

Supply Base Report: HOANG DAI VUONG CO., LTD

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Completed in accordance with the Supply Base Report Template Version 1.3

For further information on the SBP Framework and to view the full set of documentation see www.sbp-cert.org

Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

Version 1.2 published 23 June 2016

Version 1.3 published 14 January 2019

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Contents

1	Overview	1
2	Description of the Supply Base	2
2.1	General description.....	2
2.2	Actions taken to promote certification amongst feedstock supplier.....	8
2.3	Final harvest sampling programme.....	8
2.4	Flow diagram of feedstock inputs showing feedstock type [optional].....	8
2.5	Quantification of the Supply Base.....	9
3	Requirement for a Supply Base Evaluation	10
4	Supply Base Evaluation	11
4.1	Scope.....	11
4.2	Justification.....	11
4.3	Results of Risk Assessment.....	11
4.4	Results of Supplier Verification Programme.....	11
4.5	Conclusion.....	11
5	Supply Base Evaluation Process	12
6	Stakeholder Consultation	13
6.1	Response to stakeholder comments.....	13
7	Overview of Initial Assessment of Risk	14
8	Supplier Verification Programme	15
8.1	Description of the Supplier Verification Programme.....	15
8.2	Site visits.....	15
8.3	Conclusions from the Supplier Verification Programme.....	15
9	Mitigation Measures	16
9.1	Mitigation measures.....	16
9.2	Monitoring and outcomes.....	16
10	Detailed Findings for Indicators	17
11	Review of Report	18
11.1	Peer review.....	18
11.2	Public or additional reviews.....	18
12	Approval of Report	19

13	Updates	20
13.1	Significant changes in the Supply Base.....	20
13.2	Effectiveness of previous mitigation measures.....	20
13.3	New risk ratings and mitigation measures	20
13.4	Actual figures for feedstock over the previous 12 months	20
13.5	Projected figures for feedstock over the next 12 months.....	20

1 Overview

Producer name: Hoang Dai Vuong Company Limited (HDV)
Producer location: Facility address: D2 Street, Ho Nai 3 Industrial Zone, Trang Bom District, Dong Nai province, Vietnam
 Office address: 41-43 Tran Cao Van, Ward 6, Dist. 3, Ho Chi Minh City, Vietnam
Geographic position: 10°58'27.1"N 106°56'31.6"E
Primary contact: Jolie Vo (jolie@uniexport.vn; +84916680788)
Company website: hoangdaivuong.com (will change to www.uniexport.vn)
Date report finalised: 12/Dec/2019
Close of last CB audit: 17/Jan/2020
Name of CB: NEPCon
Translations from English: Yes, Vietnamese
SBP Standard(s) used: Standard 2, v. 1.0;
 Standard 4, v. 1.0;
 Standard 5, v. 1.0.
Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>
SBP Endorsed Regional Risk Assessment: not applicable
Weblink to SBE on Company website: <http://hoangdaivuong.com/wood-pellet/>

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 Description of the Supply Base

2.1 General description

Hoang Dai Vuong Company Limited (HDV) was founded in 2005 and is one of leading manufacturers of wood products in Vietnam. HDV's wood products are shipped to many markets worldwide.

In 2018, HDV started the construction of a modern wood pellet plant in Ho Nai 3 (HDV HN3), in the district Trang Bom, Dong Nai province. Ho Nai 3 lies 9 km from the city of Bien Hoa, and 44 km from Ho Chi Minh in the south of Vietnam. This pellet plant is equipped with high-end machinery and relies on well-trained, skilful operators and staff. It has an annual production capacity of approximately 200 000 tons of wood pellets.

The pellet plant is strategically located in an industrial zone surrounded by productive forests, along important highways and railways; nearby several large ports. Due to the opportune location of the facility, transport distances are relatively short, what reduces costs and CO₂ emissions. HDV HN3 is closely monitoring every step in the production process and optimising energy efficiency. The feedstock dryer, for example, runs on locally sourced low-grade biomass.

