer. Statistics from the Vietnam Academy of Social Sciences revealed that Vietnam's proven coal reserves total 6.5 billion tons; Hon Gai coal and Quang Dien coal were high-caliber products; anthracite reserves were around 3.3 billion tons in Quang Ninh Coalfield; anthracite coal was also found in Thai Nguyen, Quang Nam Province and other regions. The Vietnam National Coal-Mineral Industries Group (Vinacomin) exerts direct control on Vietnam's coal mines and operates the country's mining, processing and sales businesses.^[1]

Until the turn of the 21st century, the vast majority of Vietnam's electricity was generated by water. However, due to its rapid economic growth in recent years, Vietnam's limited water resources cannot meet its growing demand for electricity. From 2005 to 2012, the country's GDP per capita has grown from USD 699 to USD 1755^[2], with an average annual growth of 6.3%. Average annual growth in electricity demand in the same period is 12.6% with annual electricity consumption growth from 53.2 billion kWh to 120.3 billion kWh^[3]. In 2011, power generated across Vietnam amounted to 108.7 billion kWh, of which hydropower accounted for 37.6%, coal-fired power 18.9%, gas-fired power 36.8%, oil-fired power 1.6%, other power sources 0.5% and imported power 4.6%^[4]. Hydropower plants and coal-fired power plants dominate northern Vietnam due to the region's topography and its endowment of natural resources; central Vietnam is powered mainly by hydropower and oil-fired plants; southern Vietnam, from the 1990s onward, started to build many gas-fired and a few oil-fired power plants. Geographic location and power load dictate the division of the country's grid into the northern, central and southern sub-grids.

[5] Mayer Brown JSM, *Vietnam Power Development Plan for the 2011-2020 Period*, September 2011. Available at <https://m.mayerbrown.com/Files/Publication/7eb02f45-1783-4f14-8565-bf5120e1ea08/Presentation/PublicationAttachment/5dcbbea1-2d9f-42ae-8cbd-dab97456c4c5/11556.pdf>.

[6] Zhang, Shenlin, *Vietnam electric power system reform and construction, and its electricity market*, East China Electric Power, Vol. 1, Issue 36, pgs. 67-70 (January 2008).

[7] Shandong Provincial Department of Commerce, *Vietnam Electricity price will be adjusted according to the market mechanism*, April 2011. Available at <http://www.shandongbusiness.gov.cn/index/content/sid/149477.html>. (Chinese).

[8] "In 2016 Vietnam electricity price will be decided by market supply and demand," *Asia Business News*, June 11, 2015. Available at <http://www.mofcom.gov.cn/article/i/jyjl/j/201506/20150601009580.shtml>.

Given the vast coal reserves, the government has proposed the large-scale development of coal-fired power plants to address the power undersupply. *The National Master Plan for Power Development for the 2011 - 2020 Period with the Vision to 2030* establishes the goal that in 2020 the national generating capacity will reach 75,000 MW, of which 36,000 MW (48% of installed capacity) will be generated by coal. In 2030, the national generating capacity will be 148,600 MW, of which 75,000 MW (50.5% of installed capacity) will be generated by coal^[5]. The total planned investment in power generation from 2011-2020 is 48.8 billion USD, and the number for 2021-2030 is 75 billion USD, 2/3 of which will be used for power generation, and 1/3 for grid construction.

In 2005, the Vietnamese government began to reform the electricity market by gradually establishing a competitive pricing market to encourage private capital investment in the industry^[6]. Since June 2011, the electricity price began its adjustment according to the market mechanism with a forecast of full market orientation in 2016^[7]. A pilot operation of a competitive wholesale electricity market will operate from 2015 to 2020, with projected completion to occur in 2021^[8].

Although the Vietnam Government is encouraging private and foreign investments in electricity projects, the fact remains that the vast majority of such investments are made by Vietnamese SOEs such as EVN. EVN is the largest power generation corporation in Vietnam, and is the only vertically-integrated power corporation that purchases, sells, transmits and distributes electricity all within the same group. Chinese enterprises are mainly contractors of these electricity projects, and direct investments by Chinese companies are very small.

4.2 Project Profile

[9] “Vietnam unit 4 Vinh Tan Thermo Power Plant commence construction” , Sino-Vietnam Logistic Web, March 12, 2014. Available at http://www.cnvnlo.com/readart.aspx?article_id=39528&webshieldsessionverify=xdzky9phhaxw46g6gtku.

Vinh Tan Power Plant Phase II is located in Vinh Tan village, Tuy Phong County, 250km from Ho Chi Minh City. The project site is in a plains area facing the South China Sea, and it is one of the coal power electricity projects of the Vinh Tan Village Coal Power Electricity Centre. The Centre planned to install a total generating capacity of 5600MW with a four-phase implementation^[9].

Vinh Tan Phase II is the first project to complete construction and enter into operation at the Vinh Tan Power Centre. It is equipped with two 622MW thermal power generators, and it has a projected capacity of 7.2 billion kWh. The project owner EVN retained SH Electric as the general contractor for the project. As such, SH Electric is responsible for the design, procurement and construction work for the project. Project supervision is contracted to Vietnam Second Electric Power Construction Consulting Co., Ltd (PECC2), which is responsible for project design review and construction supervision.

The construction of Vinh Tan Phase II took 4 years. In October 2009, EVN and SH Electric officially signed the engineering procurement and construction (EPC) contract, with a total contract value USD 1.195 billion. Construction commenced in August 2010 and was completed in December 2014. After a 720 hours reliability run, Generator unit 1 received a Preliminary Acceptance Certificate (PAC) on January 30, 2015, and Generator unit 2 received PAC on March 21, 2015. SH Electric completed the transfer of plant responsibility and the units entered commercial operation phase. During the plant warranty period, from March 2015 to September 2016, SH Electric will continue to send technicians to maintain and service the plant. After the warranty period ends, EVN will sign the Final Acceptance Certificate and the SH Electric technical team will withdraw from the project^[10].

[10] Shanghai Electric (Vietnam) Ltd. interview by the author, May 2015, Viet Nam Hanoi.

4.3 Turmoil Triggered by Coal Dust

[11] “Locals rally as plant continues to pollute” , Viet Nam News, April 18, 2015. Available at <http://vietnamnews.vn/society/269247/locals-rally-as-plant-continues-to-pollute.html>.

[12] Shanghai Electric (Vietnam) Ltd. interview by the author, May 2015, Viet Nam Hanoi.

[13] “Vietnam Orders Coal Power Plant to Reduce Pollution Following 30-hour Protest” , ThanhNien News, April 23, 2015. Available at <http://www.thanhniennews.com/society/vietnam-orders-coal-power-plant-to-reduce-pollution-following-30hour-protest-42524.html>

[14] “Binh Thuan Tries to Tackle Power Plant Pollution” , Vietnam Net, July 16, 2015. Available at <http://english.vietnamnet.vn/fms/environment/136158/binh-thuan-tries-to-tackle-power-plant-pollution.html>.

During commercial operation, the Vinh Tan Phase II power plant emits about 1500 tons of pulverized coal ash daily. Problems caused by coal ash and pollution triggered disruptive public protests throughout the entire country.

On the afternoon of April 14, 2015, about 500 people gathered in the Chinese operation office at the Vinh Tan Phase II project site and protested against coal ash pollution^[11]. According to SH Electric, the protest turned violent, and some of the protestors resorted to smashing office furniture and supplies^[12]. When the protestors learned that SH Electric had completed the transfer of the plant and that the current plant owner should be responsible for the ash pollution issue, they withdrew from the office, gathered up over thousands of people that evening, and blocked traffic on a major highway. The protest continued for 30 hours, causing major traffic backups of over 20 kilometers. The traffic did not subside until 9:00 AM on April 16, two days after the initial protest. About 10 policemen sustained minor injuries when confronted by agitated protestors throwing bricks and stones at the police when they were performing their duties to divert the traffic^[13].

Before this protest, nearby residents had frequently complained about the problems and complained about coal ash issues to the power plant. The Binh Thuan Provincial People's Committee had requested the power plant to implement ash field mulching and sprinkler measures to mitigate environmental pollution; however the plant took no appropriate action. In December 2014, Vietnam Environment Administration sentenced EVN a fine of VND 1.5 billion, equivalent to USD 70,000, yet the plant continue to ignore taking pollution control measures. The public's discontent continue to grow with the accumulating pollution that eventually evolved into a protest^[14].

4.4 Responses of the Government and Enterprises

The protest has instigated widespread public concern. The provincial governor and EVN management visited Yong Xin village on April 14 to attempt to calm the protests. On April 16, the Deputy Prime Minister issued a directive to EVN to properly control and manage the plant's pollution problems, and sent local government officials to persuade and appeal to residents around the plant as a precaution and prevention of another protest. The Deputy Minister of the Trade and Industry Department urged EVN to take up immediate short-term measures like installing sprinklers in ash fields to prevent ashes from scattering to the surrounding areas and banning coal ash dumping in nearby neighborhoods (which impacted neighborhoods due to ash escaping from the transport vehicles), but rather must be stored properly on site^[15].

The Chairman of the Binh Thuan Provincial People's Committee also gave instruction regarding the coal ash issues. First, the power plant manager must post environmental pollution control measures and management plans publicly in order to maintain the public order and security – even though the plant was already required by law to do so. Second, the Chairman proposed that the power plant should provide jobs for local residents that are directly affected by the plant. Third, the Sui Feng County government would conduct a study on the feasibility of relocating residents affected by pollution. Finally, Sui Feng County Government and related departments in the province jointly conducted periodic tests and monitoring of the Phase II power plant's pollution to ensure that accurate information on the pollution is released to the public and provide opportunities for the public to participate in monitoring.^{[16][17]}

In response to the protests, the project owner EVN issued a public apology to the government and the residents of affected communities. In accordance with the government's request, ten days after the protest EVN ceased coal ash dumping. EVN also gave comprehensive commitments on pollution control that included:

- 1) Covering all cinder transportation to prevent ash from spilling and dropping;
 - 2) Conducting road maintenance and regular cleaning of existing transport routes without compromising the livelihood of local residents;
 - 3) Expediting the construction of a direct access route from the plant to ash yard so that it would no longer use public road for transportation of cinder;
 - 4) Increasing its fleet of water-sprinkling vehicles from 4 to 10 in order to better control dust on the site;
 - 5) Pledging to adopt emerging technologies to reduce the proliferation of ash and cinder.
- Although the incident was caused by improper operation by EVN, SH Electric also

[15] "Government News 27/4: Socio-economic Performance on the Agenda at Cabinet Meeting" , Vietnam Net, April 27, 2015. Available at <http://english.vietnamnet.vn/fms/government/129245/government-news-27-4.html>.

