Preparedness Assessment for the Integration of Sustainability Criteria in the Public Procurement of Infrastructure in Vietnam

Nguyễn Tùng Lâm^{1,*}, Hoàng Hồng Hạnh¹, Nguyễn Minh Khoa¹, Tom Moenhout²

¹Institute of Strategy and Policy on Natural Resources and Environment, No. 479 Hoàng Quốc Việt, Cầu Giấy, Hanoi, Vietnam ²International Institute for Sustainable Development, Head Office,161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4

Received 11 November 2012

Abstract. In line with the country's current examination of "green growth", there is a need to conduct a policy research in the field of public procurement, to examine how Viet Nam's legal and policy framework for environmental protection may be optimized to allow for the successful introduction of green procurement. This paper aims to explore the prevailing framework for public procurement of infrastructure and to make recommendations on how it can be "greened". A lack of efficient infrastructure is currently listed by many investors as the number one problem when operating in Vietnam, and can potentially slow down Vietnam's growth. As investment efficiency will have to increase to maintain rapid growth, it is both an opportunity and a necessity to include sustainability standards in new or adjusted institutional frameworks and legislation. This paper presents the result of a joint research between the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE), the Ministry of Natural Resources and Environment of Vietnam (MONRE), and the International Institute for Sustainable Development (IISD), Canada. It analyzed the legal and institutional framework of traditional public procurement and public-private partnerships for the procurement of infrastructure, as well as the hurdles and opportunities for integrating sustainability criteria in both methods of public procurement in the future.

Keywords: Green procurement, PPP, infrastructure, public procurement, Vietnam.

1. Introduction

1.1. National Background of the Study

Since the introduction of the Doi Moi policy in 1986, Vietnam's economy has gradually shifted from a centralized command economy to a socialist market economy, in which economic liberalization and integration into the world economy stand central. Vietnam became a member of the Association of Southeast Asian Nations (ASEAN) in 1995 and a member of the World Trade Organization (WTO) in 2007.

Vietnam has a rapidly growing economy. Before the financial crisis of 2008/2009, the annual GDP growth rate rose from 6.79% in 2000 to 8.46% in 2007 [1]. Even in the difficult times of global recession that reduced exports, Vietnam's GDP grew the last three years with

^{*} Corresponding author. Dr., Tel.: 84-1668814787 E-mail: ntunglam@yahoo.com

respectively 5.3% (2009), 6.8% (2010) and 6.3% (2011 projection) [2]. In absolute current prices, GDP has gone up from 441,000 billion VND in 2000 to 1,658,000 billion VND in 2009 [3].

The share of agriculture in economic output is declining. In 2009 agricultural produce accounted for about 21% of Vietnam's output, down from 25% in 2000 but still employing over 50% of Vietnam's labour force [4]. The share of industry and construction, however, has risen significantly from 36% of GDP in 2000 to more than 40% in 2009. In absolute terms, this is translated in a growing output, with the equivalent of 162,000 billion VND in 2000 to 667,000 billion VND in 2009. The share of the services sector in GDP has remained relatively constant throughout the last decade [3].

socio-economic In its five year development plan. Vietnam puts emphasis on the harmonization of socio-economic development with a rational and efficient use of natural resources and environmental protection, to redress environmental pollution and to raise the effectiveness of the state administration of environmental protection [5]. The 2003 National Strategy for Environmental Protection until 2010 and Vision toward 2020 follows similar lines. Related to construction, this strategy asks for strict control on the dust emissions of road upgrading and urban construction, as well as for the construction of waste treatment facilities [6].

1.2. Relevance of Public Procurement of Infrastructure in Vietnam

Government expenditure has accounted consistently for over 25% of GDP since 2001 and over 27% since 2006. In absolute numbers, the part of GDP owing to state spending grew from 170,000 billion VND in 2000 to an estimated 583,000 billion VND in 2009. Total expenditure in itself rose from 109,000 billion VND in 2008.

GDP by construction, which includes both public and privately owned projects, grew from

24,000 billion VND in 2000, to an estimated 110,000 billion VND in 2009 [3]. The share of construction in the total GDP amounted to 6.3% in 2009 and 6.4% in 2010. This shows that construction remains a significant sector in Vietnam's economy.

In the last five years, the state of Vietnam increased its spending on construction from 6,795 billion VND in 2005 to an estimated 14,679 billion VND in 2010. Investment in construction accounted for almost 5% of total state investments in 2009. In addition to state investment, foreign direct investment was the main source of funding for 707 construction projects at the beginning of 2011. Apart from manufacturing (7,358 projects) and professional, scientific and technical activities (991 projects), the construction sector was the sector in which FDI started most projects and in which it invested the most (11,589 billion VND). In 2010, 174 new construction projects were licensed, adding up to a total investment of 1,816 billion VND. Most FDI projects are financed by the Republic of Korea, Taiwan and Japan [7].