HDV HN3 is one of the largest wood processors in the region. It does not perform forest operations itself. HDV HN3 sources roundwood from around 4 – 20 suppliers. HDV HN3 only produces wood pellets and all feedstock is from external suppliers.

The pellet plant processes approximately:

- 40-69% SBP-compliant primary feedstock (approx. 5 suppliers);
- 0-19% SBP-controlled primary feedstock (approx. 3 suppliers);
- 0-19% SBP-compliant secondary feedstock (approx. 2 suppliers);
- 20-39% SBP-compliant tertiary feedstock (approx. 6 suppliers).

The following tree species are used in the production of the pellets:

- Acacia species (*Acacia spp.*);
- Eucalypt species (*Eucalyptus spp.*);
- Pine species (*Pinus spp.*);
- Pará rubber tree (*Hevea brasiliensis*);
- Teak (*Tectona grandis*).

The Supply Base

The supply base is the whole of Vietnam.

In order to guarantee future origins of feedstock are covered, the Supply Base was defined as the whole of Vietnam. However, in practise HDV HN3 sources from the south and middle of Vietnam, mainly from the provinces:

- Dong Nai;
- Dak Lak;
- Binh Dinh; and
- Long An.

Dong Nai Province

Authorities in the southern province of Dong Nai have set long-term targets for building a green sustainable economy, with strategies that protect and expand the forest cover. The province is home to tropical green forests covering a total 194 thousand ha, of which 48.5 thousand ha are plantations. Of the total forest area, special-use forests account for 48%, protective forests 28%, and production forests 24%. Acacia plantations in Dong Nai yield from 90 to 110 tons per ha in 4 year rotations.

Dak Lak Province

In 2014, the total “natural forests” area was 476 thousand ha and the total area of plantations was 32 thousand ha. The forest cover was 38.7%. Acacia plantations in Dak Lak yield from 100 to 120 tons per ha in three or four year rotations.

Binh Dinh Province

Binh Dinh has 384 thousand ha of forest area with around 150 thousand ha of plantations. As one of the pioneering provinces in sustainable forest management/forest certification, Binh Dinh has 9 762 ha of FSC certified plantations. Each year, the province harvests more than 10 thousand ha with a yield of 1 million tons. Acacia plantations in Binh Dinh yield from 80 to 120 tons per ha in 5 year rotations.

Long An Province

Total forest area of Long An is 21 thousand ha, in which natural forest accounted for 1 thousand ha and plantations 20 thousand ha. 75% of the plantations were Acacia spp and some were Melaleuca species. Acacia plantations in Long An yield from 80 to 100 tons per ha in 4 year rotations.

Located in the eastern side of Southeast Asia, Vietnam's geography stretches from highlands in the north to the Mekong Delta in the south. The country has a vast coastline and more than 10 million ha of wetlands. The diversity of species in Vietnam, particularly of rare and endemic species is remarkable.

Considering the climate, Vietnam is mainly tropical wet-dry (impacted by monsoons). To the northern highlands there are humid subtropical forests. The South Central Coast region has a tropical rainy climate.

The total forest area consists of deciduous and coniferous forests, bamboo land cover, coconut stands, and various combinations of these vegetations. Forests are located in low, flooded areas, as also on hills and mountains.

The semi-arid coastal areas of southern Vietnam are the most arid in Vietnam because of the rainshadow effects of the plateaus of the southern Annamite Range, which restrict the flow of humid air in the early monsoon season. Evergreen and semi-evergreen forest cover may be present on the coastal hills that reach higher elevations. A unique low forest or thicket community occurring on semi-arid slopes along the coast of southern Vietnam and notably rich in endemic species has been described near Phan Rang, Ba Ngoi, and Nha Trang, but it is heavily degraded today.

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) was ratified by Vietnam in 1994. There are two commercially traded timber species now listed on the CITES Appendix II from Vietnam: lign-aloes trees (*Aquilaria spp.*), and Thailand Rosewood (*Dalbergia cochinchinensis*). These Appendix-II listings are not a ban on trade. To conduct international commercial trade in these listed species, it is necessary to ensure all the proper CITES documentation from the exporting or re-exporting country is compiled and accurate. The harvest and trade of *Aquilaria crassna*, the main Vietnamese *Aquilaria* species, has been banned since 1992.