[16] Power Plant Forces Relocation Plan, Vietnam Energy, May 7, 2015. Available at <http://nangluongvietnam.vn/news/en/electricity/power-plant-forces-relocation-plan.html>.

[17] "Vinh Tan 2 Power Plant Pollutes Air Again" , Saigon Times, July 15, 2015. Available at <http://english.thesaigontimes.vn/41969/Vinh-Tan-2-power-plant-pollutes-air-again.html>.

[18] “Government News 27/4: Socio-economic Performance on the Agenda at Cabinet Meeting” , Vietnam Net, April 27, 2015. Available at <http://english.vietnamnet.vn/fms/government/129245/government-news-27-4.html>

[19] Calvin Godfrey, “Vietnam’s Dirty Growth” , Thanh Nien News, June 23, 2015. Available at <http://www.thanhniennews.com/business/vietnams-dirty-growth-46848.html>.

[20] “Khóibụi V ãnh Tân 2: khôngphải do côngnghệthàp?” , Tuoitre online, April 16, 2015. Available at <http://tuoitre.vn/tin/kinh-te/20150416/khong-phai-do-cong-nghe-thap/734636.html>.

[21] National Standard of Industrial Waste Water, QCVN:24-2009/BTNMT; National Standard of Fire Powered Industrial Waste Gas QCVB22:2009/BTNMT.

suffered an indirect impact and was questioned by governmental officials and media in its power plant design and technology. After the protest, the Trade and Industry Department requested EVN to re-examine the construction process of the plant, especially with regard to its design on pollution prevention and control, in order to identify the responsibility for the coal ash issue^[18]. Professor Nguyen Dinh Tuan of Ho Chi Minh University questioned whether the plant engineers actually knew how to properly operate the electrostatic precipitators that were supposed to prevent coal ash from being emitted from the plant^[19]. In an interview with Vietnam Youth Daily, the Deputy General Manager of the power plant, was questioned as to what measures were taken to control environmental pollution in using fuel to generate electricity and if the fly ash was a direct result of the power plant’s outdated facilities and equipment. The Deputy General Manager denied these allegations by explaining that plant using fuel power is a technology requirement only when in the ignition or under low load conditions, and the plant’s design and construction employed state-of-the-art technologies, and thus the coal ash problem wasn’t due to technological reasons^[20].

In May 2015, the paper’s authors interviewed SH Electric in Hanoi regarding issues of the Vinh Tan Phase II plant. During their conversation, the company officials explained, in great detail, the environmental impact and pollution control technology of the power plant. First, the plant utilizes anthracite from Quang Ninh, a region in northern Vietnam. Anthracite has a low volatility, a property which hinders complete combustion. As such, SH Electric decided to introduce W-shape furnace with a flame hedge to their design. This particular furnace is an advanced technology from the United States that successfully improves the boiler’s combustion efficiency, which improves the combustion of anthracite. Second, the power plant also included several mechanisms to control pollutants and aid in environmental protection measures. Such mechanisms include a sewage treatment system, a selective catalytic reduction (SCR) denitrification system, electrostatic precipitators, flue gas desulfurization (FGD) device, and ash collection place. Overall the plant performed well on pollutant monitoring tests, as the plant’s waste water and waste gas treatment satisfied the Vietnam environmental standard^[21]. Third, the plant’s design included dust controlling measures like a dust shield grid, waste collection, and a sprinkler system. In fact, SH Electric implemented the sprinkler system along with a mulching system to curtail coal ash and pollution issues. With all these measures considered, SH Electric demonstrated an integration of risk prevention measures in plant design. Therefore, the project owner, EVN, is ultimately the responsible party and no specific response was required from SH Electric.

4.5 Reflections and Suggestions on Vinh Tan Incident

Vietnam's rapid economic growth over the last three decades, fuelled in large part by foreign direct investment, has been accompanied by increasing levels of environmental pollution and degradation and their associated impacts on local communities. As explained in the following section, the government of Vietnam has attempted to design an institutional and legal framework for environmental protection to address these issues. Foreign investors wishing to be responsible partners in the healthy and sustainable development of Vietnam's economy should become familiar with the country's environmental protection framework and should design a protocol to implement its requirements.

The Vinh Tan Incident showed that once a coal-fired power plant causes environmental problems impacting the surrounding residents, reputational damage is inevitable. In the case of SH Electric, not only did angry protesters destroy their property but the company lost trust in its design and technology. Therefore, we provide the following recommendations for contractors and coal-fired power plant investors in Vietnam:

1. Adopting Advanced Environmental Standards, and Protecting the Environment as a Way to Increase Competitiveness

Vietnam's rapid economic growth over the last three decades, fuelled in large part by foreign direct investment, has been accompanied by increasing levels of environmental pollution and degradation and their associated impacts on local communities. As explained in the following section, the government of Vietnam has attempted to design an institutional and legal framework for environmental protection to address these issues. Foreign investors wishing to be responsible partners in the healthy and sustainable development of Vietnam's economy should become familiar with the country's environmental protection framework and should design a protocol to implement its requirements.

Vietnam's rapid economic growth over the last three decades, fuelled in large part by foreign direct investment, has been accompanied by increasing levels of environmental pollution and degradation and negative impacts on local communities. As explained in the following section, the government of Vietnam has attempted to design an institutional and legal framework for environmental protection to address these issues. Foreign investors wishing to be responsible partners in the healthy and sustainable development of Vietnam's economy should become familiar with the country's environmental protection framework and should design a protocol to implement its requirements.

2. Strengthening Follow-up Services including Personnel Training, and Enhancing Proprietor's Environmental Management Capability

Although the Vietnamese economy has grown rapidly since Doi Moi, certain industries are still in their early stages of development, technological and managerial personnel are in short supply, and the levels of professionalism of the workers available are not yet up to par for lack of experience.

In Vinh Tan II, the main pollutants of the power plant were sulfur dioxide, nitrogen oxide, smoke and dust, mercury, and coal ash. The extent to which pollutants could be reduced hinged on coal quality, pollution control equipment and the operation of the plant. After the plant was built, the key to preclude environmental problems was to strictly follow operational procedures and work on environmental management. Further investigation into the Vinh Tan II case found that the project's proprietor did not employ measures of water-spraying and coverage during coal ash transport and storage—this chain of negligent events shocked the whole country.

Therefore, when enterprises proceed with EPC projects, they should not only formulate Environment, Health and Safety policies concerning the project's operation, but should also offer special training for the project proprietor's relevant technology and management personnel in order to firmly grasp key procedures and measures of pollution control, and thus effectively prevent environmental and safety risks. In cases where the proprietor is not managing and operating the business properly, the contractor ought to provide consultation with the proprietor on adopting appropriate measures.

During design and implementation, EPC projects should adhere to relevant local regulations and recruit local workers to the best of their ability. Regulations should take into account local culture and vocational training for employees.

5

Case Study of the Tan Rai Bauxite Project

5.1 Industry Profile

5.2 Project Profile

5.3 Public Concerns

5.4 Responses and Measures of the Government and Enterprises

5.5 Analysis and Suggestions

Authors of the section: Chang YOU & Rong ZHU, the Global Environmental Institute

The Tan Rai Project was the first bauxite mining and aluminum oxide production project in Vietnam. Vietnam National Coal and Mineral Industries Group (Vinacomin) owns the project, and it outsourced the EPC responsibilities to China Aluminum International Engineering Corporation Limited (CHALIECO) through a USD 466 million agreement. The sheer value of the contract and the potential environmental and social impacts of the project have attracted immense attention from different groups and the media. There were a lot of concerns and skepticism around the project's environmental impact assessment, potential red mud leakage, land expropriation and restoration, labor security and its economic gains. This case demonstrates a situation in which the project triggered extensive public concerns and doubts despite the strong support and preferential policies that were planned and promoted by the host country government. It attempts to explore what Chinese companies can do to establish communication mechanisms with the government, communities and other stakeholders, in order to avoid concerns and reach agreements in their overseas investments and contracts.

5.1 Industry Profile

Vietnam’s Bauxite Resources and Exploitation Plans

Bauxite is a type of rock containing aluminum hydroxides and is the chief ore from which aluminum is obtained. Bauxite reserves are found near the surface of the earth, and depending on geological conditions, are located 0.8-2 meters below the surface^[1]. A US geographic survey indicates that Vietnam boasts abundant bauxite and its reserves are ranked as the world’s fourth largest, behind Guinea, Australia, and Brazil. However, only a tiny fraction of Vietnam’s bauxite has been exploited. A comparison with other bauxite-rich countries in terms of bauxite production and reserves is provided in the table below:

[1] Mai Truyet Than, “Environmental & Social Impacts of Bauxite Exploitation in the Central Highlands of Vietnam” , Human Rights Watch - Vietnam, May 11, 2009. Available at http://www.vlink.com/socialissues/?subaction=showfull&id=1243275543&archive=&start_from=&ucat=4&.

Table 5-1 Bauxite Mine Production and Reserves for Countries with Top 5 Bauxite Reserves, 2009-2014

Unit: 1,000 dry metric tons

Country \ Year	Mine production*						Reserves**
	2009	2010	2011	2012	2013	2014	
Guinea	15,600	17,400	17,600	17,800	18,800	19,300	740000
Australia	65,200	68,400	70,000	76,300	81,100	81,100	650000
Brazil	28,200	28,100	31,800	34,000	32,500	32,500	260000
Vietnam	30	80	600	100	250	1,000	210000
Jamaica	7,820	8,540	10,200	9,340	9,440	9,800	200000

*Data source: United States Geographical Survey publications Bauxite and Alumina 2009-2015: <http://minerals.usgs.gov/minerals/pubs/commodity/bauxite/>
 **:Data Source: United States Geographical Survey publications Bauxite and Alumina 2009 e: estimated, as indicated

In 2006, the 10th National Congress of the Communist Party of Vietnam passed a policy that restricts the export of unprocessed raw materials and incorporated bauxite exploitation into the national economic development plan. In the following year, the Politburo of the Central Committee Communist Party of Vietnam adopted a large project to develop the bauxite exploitation industry, claiming that this industry would introduce investment worth USD 15 billion by 2025. In November 2007, Premier Nguyen Tan Dung issued *Decision No. 167/2007/QĐ-TTg*, which included provisions on bauxite exploitation principles, regional plans for bauxite prospection, mining, and the production of aluminum oxides, and construction plans for supporting infrastructure. As per *Decision No. 167*, Vietnam planned to produce aluminum worth of 700,000-1,000,000 tons per year in 2010; 6,000,000-8,500,000 tons per year in 2015; and up to 13,000,000-18,000,000 tons per year in 2025.