During the last decade, the share of infrastructure procurement in the total GDP of Vietnam has been consistently between about 8 and 10% of GDP⁽¹⁾. This is more than the suggested 7% of GDP that developing countries should spend on infrastructure to sustain rapid growth. Despite the high spending and resulted increase in infrastructure stocks and access, Vietnam encountered serious infrastructure challenges that could slow down rapid growth if not addressed properly. Infrastructure is now identified as the main hindrance for companies operating in Vietnam [8].

⁽¹⁾ Numbers vary slightly according to what source is used and how infrastructure is defined (state spending or total spending). For example see: Hoang Xuan Ty, D. H. (2009), *Sustainable Public Procurement Preparedness Assessment in Vietnam: A reference to the timber industry*. International Institute for Sustainable Development; and Nguyen Xuan Thanh, D. D. (2009), *Vietnam's Infrastructure Constraints*, Harvard Kennedy School, ASH Institute for Democratic Governance and Innovation. Harvard.

Recent researchers have identified electricity and transport as the two main problematic sectors that are harming Vietnam's competitive position (Thanh and Dapice, 2009). They argue convincingly that it is not the level of investment that is the problem, as the Vietnamese government claims, but rather the efficiency of investment. The authors identify project selection, investment coordination and management as general problems. Particularly poor planning and project design, lack of capability in site management and supervision, and financial difficulties contribute to the higher costs of large-scale infrastructure projects. At the same time, Vietnam is developing toward a per capita lower middleincome economy and will therefore witness a significant decrease in official development aid, which is currently used for a substantial amount of infrastructure projects. Therefore, there are two main challenges: increasing investment efficiency, and collecting additional investment [8]. Vietnam is assessing the possibility of public-private partnerships for projects now mainly funded by ODA.

A lack of efficient infrastructure is currently listed by many investors as the number one problem when operating in Vietnam, and can potentially slow down Vietnam's growth. As investment efficiency will have to increase to maintain rapid growth, it is both an opportunity and necessity to include sustainability standards in new or adjusted institutional frameworks and legislation.

This research is a feasibility study and preparedness assessment of sustainable public procurement (SPP) of infrastructure in Vietnam. It analyzed the legal and institutional framework of traditional public procurement and public-private partnerships for the procurement of infrastructure, as well as the hurdles and opportunities for integrating sustainability criteria in both methods of public procurement in the future. At the same time, the study paid specific attention to market readiness in order to make sound and implementable sustainable development policy recommendations that are inclusive of both environmental concerns and the socio-economic development of Vietnam.

2. Research Design

2.1. Objectives and Research Questions

Considering the importance of public procurement of infrastructure to the Vietnamese economy and sustainable development, IISD and ISPONRE decided to study the current and potential future integration of sustainability criteria in infrastructure procurement. As investment efficiency will have to increase to maintain rapid growth, it is both an opportunity and a necessity to include sustainability standards in new or adjusted institutional frameworks and legislation. The status on both sustainability standards and public infrastructure procurement is not an option.

This study will provide an in-depth analysis of the current state of play and the problems and solutions associated with future initiatives. Because sustainable development aims at establishing inclusive policies that integrate environmental economical and social promotion. IISD and ISPONRE identified two sets of overall objectives: (1) identify opportunities to introduce and implement sustainable public procurement of infrastructure in Hanoi, through the participation of Vietnamese ministries and agencies, and (2) assess private sector readiness to supply sustainable infrastructure.

The specific aims and objectives of this study are to:

(1) Explore the prevailing legislative and institutional framework for the public procurement of infrastructure in Hanoi. Explore whether public-private partnerships are used and to what extent.

(2) Examine whether sustainability criteria are already integrated in the public procurement of infrastructure in Vietnam. Examine whether markets are already including such criteria in their operations. (3) Identify hurdles and opportunities for the integration of sustainability criteria in the legislative and institutional framework for public procurement of infrastructure in Hanoi. Assess the readiness of the private sector (including domestically owned enterprises) if sustainability criteria were to be included in infrastructure procurement.

(4) Make conclusions and recommendations on how infrastructure procurement can be greened, including soft law instruments, legistlative upgrades and institutional reform. Make conclusions and recommendations on market readiness.

(5) Identify stakeholders that could provide leadership in implementing sustainable infrastructure procurement.

Two main research questions are derived from these objectives. They are related to the three dimensions that had to be researched: the legal setting and the institutional framework for public procurement of infrastructure and works, and the private sector readiness.