Illustration 1: Regions of Vietnam

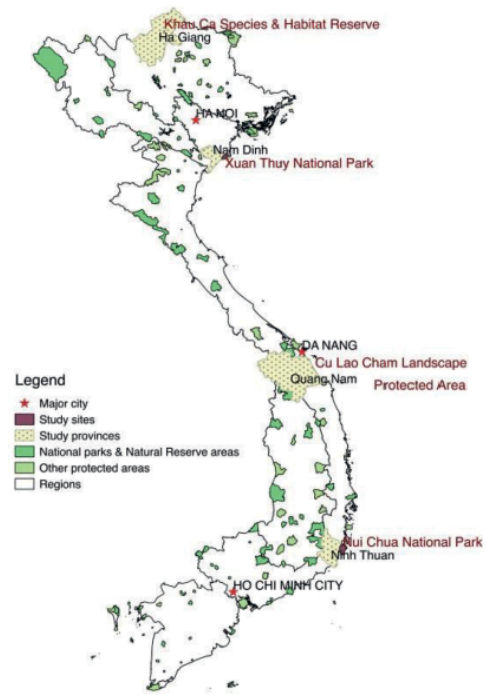


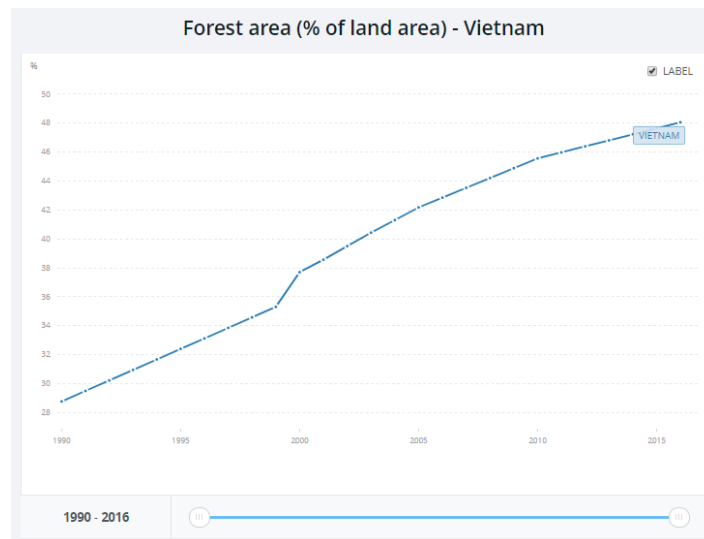
Illustration 2: Protected areas, Nature reserves and National parks
(Source: Nguyen Hoai Bao, 2016)

Vietnam has, however, several plantations of *Aquilaria crassna*, the products from which are legal to trade with proper CITES permits. Thailand Rosewood is also listed as vulnerable in Vietnam by the IUCN Red List. Being highly valued in the wood carving and furniture industries, the Vietnamese population of this species is also threatened.

The Vietnamese decree “Regulation on the management of protected forests, precious and registered forests, and the implementation of CITES” of January 22, 2019 lists 273 protected species. The species are divided in two protection classes for both flora and fauna, and in both classes a considerable amount of tree species are listed, most of which also have the IUCN status of Near Threatened, and Endangered.

There are several large mammals of conservation significance in this ecoregion, including the endangered douc langur (*Pygathrix nemaeus*), red-cheeked gibbon (*Hylobates gabriellae*), and pileated gibbon (*Hylobates pileatus*) and potentially the tiger (*Panthera tigris*). In the South Vietnamese Lowlands there are also two near-endemic bird species.

Table 1: FAO data on forest area development in Vietnam (source: World Bank website)



In 2017, the total forest area increased to 14 378 thousand ha, with natural managed forests at 10 242 thousand ha and plantations at 4 135 thousand ha. Vietnam is the only country in the Mekong region to have a continuous increase in its forest cover over the last decades. By the end of 2016, forest coverage reached 41 – 48% of the country (considering respectively the definition of forests of the government and the World Bank). It increased over 15% between 2005 and 2016.