According to the plan, the government decided to roll out two pilot projects in the central highlands: the Tan Rai bauxite-aluminum project in Lam Dong Province and Nhan Co Project in Dak Nong Province. Both projects are invested by Vietnam National Coal and Mineral Industries Group (Vinacomin), and China Aluminum International Engineering Corporation Limited (CHALIECO) is the EPC contractor for both. Due to the large investment of bauxite projects and their potential severe environmental problems, there have been incessant doubts and queries from the public and the media regarding the development of bauxite projects in the central highlands. As of now, actual production fell far short of the targets listed in *Decision 167*.

The Environmental Impact of Bauxite Exploitation and Aluminum Oxide Production

Bauxite mining has large impacts on the environment since bauxite reserves are near the earth's surface and that the overburden needs to be removed before exploitation. After exploitation, it is common practice to restore the land surface to its original condition, which is intended to reduce the environmental impact. Land reclamation can restore the mining area to pre-exploitation environmental state, i.e. an eco-system that contains flora and fauna and is capable of self-adjustment, and that can be employed in alternative ways which benefit the local community.

To produce aluminum oxides, the exploited bauxite needs to be crushed and milled and added to a high-concentration sodium hydroxide solution. Compounds including silicon dioxide, ferric oxide, and titanium dioxide that are insoluble in aqueous alkali, are filtered and separated. While aqueous alkali is used to purify aluminum oxides, a certain amount of the sodium hydroxide solution will also be separated together with the filter residue, hence the crimson or brick-red slurry-like liquid waste – often referred to as “red mud.” For every ton of aluminum oxide produced, 1 to 2.5 tons of red mud will be created. Red mud contains a large amount of highly caustic sodium hydroxide, and sometimes poisonous heavy metal or even radioactive elements. Once these harmful substances seep into the soil or the river, acute environmental pollution will ensue.

The separated red mud from the bauxite will usually be pumped by the aluminum factory into a dedicated holding pond. The water in the red mud will evaporate, leaving behind solid powder, which is the “wet disposal” approach. If leaks occur from the pond due to natural or artificial causes, the consequences will be even worse, which could have detrimental impacts on water, agriculture and fishing activities, and human health. If the red mud is piled up as “dried stacks,” the red mud powder may cause dust pollution that can trigger human respiratory diseases and water pollution. A large amount of dust could even cover up farmland in the vicinity and disturb agricultural production.

Relevant Environment and Land Policies

Pursuant to Decree No. 21/2008/ND-CP issued by the Vietnamese government, prior to applying for a mineral exploitation permit enterprises should submit an environmental impact assessment report for approval either by the Ministry of Natural Resources and Environment or to the provincial/city-level People's Committee, whose jurisdiction depends on the project's size. When exploitation is completed, applicants must restore the environment, and the expenses incurred as a result must be shown in the project's environmental impact assessment report and the feasibility study. In the case of mineral prospection or other mining projects, before submitting applications for the mineral prospection or exploitation permit, the applicant must complete the registration of environmental protection commitments to obtain the approval of the relevant authority (the district-level People's Committee).

[2] *Law on Land*, No. 13/2003/QH11, National Assembly, November 26, 2003, Art. 94.

[3] *Law on Land*, Art. 94(2).

[4] *Law on Land*, Art. 94(3)(d).

[5] *Law on Land*, Art. 36.

In terms of land use, according to the *Law on Land*, minerals may only be exploited and processed on “non-agricultural production and business” land^[2]. Enterprises may lease land to obtain land use rights from the state, organizations, families or individuals^[3]. In cases where mineral prospection does not stand in the way of land use, or mineral exploitation does not affect the use of surface earth, the land lease is not necessary^[4]. When the type of land involved in the project may not be used for mineral exploitation and processing, enterprises shall apply to relevant authorities for permission to change land use^[5]. The review and approval of land use change applications take 30 days, starting from the applicant's submission of complete materials.

Forest projects are one such project type that requires land use. In fact, changing forest land use must comply with relevant laws and regulations including the *Law on Land*, and overall plans for forest development and protection, adopted by relevant authorities. Applicants for changing forest land use need to provide the following materials: detailed information regarding the investment project, investment permit, environmental impact assessment report on changing the use of forest land, compensation plan for removal of forest surface adopted by relevant departments, and afforestation plans prepared by relevant departments.

In addition to law compliance to obtain land use rights, Article 94 of the *Law on Land* clearly stipulates that land used for mineral development shall meet the following conditions: on the basis of a land lease contract, relevant provisions of the mineral exploitation permit should be complied with, and mineral prospection and exploitation timelines should be followed; proper measures should be taken to protect the environment and dispose of waste, and preclude losses caused to users of the surrounding land and the local community; when the project is completed, land users should restore the land to a state as stipulated in the land lease contract^[6].

[6] *Law on Land*, Art. 94.

5.2 Project Profile

In June 2008, General Secretary of the Communist Party of Vietnam Nong Duc Manh and his Chinese counterpart Hu Jintao signed a joint declaration that the two countries would conduct cooperation in bauxite exploitation and aluminum oxide production. Later in July, Vietnam National Coal and Mineral Industries Group (Vinacomin), signed an Engineering Procurement Construction (EPC) agreement with China Aluminum International Engineering Corporation Limited (CHALIECO) and outsourced the EPC responsibilities including the integrated production facilities for aluminum oxides and supporting facilities for the project to CHALIECO. The integrated production facilities include a bauxite exploitation factory, sorting equipment, and an aluminum oxide factory with an annual production capacity of 650,000 tons; the supporting facilities of the project include two hydropower plants and one red mud holding pond, with a total EPC contractual value of USD 466 million^[7].

[7] PRC State-Owned Assets Supervision and Administration Commission, "CHALIECO Signs EPC Agreement with Vietnam's Tan Rai Aluminum Project," July 30, 2008. Available at <http://www.sasac.gov.cn/n86114/n326638/c878478/content.html>.

[8] CHALIECO, "Tan Rai Aluminum Oxide Project to Start Production," June 25, 2013. Available at <http://news.cnal.com/enterprise/2013/06-25/1372135055335648.shtml>.

[9] CHALIECO, "Tan Rai Aluminum Project's 2014 Capacity Reaching 75%," February 12, 2015. Available at <http://news.cnal.com/enterprise/2015/02-12/1423700909398343.shtml>.

Tan Rai Project kickstarted construction at the end of 2008 and planned to start production in 2011. However, the project was delayed for a few months by design adjustments to the red mud pond, the rainy season, and incomplete administrative procedures. The project was transferred to Vinacomin, the owner, and started production in September 2013^[8].

The aluminum oxide factory's production was 485,000 tons in 2014, completing 75% of the design capacity. Most of the products were exported, primarily to Switzerland, Singapore, Japan, Korea, and China^[9]. Tan Rai Project created USD 157 million worth of National Industrial Output in 2014 and USD 8.98 million worth of fiscal revenue. Once the design capacity is reached, this project will create an output worth of USD 202 million and offer 1,200 jobs with a monthly salary of USD 270.

5.3 Public Concerns

As Vietnam's first bauxite mining and aluminum oxide production project, the Tan Rai Project has caused much attention and raised concerns regarding its environmental and social impact from its inception.

[10] "CHALIECO's Vietnam Plan Impeded, General Vo Nguyen Giap Led the Opposition," *International Herald Tribune*, May, 2009, *available at* http://news.ifeng.com/mil/1/detail_2009_05/20/507493_0.shtml.

In 2008, environmentalists launched protests because the project began bauxite mining without having conducted an environmental impact assessment. In 2009, the famed General Vo Nguyen Giap sent a letter to Prime Minister Nguyen Tan Dung advocating for the government to end the project by voicing concerns about the project's impact on the environment, immigration and its threats to homeland security. In the same year, Parliamentarians raised the point to Parliament that the Tan Rai Project violated Decision 66 of 2006 by not reporting to Parliament. In it, they demanded that Parliament investigate into the matter, even if the project received more than USD 110 million investment^[11].

[11] Thayer, Carlyle A., "Political Legitimacy of Vietnam's One Party-State: Challenges and Responses," *Journal of Current Southeast Asian Affairs*, Vol. 28, Issue 4, pgs. 47-70 (2009). *Available at* <http://journals.sub.uni-hamburg.de/giga/jsaa/article/view/170>.

Some of the main objections held that Tan Rai Project was on the highland 1,000 meters above sea level; and worse still, it is located on the upstream of a river, which, in cases of red mud leakage, could impose immense stress on the eco-system. Former Deputy Prime Minister Madam Nguyen Thi Binh submitted a letter jointly signed by a dozen scholars, requesting that the Politburo reconsider the bauxite project^[12].

[12] "Intellectuals Urge the Party and State to Halt Bauxite Projects," *Vietnam Net*, October 23, 2010. *Available at* <http://english.vietnamnet.vn/en/special-report/633/intellectuals-urge-the-party-and-state-to-halt-bauxite-projects.html>.

As for land expropriation and restoration, the project amended its land reclamation plan in response to opposition. The original plan was expropriating land for ten years of bauxite mining, permanently taking away the 2,000-hectare land but would provide economic compensation for the residents. But objections maintained that those residing in far-flung areas that relied on land for survival lacked money management skills. Therefore they potentially could plunge back into poverty if they lost their land merely for economic compensation. The new plan is for Vinacomin and CHALIECO to lease land, and remove and store the surface earth before mining. In 2-3 years when the mining ends, the stored surface earth will be restored, land reclaimed and returned to the residents. Despite avoiding land loss for the residents, objections were still there, pointing to a possible failure of land restoration, given that in the four-month rain season in the central highlands, the restored surface earth could be flushed away.

[13] “Unskilled Chinese workers flow into Vietnam,” Vietnam Net, April 26, 2009. Available at <http://www.vietcatholic.net/News/Html/66519.htm>.

[14] “2 Bauxite Plants in Lam Dong at Risk of Loss,” Tuoitre News, May 13, 2013. Available at <http://tuoitrenews.vn/society/9545/2-bauxite-plants-in-lam-dong-at-risk-of-loss>.

[15] Doan Trang, “A Look Back on the Bauxite Mining Project: A Big Loss,” Vietnam Right Now, May 17, 2015. Available at <http://vietnamrightnow.com/2015/05/a-look-back-on-the-bauxite-mining-project-big-loss/>.

[16] “MOIT, Experts Disagree on Bauxite Projects,” Vietnam Breaking News, June 9, 2015. Available at <http://www.vietnambreakingnews.com/2015/06/moit-experts-disagree-on-bauxite-projects/>.

[17] Pan Nature, “After many years, Vietnam authority, investor still struggle to justify bauxite plants,” April 9, 2015. Available at <http://www.nature.org.vn/en/2015/04/after-many-years-vietnam-authority-investor-still-struggle-to-justify-bauxite-plants/>.

Labour security-wise, opinion-holders led by General Vo Nguyen Giap argued that, the central highlands had strategic importance, and that a massive inflow of Chinese workers would endanger Vietnam’s homeland security. Such an opinion was attributable to reports that Chinese contractors, including for Tan Rai Project, tended to recruit thousands of Chinese workers, the number of which even exceeded that of the locals^[13]. Also out of homeland security concerns, despite previous invites for foreign investment into Tan Rai Project, the financing plan to introduce foreign capital from Alcoa in the US and Yunnan Metallurgical Group in China was vetoed.

Moreover, ever since the launch of the project, there have been reports questioning whether it was economically feasible, and there were even suspicions that huge losses were incurred.^{[14][15][16]} Opponents claimed that the project was highly leveraged, had a long payback period, and that because the bauxite and aluminum oxide factories were in the highlands, transportation would be very inconvenient and would further reduce profits. As of now, the aluminum oxide factory has not yet realized its design capacity. External doubts pin the cause down to CHALEICO’s sub-par training for Vietnamese employees, while others claim that China employed outdated technologies for the Tan Rai Project^[17].

5.4 Responses and Measures of the Government and Enterprises

Regarding the doubts and denouncements of the Project, in 2008, the protests by a few environmentalists did not elicit a response from either the government nor the involved companies. As General Vo Nguyen Giap and an increasing number of scholars and government officials openly opposed the Project, the government, on the one hand, insisted that Tan Rai Project would continue; on the other, it hosted discussions to listen to objections from all sides.

In 2009, opposing voices became louder, and Prime Minister Nguyen Tan Dung instructed the Ministry of Industry and Trade to submit to the Politburo an application to continue the project and designated Deputy Prime Minister Hoang Trung Hai to host national seminars on the bauxite project. The Deputy PM announced in the seminar that the government would not proceed with the bauxite project “at any cost,” issued orders to amend the Project’s plan, and demanded an environmental impact assessment^[18].

Meanwhile, the Parliament asked the government to submit a special report on the central highland bauxite project. According to the report, despite the Tan Rai Project’s large investment, the application for approval was submitted in terms of single sub-projects like the aluminum oxide factory, and the investments of single projects fell short of USD 110 million threshold that would require the project report to the Parliament for approval. Moreover, the Parliament hosted a discussion session on the bauxite project, in which voices of support and objection were fully expressed; and a decision was made to require relevant parliamentary committees to research into bauxite projects for approval, and report the results to Parliament^[19].

[18] Thayer, Carlyle A., “Political Legitimacy of Vietnam’s One Party-State: Challenges and Responses,” *Journal of Current Southeast Asian Affairs*, Vol. 28, Issue 4, pgs. 47-70 (2009).
Available at
<http://journals.sub.uni-hamburg.de/giga/jsaa/article/view/170>

[19] *Ibid.*

[20] Source: the writer's interview with professors and CHALIECO, May 2015.

[21] "Deputy PM urges bauxite plant's safe operation," Vietnam, February 11, 2014. Available at <http://en.vietnamplus.vn/deputy-pm-urges-bauxite-plants-safe-operation/56298.vnp>.

[22] "No foreign labor for bauxite project: government" , Vietnam Breaking News, May 26, 2009. Available at <http://www.vietnambreakingnews.com/2009/05/no-foreign-labor-for-bauxite-project-government/>.

[23] "Deputy PM plays down bauxite project worries" , Vietnam.net, May 24, 2013. Available at <http://english.vietnamnet.vn/fms/business/75015/deputy-pm-plays-down-bauxite-project-worries.html>.

[24] "Vietnam exempts equipment import duty for Tan Rai bauxite project" , Invest in Vietnam.vn, September 11, 2013. Available at <http://investinvietnam.vn/Ing/2/detail/7651/Vietnam-exempts-equipment-import-duty-for-Tan-Rai-bauxite-project.aspx>.

[25] "Confirming the Effectiveness of Bauxite Projects in Central Highlands" , Vietnam Breaking News, April 16, 2014. Available at <http://www.vietnambreakingnews.com/2014/04/confirming-the-effectiveness-of-bauxite-projects-in-central-highlands/>.

[26] "PM Nguyen Tan Dung: Lam Dong Bauxite -Aluminum Project has confirmed the correctness of a policy" , Vinacomin, February 10, 2015. Available at <http://www.vinacomin.vn/en/news/News-of-Vinacomin/PM-Nguyen-Tan-Dung-Lam-Dong-Bauxite-Aluminum-Project-has-confirmed-the-correctness-of-a-policy-1864.html>.

In terms of environmental issues, the red mud stacking premise was designed by CHALIECO and was constructed by a local Vietnamese company. The "wet disposal" approach was applied to all the red mud to prevent dust. Inspections proved the absence of radioactive elements in the red mud of Tan Rai Project, and there are already professors experimenting with using the project's red mud to make bricks and planning for further research into how the economy of scale can be achieved in the brick production. CHALIECO is considering using the red mud for iron-making and announced its ongoing talks with the government on relevant matters^[20]. In February 2014, Deputy Prime Minister Hoang Trung Hai visited Tan Rai Project, and urged the Project Management Board to strengthen environmental monitoring, and research into red mud disposal approaches. He also encouraged scientists to further their efforts and translate experiments into industrial production^[21]. Labour-wise, the government declared in May 2009 that the project would mostly use domestic workers, and required Vinacomin to hire foreign experts only when necessary^[22].

In response to the public's concerns over Tan Rai Project's economic feasibility, Deputy PM Hoang Trung Hai^[23] said on multiple occasions that the project would definitely make a profit. In 2013, the Ministry of Finance decided to exempt equipment import duties for the Tan Rai Project^[24]. In 2014, the Deputy PM said in a regular press conference held by the Ministry of Industry and Trade, that the project would start to make a profit in 12-13 years^[25]. In 2015, Prime Minister Nguyen Tan Dung said after a visit to the project that its success should stand as a model, and that the government would support projects of its kind, by removing policy or institutional barriers. The PM also encouraged other projects to go into production and claimed that Vietnam ought to develop more bauxite projects, and that private shareholders were allowed to expand project size.^[26]

As the contractor of the project, even though the Chinese company didn't suffer direct economic losses due to disputes, it was instead questioned and criticized regarding its technology and the hiring of workers. As for Vietnam's questions about the backwardness of the plant's technology and the sub-par training provided to the workers, which resulted in the "failure to reach the design capacity," CHALIECO pointed out in an interview with the writer that this issue is attributable to the weak industrial foundation of Vietnam, and the lack of such disciplines at the country's universities, which resulted in the insufficient knowledge on the part of the workers. Even after being trained, local workers still could not firmly grasp how to operate the equipment, causing the failure to reach the production capacity of aluminum oxides^[27].

[27] Source: the author's interview with CHALIECO, May 2015.

The criticism surrounding the company's hiring practices were that the Chinese company hired a large number of Chinese workers instead of local ones and that the influx of Chinese workers into the central highlands would threaten Vietnam's homeland security. In an interview, the company responded by saying that it was necessary to hire Chinese workers despite the lower cost of recruiting Vietnamese workers and the company's effort to hire locally. In fact, the firm said they experienced problems including barriers to communication and management, and that the local workers lacked technological proficiency. Additionally, the company said that compared to Chinese workers, the Vietnamese workforce demanded shorter periods of salary distribution and shorter working hours. In fact, as per Vietnam's regulations, working in Vietnam for under 6 months does not require a work permit; this period was later amended to 3 months. As most Chinese workers only stay in Vietnam for 1-2 months, there is no need to apply for a permit. The company also addressed that while there are many Chinese workers slated to work in Vietnam for the Tan Rai project, only 200-300 persons are on site at the same time and the maximum number of people does not exceed 500. For this reason, CHALIECO believes that these media reports^{[28][29]} about the influx, have likely been exaggerated.

[28] "Unskilled Chinese workers flow into Vietnam" , VietNamNet, April 26, 2009. Available at <http://www.vietcatholic.net/News/Html/66519.htm>.

[29] "Thu từ 'Ghi chép trên công trường bô-xít Tân Rai" , VietNamNet, April 15, 2009. Available at http://www.tin247.com/ghi_chep_tren_cong_truong_boxit_tan_rai-1-21410295.html. (Vietnamese).

5.5 Analysis and Suggestions

Despite being a key national project planned and promoted by the government with strong support and preferential policies from Vietnam's government leaders, the Tan Rai Project still triggered extensive public concerns and doubts due to its potentially severe environmental and social impact. It is Vietnam's first bauxite mining and aluminum oxide project, and the problems encountered during construction and operation are harbingers for potential industry challenges going forward, and serve as an important source of lessons for follow-up projects.

In terms of environmental impact, the initiation of mining with no prior environmental impact assessment raised public questioning. Further, the application for investment permits for single sub-projects, and hence the failure to report to Parliament for approval, exacerbated the doubts and criticisms from the political community including the Parliament. The joint issuing of letters and voicing of objections by military and academic elites, led by General Vo Nguyen Giap, further placed the Tan Rai Project under media and public scrutiny.

Confronted with criticism from multiple sides, decision-makers headed by Prime Minister Nguyen Tan Dung took immediate action and expressed their position. On the one hand, seminars and discussions were held to take heed of opinions from all sides, and public responses were issued to objections via adjusting the project's plan to reduce its environmental and social impact; on the other hand, the government insisted on the strategic importance of Tan Rai Project for the country's bauxite industry, and steadily proceeded with the project. The government's active efforts to collect advice and publicly and transparently respond to questions and doubts managed to optimize the project's circumstances and its social plan and averted the escalation of events into public turmoil that could cause substantial economic losses and severe social clashes.

In addition, judging from the amendments to the project's financing plan and the objections of opinion-holders to the influx of Chinese workers, it can be concluded that the Vietnamese government and society are still rather conservative and prudent in mineral exploitation and resource development, and restrict foreign capital investments. Due to technological and expertise disadvantages, Vietnam does not reject foreign enterprises, but once a disproportionate number of foreign nationals are hired, uneasiness among local residents and even in wider areas will ensue. With political willingness to develop bauxite mining and aluminum oxide production and competitive edge for Chinese enterprises, they still need to deepen exchanges and interactions with Vietnamese communities, and gain approbation for its technological, environmental and social reputation, so that they can stand out from industry competition, and acquire more contracts and investment opportunities.