Yet, regional shifts tell a different story. In the Central Highlands, an area that has a high concentration of ethnic minorities, relying on the forest for livelihood, the forest area was reduced by approximately 6% (312 416 ha) in the same years. In general, deforestation reduced by 70% during the period 2011 – 2015, compared to 2005 – 2010. The main reasons for deforestation are conversion into agricultural lands, illegal harvesting, and forest fires.

While forest quantity has increased, forest quality has declined: 67% of the remaining natural (i.e., non-plantation) forest is classified as poor or extremely poor. In many provinces, plantations are almost entirely acacia monocultures: 90% in Hoa Binh and Quang Ngai and 77% in Quang Ninh, Ha Tinh, and Quang Tri. And nearly all of this is geared to low-value wood chips in 3 to 6 year rotations.

Vietnam Forest Sector

The forest sector is growing as Vietnam, it contributed US\$1.4 billion to the national economy in 2006, accounting for approximately 2.4% of the country's GDP. At present, there are about 25 million Vietnamese people for whom 20%, or by some estimates up to 40%, of their annual income comes from the forest.

The quantity and quality of forests have improved in the last few years, and turnover in the forestry sector has resulted in economic growth. Communities have benefited from the increase in financial support and job creation from this growth.

Forest management in Vietnam is highly centralized and approximately 52% of Vietnam's forested area is publicly owned (government areas), 20% are collective properties, 28% is privately owned.

2014 data on forest ownership state:

- 34% Forest Management Boards;
- 24% Households;
- 16% Peoples' Committees;
- 14% State Forestry Companies;
- 4% Communities;
- 2% Armed Forces;
- 2% Other Economic Organizations;
- 4% Other Organizations.

According to 2013 data:

- State forest enterprises manage around 1.9 million ha of forests, 73% of which (1.4 million ha) is natural forest, and the remaining 27% are plantations;
- Forest management boards, belonging to the state, manage more than 4.7 million ha, primarily special-use and protection forests for protection and conservation purposes. About 88% are natural forests, and the remaining 12% are plantations;
- Individual households own about 3.4 million ha, 50% of which (1.7 million ha) are natural forests, and the remaining 50% are plantations;
- Commune People's Committees manage around 2.3 million ha, most of which (1.8 million ha) are natural forests;
- Groups and community organizations such as farmer unions, women and youth groups, manage 524,477 ha of forests, 96% of which are natural forest.

All policies, laws and regulations are issued by the government and the National Assembly. Forest management is governed by the 1991 Law on Forest Protection and Development, last amended in 2004. Under the Law, the Ministry of Agriculture and Rural Development (MARD) is responsible for managing Vietnam's forest protection and development campaign. MARD works closely together with the Ministry of Natural Resources and Environment (MONRE). Each Vietnamese province is required to prepare forest protection and development plans.

Vietnam has a number of laws and regulations requiring sustainability in forest operations, including management plans. The key pieces of legislation are the 2004 Law on Forest Protection and Development (based on the 1991 Forest Resources Protection and Development Act) and the Land Law of 2003. The

Forest Protection and Development Law bans unplanned and unpermitted timber logging. The Land Law classifies forest as agricultural land, divided into three main types:

- Production forests (around 52% total forest area);
- Protection forests (around 33% total forest area);
- Special use forests (around 15% of the total forest area, i.e. protected areas).

Protection forests are divided into two categories: critical and very critical. The conditions on the harvesting permit are applied to the critical level forest and subsequently there are many limiting conditions including of the harvesting intensity (natural forests) and harvesting measures (plantations).