Based on the analysis of this case, we provide the following recommendations for enterprises with mining and resource development operations in Vietnam:

1. Strict Compliance with the Host Country's Laws and Regulations, and the Adoption of the Industry's Best Practice

Mining projects tend to have a potentially severe environmental and social impact, hence the intense interest and extensive concerns from environmental protection organizations, residents in the project's area, and the media. Measures including gaining all administrative permits and completing the environmental impact assessment according to law, and adopting industry best practice so as to control environmental and social impact, will not only add to the public credit of the project per se but also avoid delays and extra costs caused by inspections or objections during project execution.

In 2014, China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters issued the Guidelines on Corporate Social Responsibility for China's Outbound Mineral Investment Industry^[30]. The *Guidelines referred to multiple international standards of the industry*, and offered instructions in eight areas ranging from the corporate governance of outbound mineral investment enterprises, equitable operation practices, supply chain management, human rights, laborer practice, occupational health and safety, environment, to community participation, and provided detailed implementation procedures. Enterprises bound for mineral investment and engineering contracting in Vietnam, can not only refer to the guidelines for projection optimization and the formulation of corporate governance policies, but also apply to become pilot projects, and attend the Chamber's guideline training events.

2. Open Response to Questions and Doubts, and Understanding Stakeholders' Needs

Due to the varying priorities of enterprises, governments, and community residents, different parties naturally hold varying views regarding the same mineral project. Interviews with enterprises revealed that Chinese enterprises in Vietnam encountered similar problems in local staff management and the communication with private organizations like environmental protection agencies and the media. In fact, enterprises take public evaluations of a project very seriously, but as for doubts or objections, some enterprises did not respond directly. Reasons could be a lack of corresponding mechanisms, or a belief that queries and doubts were raised by dissenters, and that direct response would not generate positive feedback.

[30] China Chamber of Commerce of Metals, Minerals & Chemical Importers & Exporters, *Guidelines for Social Responsibility in Outbound Mining Investments*. Available at https://www.emm-network.org/wp-content/uploads/2015/03/Guidelines_for_Social_Responsibility_in_Outbound_Mining_Investments.pdf.

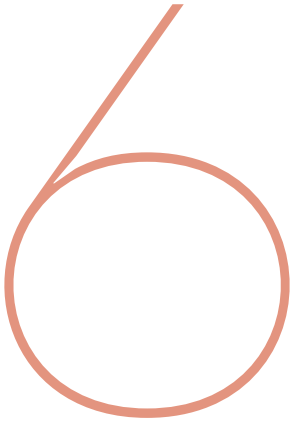
The Tan Rai Project showed that when an investment project was doubted, misunderstandings caused by asymmetrical information can be resolved via timely contacts with relevant persons, explanations, information disclosure, seminars, etc. Reasonable objections should be earnestly heeded and adopted, so as to optimize the project's plan, and proceed more smoothly with the project. The Vietnamese government's attitude and measures regarding the Tan Rai Project are a good reference for enterprises to consider.

In terms of corporate systems and project management, due diligence, third-party consultations, and public participation are ways to understand the main requests of stakeholders, which should be incorporated into the project's design, and public recognition ought to be obtained as early as the initial phase of the project. Moreover, enterprises can establish the project's information disclosure mechanisms, direct information to those with queries or doubts, hold level-headed talks with dissenters, and defuse misunderstandings and pacify conflicts.

3. Build Communication and Exchange Mechanisms, and Conduct Responsible and Sustainable Investments

It was learned from interviews with Vietnamese private organizations and government that Chinese enterprises rarely attend Vietnam's enterprise meetings and orientations on new policies, hosted by semi-official organizations. In these meetings, enterprises from other countries usually voice their opinions on government policies, and even jointly propose policy recommendations at times. Due to long-time absence, Chinese enterprises did not manage to convey their appeals and difficulties to the government and missed the opportunity to impact policy and resolve problems via such an important avenue.

Therefore, we recommend that enterprises establish dedicated departments or put in place the needed personnel to communicate with the government, relevant organizations and institutions, the media, and the local workers. Enterprises should inform themselves in a timely fashion of policy changes, voices from all sides, and the needs of workers. And based on such information, stakeholders should be informed of the enterprise's ongoing efforts, difficulties, and needed policy or information assistance. Chinese enterprises should work with Vietnamese communities to jointly establish stable and friendly investment environments, build effective long-term corporate social responsibility mechanisms, and conduct responsible and sustainable investments in Vietnam.





Case Study of the Long Jiang Industrial Park

6.1 Industry Profile

6.2 Project Profile

6.3 Environmental and Social Requirements

6.4 Corporate measures and corresponding actions

6.5 Advice for Chinese Investors

Author: Qijia YANG, Chinese Academy for Environmental Planning.

Long Jiang Industrial Park is one of the only two Chinese-invested industrial parks in Vietnam. It is built by Zhejiang Province Qian Jiang Investment Management Co., Ltd., and is a home for electronic, wood product processing, manufacture equipment, building materials and all sorts of manufacturing enterprises. Vietnam has relatively stringent management in industrial parks. Both its Law on Environmental Protection and the Investment Law have sections that specifically address the environmental and social responsibilities of the parks and enterprises in them. In accordance with government requirements on both environmental and social responsibilities, Long Jiang Industrial Park has developed in-depth knowledge and understanding of local laws and regulations since its construction. Not only is its long-term development plan aligned with the relevant laws and regulations, but it is also equipped with comprehensive environmental protection facilities, it complies with social security requirements, and fulfills social responsibilities to the local communities. Long Jiang Industrial Park is an exemplary case that other Chinese investors in Vietnam could learn from. It serves as a model that encourages investors and enterprises to meet local development need and comply with environmental regulations in order to facilitate the technology exchange between the countries as well as local economic growth.

6.1 Industry Profile

Since the Doi Moi reform, the Vietnam government has attached great importance to the development and construction of industrial and economic zones, which are set as the focal point for foreign capital. As of the end of June 2013, there are 289 industrial zones, 15 coastal economic zones and 28 ports economic zones in Vietnam. There are 4,665 projects in the industrial zones with a total investment of USD 70 billion. Coastal economic zones have attracted USD 40 billion foreign investment and port economic zones have attracted foreign investment USD 700 million^[1].

[1] PRC Ministry of Commerce, Vietnam Industrial and Economic Zones Becoming the Centre of Foreign Investment. Available at <http://www.mofcom.gov.cn/article/i/jyj/j/201306/20130600175799.shtml>. (Chinese).

The Vietnamese government has launched a series of preferential tax benefits to attract companies enter and operate in the industrial and economic zones. Companies located in industrial zones, economic zones, export product processing zones and high-tech zones will enjoy exemptions in income tax, import duties, and VAT, etc. (see table 6-1).

Table 6 - 1 Industrial Park Tax Policy Benefits

Tax categories	Tax benefits
Export tax	Exempted
Import tax Company income tax	Imported equipment that constitutes as fixed assets, various supplies, raw materials and goods that are used in the production and operation are tax exempted.
VAT	Exempted
Profit tax	Exempted

Chinese enterprises' investment in Vietnam industrial parks is still in its infancy. Currently, there are only two projects. One is Shenzhen - Haiphong Economic and Trade Cooperation Zone, which is located in the coastal city Hai Phong in northern Vietnam, and the other one is Long Jiang Industrial Park near Ho Chi Minh City. The Shenzhen - Haiphong Economic and Trade Cooperation Zone mainly cater to enterprises in electronics, clothing, upmarket daily necessities and other light industrial items, and is currently in the phase of recruiting investment. Long Jiang Industrial Park is mainly for electronic, wood product processing, manufacture equipment, building materials and all sorts of manufacturing enterprises. Long Jiang' s first Chinese-funded enterprises are already in operation in the park.

Building industrial and economic zones overseas can provide Chinese investors a good platform to explore and develop the overseas market, which has a monumental significance to push Chinese companies to go global. This chapter uses Long Jiang Industrial Park as an example on its successful experience in environmental and social responsibilities.

6.2 Project Profile

Long Jiang Industrial Park is located in Xin Fu County, Tien Giang Province, Vietnam, built by Zhejiang Province Tien Giang Investment Management Co., Ltd. The park covers 600 hectares, including 540 hectares of industrial area and 60 hectares of the residential service area, a total investment of USD 105 million. Long Jiang Industrial Park is an integrated industrial park with planning for electronics, electrical products, machinery manufacturing, wooden products, light industry, building materials, biopharmaceuticals, agricultural and forestry products processing, rubber products, paper manufacturing and products, manmade fibers, etc.

Presently, phase one has been developed and established with 24 enterprises receiving licenses (see table 6-2). It is estimated that the park will house 100-200 enterprises after completion, will create 50,000 – 100,000 jobs and produce a USD 4.5 billion production value annually which will resolve local employment issues and push the market forward. As of September 2015, there were only 4800 workers employed at Long Jiang^[2].

[2] Long Jiang Industrial Park.
Available at
http://ljip.vn/web/index.php?option=com_content&view=category&layout=blog&id=53&Itemid=78&lang=en.

Table 6 – 2 Long Giang Industrial Park Enterprises List

Index	Company name	Country of Origin	Industry	Investment Funds (USD Million)	Area (HA)
1	Sea Bright (Viet Nam) Copper Co., Ltd.	China	Copper tubing	55	17.1
2	Viet Nam Heruikang Edible Oil Co., Ltd	China	Edible Oil	4	2.0
3	JiangnanPackaging Viet Nam Co., Ltd	China	Wood packaging	3	1.5
4	Founder Motor (Vietnam) Co. Ltd	China	Electric Motor	3.8	1.5
5	SUNJIN VINA MEKONG CO., LTD	Korea	Animal feed	6	3.1
6	Brilliant Vietnam Gelatin Co. Ltd.	China	Food	5	2
7	Loctek Ergonomics Vietnam Company Limited	China	Production and Processing racks	12	4.8
8	Vietnam Neo East Asian Arts and Crafts Co., Ltd.	China	Handbags	1	1.2
9	SU PACIFIC EDIBLE OILS CO., LTD	Singapore	Rice Bran oil	1.2	1.5
10	Texhong Yinlong Textile Ltd.	HongKong, China	Yarn	350	56.3
11	NISSEI ELECTRIC MYTHO CO., LTD	Japan	Electrical appliances	4.7	3.0
12	LOCK & LOCK LIVING	Korea	Kitchenware	150	25.8
13	EBISUYA Co., Ltd	Japan	Plastic packaging	7.5	2.0
14	Tien Giang Province International Agricultural nutrition Ltd.	Malaysia	Feed & Fodder	3.5	3.0
15	Kangna Vietnam Textile Co., Ltd	China	Textile	41	12.2
16	Vinmay Stainless (Vietnam) Steel Co. Ltd.	China	Stainless Steel	4.7	1.0
17	Sanqi (Vietnam) New Material Co., Ltd.	China	Non-woven fabric products	10	1.7
18	Yongfeng Package Co., Ltd.	China	Plastic	8.6	1.6
19	Kaida Plastic (Vietnam) Co., Ltd.	China	Plastic, textile	2	0.6
20	Apache Footwear Vietnam Co., Ltd.	Taiwan	Footwear	15	7.7
21	JL Precision Industries Co., Ltd.	Taiwan, Australia	Die Equipment	3	1.1
22	Leow Casing Vietnam Co., Ltd.	Hong Kong	Sausage Casing	4	2.0
23	Yegin Industry (Vietnam) Co., Ltd.	Taiwan	Manufacturing of sports equipment	22	2.9
24	Hua Chang Vina Science and Technology Co. Ltd.	Hong Kong	N/A	16	3.3

Note: N/A means information unavailable

6.3 Environmental and Social Requirements

The Vietnamese government has a relatively stringent management in industrial parks and has introduced a series of laws and regulations to manage park developers and enterprises. The *Law on Environmental Protection* has specifically stipulated environmental protection aimed at industrial zones^[3]:

[3] *Law on Environmental Protection*, No. 55/2014/QH13, June 23, 2014, Art. 66, Art. 125(3), Art. 127(3).

- Industrial zones must have a dedicated environmental protection department, park planning and operation must be in accordance with the laws and regulations;
- In terms of environmental monitoring, zone management departments must collaborate with local environmental authorities and submit development reports in accordance with the provision of the law;
- Industrial parks should implement government-designed monitoring programs and report to regulatory agencies on environmental protection, and properly manage environmental monitoring data and make it public as required by law.
- Industrial zones must establish centralized wastewater collection and treatment facilities in accordance with the law, and install continuous monitoring equipment and sewage flow meters. Sewage can only be disposed of when its treatment reaches the sewage treatment standard. Local environmental monitoring department will conduct an inspection, and companies who dispose of sewage exceeding the standard will be punished and penalized.

[4] Decree No. 18/2015/ND-CP on Environmental Protection Planning, Strategic Environmental Assessment, Environmental Impact Assessment and Environmental Protection Plans, February 15, 2015, Appendix III.

In addition, all industrial parks must conduct an environmental impact assessment prior to construction, and the EIA reports for industrial parks as large as Long Jiang must be reviewed and approved directly by MONRE.^[4] Individual enterprises wishing to invest in an industrial park must submit their own environmental impact evaluation to the provincial level Department of Natural Resources and the Environment (DONRE) in order to obtain a construction permit^[5].

[5] Long Jiang Industrial Park. Available at http://ljjp.vn/web/index.php?option=com_content&view=category&layout=blog&id=38&Itemid=62&lang=en.

Regarding social responsibility, the Vietnamese government attaches high importance to maintaining legal rights for local workers. Article 25 of the *Law on Investment* specified that foreign enterprises and joint ventures have the right to recruit and hire workers to meet the business need and should give priority to recruit Vietnam citizens. For positions that have high standard technical and management requirement which cannot be met by local workers, enterprises have the rights to hire foreigners, however, must provide equivalent training to local workers. From January 01, 2015, the Vietnam government has increased minimum wages to VND 3.1 million, 2.75 million, 2.4 million and 2.15 million in regions 1 to 4, respectively.

6.4 Corporate Measures and Corresponding Actions

In accordance with government requirements on both environmental and social responsibilities, the construction of Long Jiang Industrial Park is in adhering to compliance management, enforcing great effort to integrate into the local community, binding its development and growth together with local economic development and making its contribution to Vietnam's economic development.

In the progress of the park construction, Long Jiang is in accordance with the local laws and regulations for its long-term development planning. The park eliminates polluting industries during its investment recruitment process, reducing polluting companies from the source. In terms of pollution control, the park has completed and put into operation a wastewater treatment plant of 48,000 cubic meters^[6] daily capacity to deal with sewage treatment for companies in the park. In the area of social responsibilities, the park largely hires local workers, helping to solve local employment issues and promoting a long-term healthy development in the local market. Long Jiang Industrial Park takes specific measures including the followings:

[6] Long Jiang Industrial Park, "Water Supply." Available at http://ljiip.vn/web/index.php?option=com_content&view=category&layout=blog&id=48&Itemid=73&lang=en.

1. In-depth knowledge and understanding of local laws and regulations

The key to successful foreign investment projects is to comply with local laws and regulations. The Long Jiang Industrial Park, as a platform for Chinese-funded enterprises, not only stringently complied with legal requirements during its construction process, it also communicated regularly with local government, keeping abreast of changing policies, laws, and regulations. Moreover, the Park provides enterprises with legal training on taxation, environmental protection, and social responsibilities. Assisting companies to familiarize and assimilate into the new environment and legal compliance requirements reduce unnecessary hiccups. Sea Bright Co., Ltd was awarded by the Vietnamese government for "Outstanding Contributions to Social Security" in 2012 for park's great effort in helping enterprises to understand local laws. Companies inside the park pay high regards to the environment protection as well as social responsibilities.

2. Equip with comprehensive environmental protection facilities

Since its construction in 2007, Long Jiang Industrial Park has stringently complied with the requirement of the *Law on Environmental Protection* and has logically segmented the park in various functional sections providing enterprises a unified environmental service. A daily 48,000 cubic meter capacity wastewater treatment plant is in operation, providing waste water and waste collection and integrated process for in-park enterprises, ensuring minimal pollution in the park.

3. Strict compliance with social security requirements

The park meticulously follows new wage standard enforced by the Vietnamese government in 2015, as the minimum wage in the park is VND 3.1 million per month. In the area of social security, in-park enterprises pay social insurance, medical insurance, and unemployment insurance for their workers at a value equivalent to 22% of their basic salary.

4. Actively fulfill social responsibility

In its development process, the park pays immense effort to communicate with local government, making an effort to integrate into the local society. The park can provide employment opportunities for a vast number of local workers, making a contribution to the local economic development. It is also actively involved in establishing schools in surrounding areas and building housing facilities for the poor and less fortunate in the society.

In the area of recruiting investment, Long Jiang Industrial Park participated in numerous investment activities hosted by the Tien Giang provincial government, attracting enterprises that meet with local government requirements. During the process of screening investments, the park rejected many dyeing and printing companies in order to comply with the environmental and ecology protection emphasized by both China and Vietnam governments.

6.5 Advice for Chinese Investors

The following recommendations are for enterprises entering Vietnam based on the experience of Long Jiang Industrial Park:

1. Encourage investment in the business park

Long Jiang Industrial Park provides an excellent production environment and operation platform for investment enterprises entering Vietnam. The park provides factories and assistance in license application and procedures which are effective in helping businesses control upfront investment costs, cut downtime cost and proceed with normal production and operation as soon as possible. Legal training and advisory services provided by the park may reduce the corporate risk due to unfamiliarity with local investment policies and customs. In addition, the comprehensive wastewater and sewage treatment facility can also enable companies to avoid potential environmental issues and disputes which may arise.

2. Encourage new and high technology enterprises to invest in Vietnam

With its accelerating reform process, Vietnam's national economic development, industrial policies, and environmental standards are increasingly advancing. Companies that are not in line with local government investment standards will not be able to stay. Some Chinese companies in the high energy and high pollution industries tried to relocate in Vietnam but failed. Encouraging new and high technology enterprises to invest in Vietnam under the guidance of the two countries' industrial policies will not only benefit technology exchange and economic development of the two countries but also reduce investment activities impact on the environment.

3. Encourage investment in industrial parks

Though China has completed two development zones in Vietnam, its zoneage is still in its infancy in comparison with other developed countries, such as Japan and South Korea. With more and more Chinese companies investing in Vietnam, there is a need for more enterprises to participate in economic zones development overseas. It is necessary to encourage qualified enterprises to invest and develop in offshore industrial and economic zones, attracting other enterprises and companies to invest in Vietnam, and reduce investment and social risks through in-park training.

Conclusion

Appendix A Acronyms and Abbreviations

Appendix B Governmental Structure of Vietnam

Appendix C Table of Vietnam ' s Environmental Laws and Policies

Conclusion

Vietnam's economic incentives, including low labor costs and low tax rates, have made it an attractive place for foreign investment, particularly in the manufacturing and processing industry. However, the ratio of foreign investment in Vietnam's GDP dropped significantly in recent years, from 26% in 2009 to 11% in 2014. This decrease can most likely be attributed to the country's complicated investment application and documentation process as well as overall weak support for investment.

To address this decline in foreign investment, Vietnam in 2015 amended its *Law on Investment* and *Law on Enterprises*, both of which expanded the industry access to foreign investment, simplified investment approval proceedings, and improved operational autonomy. In the same year, Vietnam also released the new *Law on Environmental Protection* (LEP) and a *Decree on Environmental Protection Planning, Strategic Environmental Assessment, Environmental Impact Assessment and Environmental Protection Plans* (the EIA Decree). The LEP and EIA Decree include more detailed and stringent requirements on environmental impact assessment, public participation in environmental protection, and public access to environmental information. The promulgation of these laws demonstrate the Vietnamese government's desire to promote investment and stimulate economic growth that is not at expense of the environment and to promote economic growth through a "green transformation."

Of all foreign investors in Vietnam, China ranked 9th at the end of 2014 and accounted for 3.4% of Vietnam's total foreign investment. Compared to the other countries in the Mekong Region, namely Laos, Cambodia and Myanmar, China's investment in Vietnam is quite distinct. In fact, in each of the aforementioned three countries, China ranked as the biggest foreign investor. In terms of industrial distribution, Chinese enterprises in Myanmar and Laos are largely concentrated in the extractive and power industries, but Chinese firms in Vietnam mainly invest in the processing and manufacturing sector, such as machinery, electronics, and light industry.

The Vietnamese government is extremely cautious of foreign investment in large scale mining, energy or infrastructure projects. For this reason, Chinese firms are less likely to invest and seldom enter into economic cooperation via contracts. With few investment in these projects which have potentially huge environmental and social impacts, Chinese investment in Vietnam have rarely faced major environmental and social risks. However, an analysis of the Vinh Tan coal power plant phase II Project and Tan Rai Bauxite Project illustrate that as Vietnam's government strengthens its environmental policies, the awareness of the public on environmental issues had also increased along with the country's economic development. As such, once a project gets involved with environmental and social issues, or has high potential environmental and social impacts, Chinese companies will still face problems that will affect their reputation and economics, even as contractors.