A logging ban has been in place since 1997, covering “natural forests” in most Vietnamese provinces (“natural forests” is an official category, to which all forests belong that are not plantations), as also an export ban on logs. In 2012, the Prime Minister closed all natural forests to harvesting, apart from two companies managing FSC-certified natural forests (note: in the future forest management in natural forests under PEFC certification may be allowed). This ban also applies to the collection of non-timber products from natural forests in some provinces. Most of the natural forests contain category 1 to 6 HCVs. However, there is no formal assessment (based on the six attributes of HCVs) by forest managers or the authorities, except for those areas that are FSC-certified.

In December 2014, the Prime Minister signed Decision No. 2242/QĐ-TTg approving the scheme strengthening the management of exploitation of timber of native forests for the period 2014–2020. This scheme is aimed at improving the quality of native forest and developing high quality production forests eligible for sustainable exploitation to meet the demand for natural timber for domestic consumption and gradually replace imported timber.

Although Vietnam is investing in improved law-enforcement, various violations, including unauthorized forest harvesting are still a persistent problem. There are an estimated 30 to 50 thousand reported forest violations per year. According to Transparency International’s 2018 Corruption Perceptions Index, Vietnam scores only 33 points (a high level of corruption).

Forest Management Certification

FSC forest certification has proven to be an effective tool to fight corruption and protect HCV forests and red-list species. At present, only 46 companies have an FSC FM/CoC certificate in Vietnam, of which 3 are group certificates. 3.1% of the total forest area is certified. However, around 900 companies have an FSC COC certificate in Vietnam.

Exceptions have been made for FSC certified companies on the ban on logging in “natural forests” (meaning “not plantations”). If FSC certified companies were allowed to harvest in the natural forests more often, and were allowed to harvest 1% of the total forest timber volume within production forests annually (leaving out of consideration the protection forests and protected areas), this would yield about 4 million m³ a year, which is much more than the present roundwood imports. Sustainable logging would require greatly improved forest monitoring and law enforcement, however (IUCN, 2018).

Vietnam has no PEFC endorsed national forest certification system yet. No PEFC FM/COE certificates have been issued yet, only around 6 Vietnamese companies have the PEFC CoC certificate. The Vietnamese government is determined to boost the success of forest certification by pursuing PEFC endorsement.

In 2016, the Vietnamese Ministry of Agriculture and Rural Development (MARD) approved the establishment of the Vietnam Forest Certification Scheme (VFCS) Program. In 2018, the government committed to the establishment of a national forest certification system, in line with PEFC requirements. MARD launched the Vietnam Forest Certification Office March 2019. Vietnam is working on its national forest certification system and has become a National Member of PEFC in June 2019. Vietnam seeks to PEFC certify at least 3 million ha by 2030.

2.2 Actions taken to promote certification amongst feedstock supplier

With the motto “Cooperating For Success” and the orientation “Continuous Innovation”, HDV has always endeavoured in building its name in high-quality and sustainable products.

HDV interacts with its suppliers and encourages FSC forest certification. HDV underlines the advantages and importance of forest certification to the wood sector in general and to the pellet business in particular. Most suppliers HDV HN3 cooperates with are FSC certified.

2.3 Final harvest sampling programme

HDV NH3 does not procure primary feedstock from stands which were felled after a rotation period of more than 40 years. There are no energy plantations in Vietnam with long rotation periods. The primary feedstock for pellet production coming from stands with a rotation period of more than 40 years, are small volumes related to forest maintenance.

By the end of 2009, the area of acacia hybrid plantations was estimated at 232 thousand ha by Vietnam’s Ministry of Agriculture and Rural Development (MARD), making acacia hybrid the most important plantation tree variety in Vietnam.

According to ITTO (2017) the Vietnamese forest industry produced in 2015 about 12.7 million m³ of logs. Most wood originates from plantations. Species most commonly used in forestry plantations are Acacia (*Acacia spp.*) and Eucalypt (*Eucalyptus spp.*).