Through our research, we found that Chinese enterprises in Vietnam are already experiencing some difficulties associated with insufficient communication between local environmental and investment government authorities, media and the public whom are affected by the project. When the investment or contracting projects experience problems, the Chinese firm will not take the initiative to publish information on the project or to clarify misleading media coverage. We also found that few of the Chinese enterprises in Vietnam participate in government consultation or training on the new policies. Additionally, the firms do not rely on the capability or knowledge of the chambers of commerce, media, or NGOs to aid in generating social acceptance for their project or firm. In these ways it is clear that the Chinese enterprises have great room for improvement in their local stakeholder relations.

With the establishment of the " One Belt, One Road" Initiative and the Asian Infrastructure Investment Bank, it is certain that more Chinese enterprises will strengthen economic collaboration abroad with countries, including Vietnam along the former initiative. To help enterprises prevent and control environmental and social impacts and risks of their projects, we combined the findings of our study to make the following recommendations:

1. Adopting Advanced Environmental Standards, and Protecting the Environment as a Way to Increase Competitiveness

As Vietnam's economy continues to grow, its government is beginning to take environmental protection more seriously. Vietnam is continually updating its environmental laws and regulations, and bringing its technology standards more closely in line with advanced international standards. The comparison between and selection of host country standards, China standards and international standards will become a "threshold" issue that engineering companies need to urgently address. In order to improve their reputation and competitiveness, enterprises investing or operating in Vietnam should actively select higher standards and employ state-of-the-art technologies to control pollution and protect the environment. They should also stay as up-to-date as possible regarding potential policy changes and new environmental protection requirements as a result of Vietnam's improved environmental consciousness.

2. Strengthening Follow-up Services including Personnel Training, and Enhancing Proprietor's Environmental Management Capability

Although the Vietnamese economy has grown rapidly since Doi Moi, certain industries are still in their early stages of development, technological and managerial personnel are in short supply, and the levels of professionalism of the workers available are not yet up to par for lack of experience.

Therefore, when enterprises proceed with EPC projects, they should not only formulate Environment, Health and Safety policies concerning the project's operation, but also offer special training on relevant technology and management personnel for the project proprietor, so that they can firmly grasp key procedures and measures of pollution control, in order to effectively prevent environmental and safety risks. In cases where the proprietor is not managing and operating the business properly, the contractor ought to bring to the proprietor's attention the right problems and offer suggestions, to help and urge him/her to adopt corresponding measures.

During design and implementation, EPC projects should adhere to relevant local regulations and recruit local workers as much as possible. Regulations formulated should take into account the locals' habits, cater to workers' needs, develop employees' skills, raise management' s professionalism, and overall, be respected.

3. Open Response to Questions and Doubts, and Understanding Stakeholders' Needs

Due to the varying priorities of enterprises, governments, and community residents, different parties naturally hold varying views regarding the same mineral project. Interviews with enterprises revealed that Chinese enterprises in Vietnam encountered problems in managing local staff and communicating with private organizations like environmental protection agencies and the media. In fact, enterprises take public evaluations of a project very seriously, but as for doubts or objections, some enterprises did not respond directly. Reasons could be a lack of corresponding mechanisms, or a belief that queries and doubts were raised by dissenters, and that direct response would not generate positive feedback, hence their silence.

In terms of corporate systems and project management, due diligence, third-party consultations, and public participation are ways to understand the main requests of stakeholders, which should be incorporated into the project's design. Public recognition ought to be obtained as early as the initial phase of the project. Moreover, enterprises can establish the project's information disclosure mechanisms, direct information to those with queries or doubts, hold level headed talks with dissenters, and defuse misunderstandings and pacify conflicts.

4. Building Communication and Exchange Mechanisms, and Conducting Responsible and Sustainable Investments

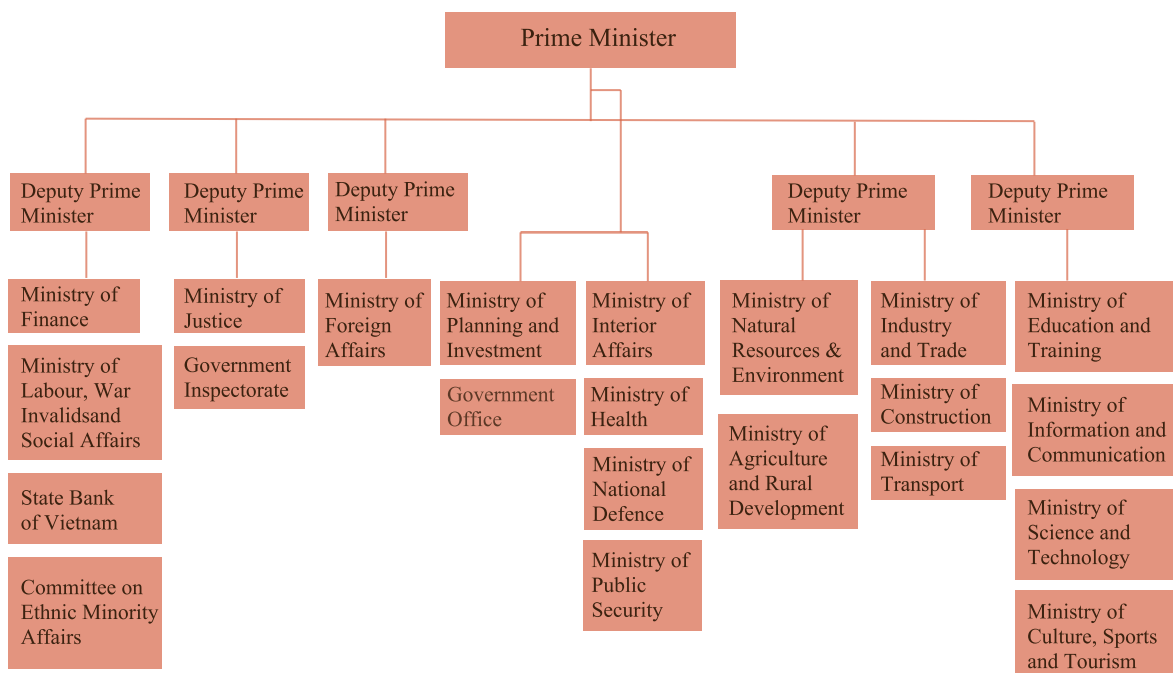
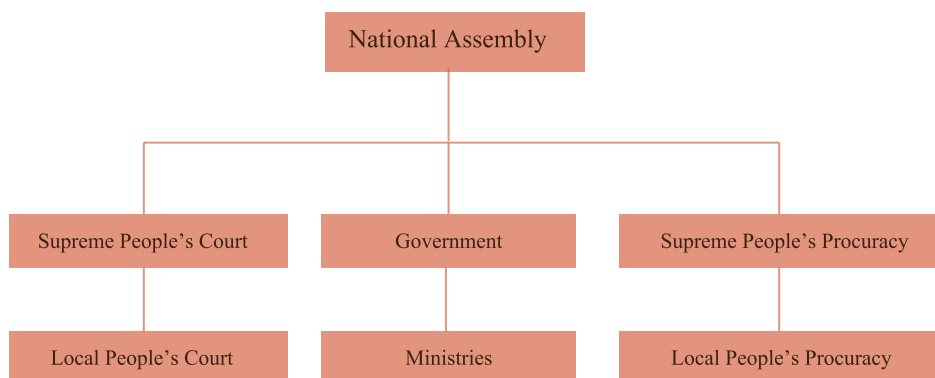
It was learned from interviews with Vietnamese private organizations and government that Chinese enterprises rarely attend Vietnam's enterprise meetings and orientations on new policies, hosted by semi-official organizations. In these meetings, enterprises from other countries usually voice their opinions on government policies, and even jointly propose policy recommendations at times. Due to long-time absence, Chinese enterprises were unable to appropriately convey their appeals and difficulties to the government and missed the opportunity to impact policy and resolve problems via such an important avenue.

Therefore, we recommend that enterprises establish dedicated departments or put in place the needed personnel to communicate with the government, relevant organizations and institutions, the media, and the local workers. Enterprises should inform themselves in a timely fashion of policy changes, voices from all sides, and the needs of workers. And based on such information, stakeholders should be informed of the enterprise's ongoing efforts, difficulties, and needed policy or information assistance. Chinese enterprises should work with Vietnamese communities to jointly establish stable and friendly investment environments, build effective long-term corporate social responsibility mechanisms, and conduct responsible and sustainable investments in Vietnam.

Appendix A Acronyms and Abbreviations

CAEP	Chinese Academy for Environmental Planning
CHALIECO	China Aluminum International Engineering Corporation Limited
DPI	Department of Planning And Investment
DRC	Democratic Republic of The Congo
EHS	Environment, Health And Safety
EIA	Environmental Impact Assessment
EPC	Engineering Procurement And Construction
EPP	Environmental Protection Plans
EVN	Vietnam Electricity
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GEI	Global Environmental Institute
LEP	Law on Environmental Protection
MOC	Ministry of Commerce
MONRE	Ministry of Natural Resources And The Environment
MPI	Ministry of Planning And Investment
NGO	Non-Governmental Organization
OFDI	Outward Foreign Direct Investment
PAC	Preliminary Acceptance Certificate
PECC2	Vietnam Second Electric Power Construction Consulting Co., Ltd
SEA	Strategic Environmental Assessments
SME	Small to Medium Enterprise
VASS	Vietnam Academy of Social Sciences
VEA	Vietnam Environment Administration
Vinacomin	Vietnam National Coal-Mineral Industries Group
VLS	Vermont Law School
WCS	Wildlife Conservation Society
WTO	World Trade Organization

Appendix B Governmental Structure of Vietnam





Appendix C Table of Vietnam’s Environmental Laws and Policies

Title	Issued by	Date	Notes
Constitution			
Constitution of the Socialist Republic of Vietnam	13th National Assembly of the Socialist Republic of Vietnam	November 28, 2013	<ul style="list-style-type: none"> ● Art. 3 – “The State shall...protect and guarantee human rights and citizens’ rights.” ● Art. 14(1) – states that human rights “shall be recognized, respected, protected and guaranteed in accordance with the Constitution and the law.” ● Art. 25 – guarantees citizens’ “right of access to information.” ● Art. 30(1) – guarantees “everyone” the “right to lodge complaints or denunciations about illegal acts of agencies, organizations or individuals with competent agencies, organizations, or persons.” ● Art. 43 – “Everyone has the right to live in a clean environment and has the obligation to protect the environment.” ● Art. 63(3) – “Organizations and individuals that cause environmental pollution, natural resource exhaustion or biodiversity depletion shall be strictly punished and shall rectify and compensate for damage.”
Laws			
Law on Environmental Protection, No. 55/2014/QH13	National Assembly	June 23, 2014	<ul style="list-style-type: none"> ● Section II, Arts. 13-17 address SEA requirements ● Section III, Arts. 18-28 address EIA requirements ● Section IV, Arts. 29-34 address Environmental Protection Plan requirements; investment projects that do not require an EIA must formulate an EPP ● Art. 46 – provides the “human community” with the right to “provide and request the provision of information about climate change issues.” ● Art. 131 – requires certain environmental information be made public, include SEAs, EIAs, EPPs, information on emissions sources and levels, and the results of environmental inspections

			<ul style="list-style-type: none"> • Art. 145 – guarantees “socio-political organizations” and “socio-occupational organizations” various rights with regard to access to information and involvement in environmental protection activities • Art. 146 – guarantees “local communities” various rights with regard to access to information and involvement in environmental protection activities • Art. 162 – Subsection 1 authorizes “organizations” and “individuals” to file a complaint or lawsuit against “any breach of environmental protection”; Subsection 2 authorizes individuals to “report any breach of environmental protection to the authorities according to the law on claims and denunciations
Law on Water Resources, No. 17/2012/QH13	National Assembly	2012	<ul style="list-style-type: none"> • Art. 55 – requires the assessment of environmental impacts of ‘water transfer’ projects
Mineral Law, No. 60/2010/QH12	National Assembly	November 30, 2010	<ul style="list-style-type: none"> • Art. 12(2)(e) – requires national mineral exploitation master plans to incorporate SEAs • Art. 30(2) - requires that “solutions and costs for environmental protection, rehabilitation, and restoration must be identified in investment projects, environmental impact assessment reports and environmental protection commitments approved by competent state agencies.” • Art. 30(3) – requires organizations and individuals to “pay a deposit for environmental rehabilitation and restoration” before conducting mineral mining activities • Art. 53(2)(b) – requires organization and individuals to have an EIA report or EPC in order to obtain a mining license;
Law on Environmental Protection Tax, No. 57/2010/QH12	National Assembly	November 15, 2010	<ul style="list-style-type: none"> • This law establishes a system for the taxation of various environmental harmful products or substances, including coal

<p>Law on Economical and Efficient Use of Energy, No. 50/2010/QH12</p>	<p>National Assembly</p>	<p>June 17, 2010</p>	<ul style="list-style-type: none"> • Art. 12 – requires mining establishments to apply various technological and managerial measures to increase the efficiency of their energy use • Art. 13 – requires energy producers and suppliers to apply various technological and managerial measures to increase the energy efficiency of their operations
<p>Law on Biodiversity, No. 20/2008/QH12</p>	<p>National Assembly</p>	<p>November 13, 2008</p>	<ul style="list-style-type: none"> • This law lays out the requirements and procedures for “the conservation and sustainable development of biodiversity” and the “rights and obligations of organizations, households and individuals in the conservation and sustainable development of biodiversity.”
<p>Law on Chemicals, No. 06/2007/QH12</p>	<p>National Assembly</p>	<p>November 21, 2007</p>	<ul style="list-style-type: none"> • This law establishes the “rights and obligations of organizations and individuals engaged in chemical-related activities, and state management of chemical-related activities.”
<p>Law on Investment, No. 67/2014/QH13</p>	<p>National Assembly</p>	<p>November 26, 2014</p>	<ul style="list-style-type: none"> • Art. 2 – makes the law applicable to foreign investors • Art. 30 – requires National Assembly to make decisions on investment policies for certain categories of large projects that may have significant effects on the environment • Art. 34 – Requires a “preliminary” assessment of environmental impacts and environmental protection measures to be included with a project’s application dossier for applications to the Prime Minister • Art. 35 – Requires a “preliminary” assessment of environmental impacts and environmental protection measures to be included with a project’s application dossier for applications to the National Assembly • Art. 47 – Authorizes the applicable investment authority to suspend all or part of a project “for environmental recovery at the request of an environmental authority.” • Art. 69 – Requires appropriate investment authority to monitor projects for, among other things, fulfillment of environmental protection commitments • Art. 71 – Requires investors executing investment projects to submit monthly, quarterly, and annual reports to “registry offices and local statistical agencies” on various indicators, including environmental protection

<p>Law on Forest Protection and Development, No. 29/2004/QH11</p>	<p>National Assembly</p>	<p>December 3, 2004</p>	<ul style="list-style-type: none"> • This law generally lays out requirements and procedures for the “management, protection, development and use of forests” and “forest owners’ rights and obligations.”
<p>Land Law, No. 13/2003/QH11</p>	<p>National Assembly</p>	<p>November 26, 2003</p>	<ul style="list-style-type: none"> • Art. 7 – establishes MONRE as the agency responsible for State administration of land • Art. 11 – requires that land use be “economical, effective, and environmentally protective.” • Art. 21 – requires that the environment must be protected in the formulation of land use zoning and planning • Art. 23 – requires that land use zoning include measures for protecting the environment • Art. 93 – requires that the use of land on which “production and business facilities” are built must comply with the provisions on environmental protection • Art. 94 – requires that land use for mineral activities apply measures to “protect the environment and treat waste...” • Art. 107 – requires all land users to comply with provisions on environmental protection • Art. 132 – establishes MONRE as the Land Inspectorate, responsible for inspecting compliance with the land laws and detecting and dealing with breaches of the law
<p>Decrees</p>			

<p>Decree No. 18/2015/ND-CP – Environmental Protection Planning, Strategic Environmental Assessment, Environmental Impact Assessment and Environmental Protection Plans</p>	<p>National Government</p>	<p>February 15, 2015</p>	<ul style="list-style-type: none"> ● Annexes I and II provide lists of plans or projects that are subject to SEA or EIA requirements ● Art. 12(2) obligates project owner to conduct EIA (or hire a competent organization to do so in accordance with Art. 19 of the LEP) and to take legal responsibility “for EIA results and information or figures used in the EIA Report.” ● Art. 12(4) requires the project owner to “consult with the People’s Committee of communes, wards and towns where the project is carried out, [and] with organizations or community under the direct impact of the project.” ● Art. 12(5) requires project owners to send EIA Reports to the People’s Committee of the commune where the project is carried out and organizations under the direct impact of the project together with the requests for written opinions. The recipients then have 15 working days to respond. ● Art. 12(6) requires that consultation with the community under direct impact of the project be consulted “in the form of a community meeting co-chaired by [the] project owner and the People’s Committee of the commune where the project is carried out,” along with other organizations, neighborhoods, and villages. ● Art. 13 contains minimum requirements for EIA consultation organizations ● Art. 18(1) requires “new investment projects” and “plans for business investment” to formulate and register environmental protection plans ● Art. 20(3) holds project owners responsible for the costs of preparing and reviewing the EIA report
<p>Decree No. 15/2012/ND-CP - Detailing a Number of Articles of the Mineral Law</p>	<p>National Government</p>	<p>March 9, 2012</p>	<ul style="list-style-type: none"> ● Art. 25(2) – requires a new EIA or EPC, as the case may be, for expansion of mineral mining licenses ● Art. 31(1) – requires the project’s EIA or EPC, as the case may be, to be included in the dossier of application for a mineral mining license ● Art. 32(1) – requires the project’s EIA or EPC, as the case may be, to be included in the dossier of application for a mineral salvage mining license

<p>Decree No. 140/2006/ND-CP – Providing for Environmental Protection at Stages of Elaboration, Evaluation, Approval and Implementation of Development Strategies, Planning, Plans, Programs and Projects</p>	<p>National Government</p>	<p>November 11, 2006</p>	<ul style="list-style-type: none"> • Art. 1(6) – makes the Decree applicable to foreign investment projects • Art. 6(2) – requires that the EIA for projects be conducted simultaneously with the feasibility study, that the contents of the EIA comply with the requirements in the Law on Environmental Protection, and that the investors themselves take responsibility for the figures and data in the EIA report • Art. 7(2) – requires that: 1) evaluation dossiers for approval of development projects must include the competent authorities’ decision on approval of the projects’ EIA report; 2) EIA review councils must report the results of their EIA reviews to heads of competent agencies for use as a basis for project approval; 3) authorities competent to approve and grant investment licenses for projects must consider the project’s EIA report; 4) specifies that projects may only be approved after their EIA has been approved • Art. 8 – requires that: 1) project owners implement all of the requirements contained in their EIA during project implementation; 2) the EIA approving agency shall direct and organize the examination, inspection, and supervision of the project owner’s implementation of environmental protection measures; 3) the EIA approving agency shall receive and handle community petitions concerning environmental issues related to the development project. • Art. 10 – establishes MONRE as the agency responsible to “uniformly manage the evaluation and approval of SEA reports and EIA reports nationwide...,” and to coordinate with other relevant ministries in supervising, examining and inspecting compliance with environmental protection requirements
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Circulars			
Circular No. 09/2014/ TT-BNNPTNT	Ministry of Agriculture and Rural Development	March 26, 2014	<ul style="list-style-type: none"> Establishes required contents of SEA's and EIA's managed by the Ministry of Agriculture and Rural Development
Circular No. 1/2012/ TT-BTNMT	MONRE	March 16, 2012	<ul style="list-style-type: none"> Addresses formation and approval of environmental protection plans
Circular 13/2009/ TT-BTNMT	MONRE	2009	<ul style="list-style-type: none"> Operational regulations of SEA, EIA review committees
Decisions			
Decision No. 25/2014/ QĐ-TTg	Prime Minister	March 25, 2014	<ul style="list-style-type: none"> This Decision establishes the functions, tasks, powers, and organizational structure of the Vietnam Environment Administration under MONRE
Decision No. 19/2007/ QĐ-BTNMT	MONRE	Nov. 26, 2007	<ul style="list-style-type: none"> This Decision establishes the regulations on conditions for, and provision of, the service of appraising EIA reports
Decision No. 13/2006/ QĐ-BTNMT	MONRE	August 9, 2006	<ul style="list-style-type: none"> This Decision establishes regulations for the organization and activities of the Council on Environmental Impact Assessments

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Global Environmental Institute

Add/The Global Environmental Institute Tayuan Diplomatic Office Building,
14 Liangmahe South Road; Building 1, Suite 32 Chaoyang District Beijing
100600, China
T/86-10-8532-5910
F/86-10-8532-5038
E-mail/gei@geichina.org
<http://www.geichina.org>

GEI
Wechat



GEI
Website