2.4 Flow diagram of feedstock inputs showing feedstock type [optional]

2.5 Quantification of the Supply Base

Supply Base

- a. Total Supply Base area (ha): 14.4 million ha (FSC CNRA VN V1.0, 25 July 2017)
- b. Tenure by type (ha):
 - 7.5 million ha public property
 - 4.0 million ha private properties
 - 2.9 million ha community properties
- c. Forest by type (ha): Tropical forests
- d. Forest by management type (ha):
 - 11.0 million ha managed natural
 - 3.3 million ha plantations
 - 83 thousand ha natural (primary forest)
- e. Certified forest by scheme (ha): 462 161 ha – FSC certified (2019)

Feedstock

- f. Total volume of Feedstock: 35,285.038 tons
- g. Volume of primary feedstock: 20943,94 tons
- h. List percentage of primary feedstock (g), by the following categories.
 - Certified to an SBP-approved Forest Management Scheme: 100% (FSC)
 - Not certified to an SBP-approved Forest Management Scheme: 0% (FSC)
- i. List all species in primary feedstock, including scientific name
 - Acacia species (*Acacia spp.*);
 - Eucalypt species (*Eucalyptus spp.*);
 - Pine species (*Pinus spp.*);
 - Pará rubber tree (*Hevea brasiliensis*);
 - Teak (*Tectona grandis*).
- j. Volume of primary feedstock from primary forest: 0 ton
- k. List percentage of primary feedstock from primary forest (j), by the following categories.
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: 0%
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: 0 %
- l. Volume of secondary feedstock: 0 tonnes.
- m. Volume of tertiary feedstock: specify origin and composition.

Type	Vietnam
Sawdust and shavings	3,476.928 tonnes
Off-cuts	10,864.170 tonnes

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
<input type="checkbox"/>	<input checked="" type="checkbox"/>

No SBE was conducted, because HDV HN3 procures sufficient volumes of FSC certified feedstock. Developing the first SBE for Vietnam would have been very demanding (an inefficient). HDV HN3 prefers to invest time and resources in assisting local forest managers in becoming FSC certified.

4 Supply Base Evaluation

4.1 Scope

Not applicable

4.2 Justification

Not applicable

4.3 Results of Risk Assessment

Not applicable

4.4 Results of Supplier Verification Programme

Not applicable

4.5 Conclusion

Not applicable

5 Supply Base Evaluation Process

Not applicable

6 Stakeholder Consultation

Not applicable

6.1 Response to stakeholder comments

Not applicable

7 Overview of Initial Assessment of Risk

Not applicable

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

Not applicable

8.2 Site visits

Not applicable

8.3 Conclusions from the Supplier Verification Programme

Not applicable

9 Mitigation Measures

9.1 Mitigation measures

Not applicable

9.2 Monitoring and outcomes

Not applicable

10 Detailed Findings for Indicators

Not applicable

11 Review of Report

11.1 Peer review



The SBR has gone through a peer review by Tatiana Savelyeva. Tatiana Savelyeva completed forest engineering studies in Russia, Sweden, and Finland. In the last four years, she assisted around 30 companies on SBP certification, including SBE projects in Portugal and Spain. Tatiana Savelyeva passed the SBP auditor exams in 2017.

The SBR was prepared with assistance of Rens Hartkamp, BiomassConsult (M.Sc. in forestry; Ph.D. in economics). Rens Hartkamp has around 20 years of experience in forest certification and 10 years in biomass certification. He assisted over 40 companies on SBP certification. He passed the SBP auditor exams in 2015. Rens Hartkamp is also active in the field of benchmarking and developing biomass certification systems.

11.2 Public or additional reviews

No public or additional reviews were performed.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	 Võ Thị Đăng Thảo Jolie Vo	Sales Development Senior	12/12/2019
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	 Vu Xuan Quynh Vu Xuan Quynh	CEO	12/12/2019
	Name	Title	Date

13 Updates

13.1 Significant changes in the Supply Base

Initial audit, no changes.

13.2 Effectiveness of previous mitigation measures

Not applicable.

13.3 New risk ratings and mitigation measures

Not applicable.

13.4 Actual figures for feedstock over the previous 12 months

As stated in chapter 2.5.

13.5 Projected figures for feedstock over the next 12 months

As stated in chapter 2.5.

* As exact data differ every year and are considered confidential, ranges (bands) of feedstock amounts and percentages are presented.