(1) "Where are sustainability criteria integrated in the procurement of infrastructure, and where could the integration still be strengthened?" The study aims at analyzing the existing and potential policy incentives for the green procurement of works, with a particular emphasis on the standards set out in ISO 26000. It looks at the legal setting and institutional framework. This policy part has the goal of being descriptive in tracking down where environmental and social criteria are already included in the legislative and institutional framework related infrastructure to procurement. It will also be prescriptive in setting out а number of policy recommendations to increase the integration of sustainability standards in the legal and institutional settings.

(2) "Is the Vietnamese private sector ready to supply infrastructure that abides by new sustainability criteria, and what can be done to prepare them for this change?" The study aims at analyzing the difficulties that Vietnamese bidders (state owned companies and private enterprises) could encounter when being required to supply infrastructure according to green and social standards. It will be descriptive in analyzing how the bidders are preparing this change, and prescriptive in formulating suggestions as to how the private sector could prepare itself more, as well as how the government could assist preparation.

2.2. Methodology

The study is explorative in nature and was conducted through an in-depth analysis of legal documents and interviews with stakeholders across the public and private sectors (private companies and domestically owned enterprises), as well as with the international donor and development community. Three main steps were undertaken:

(1) Since Vietnam's public administration is still highly centralized, an important first step was to understand the legal framework on the procurement of infrastructure. This legal study was complemented by the unravelling of the institutional framework through which infrastructure procurement takes place. The desk study included a detailed analysis of, others, relevant national laws. among regulations, policies regarding the state budget, public spending, procurement regulations and construction law.

(2) In a second step, the authors identified the already existing integration of sustainability standards in the regulations and institutional frameworking concerning infrastructure procurement. Semi-structured interviews were held to verify the existing regulatory framework and standards integration.

(3) In a third step, the authors conducted conference calls, semi-structured interviews and focus group meetings to collect the opinions of stakeholders. Public entities, private companies and international donors were consulted. These methods were used to identify the hurdles and opportunities for future integration of sustainability standards into the public procurement of infrastructure.

3. Findings from the Study

3.1. Organization of Public Procurement of Infrastructure in Vietnam

In recent years, the legal system related to managing public procurement has been continuously adjusted, in order to allow for a stricter control of funding. Vietnam has adopted a number of laws and decrees governing public procurement, most recently in 2005 and 2009. The Law on Procurement (Law No 61/2005/QH11), adopted in 2005 and amended by Law No. 38/2009/QH12 in 2009 (together, the "Law on Procurement"). Subsequently, the government issued implementing regulations for the Law on Procurement in Decree 85/2009. Public procurement rules are also addressed in the 2003 Law on Construction.

There are a number of laws on public procurement, relevant to infrastructure such as State Budget Law, Bidding Law 2005 and its amendment in 2009. The State Budget Law No. 01/2002/QH11 (December 27, 2002) sets up some principles relating to expenditures on infrastructure investment, with an emphasis on state budget accumulation for investment aimed at developing infrastructure (Article 8). In accordance with regulations regarding public purchase, there are currently many state agencies at the central and local level directly involved in the process of developing the state budget estimation. Therefore, if the Vietnamese government issues supplementary budget estimation regulations that integrate elements of environmental protection and social equality in procurement of for example, infrastructure, such regulations will promote the purchase of socially and environmentally friendly infrastructure across different levels of government. The regulations relating to budget estimation can thus have a potentially high and integrating impact.

61/2005/QH11 Bidding Law No. (December 12, 2005) is the highest legal instrument that regulates public procurement. According to the Bidding Law, when state agencies purchase properties they should choose from one of seven bidding forms (Articles 18 to 24). These forms also apply for construction investment projects. Decree No. 85/2009/ND-CP on guiding the Bidding Law and the selection of construction contractors under the Construction Law. delivers further guidance on evaluation criteria applicable to bids for construction and installation bidding packages.

On 9 November 2010, Vietnam's Prime Minister issued the long-awaited Decision No. 71/2010/QD-TTg, a pilot step investment scheme based on the public-private partnership (PPP) model, in order to address the growing financing needs of infrastructure projects in Vietnam. Decision No. 71/2010/QD-TTg ("Decision 71"), which regulates investments using the PPP model. Decision 71 took effect on 15 January 2011.

The concept of PPP, however, is not new under Vietnamese law. Indeed, most of the infrastructure projects in Vietnam have been carried out in accordance with the regulations set out in Government Decree No. 108/2009/ND-CP ("Decree 108"), dated 27 November 2009, for build-operate and transfer (BOT), build-transfer-operate (BTO) and buildtransfer (BT) forms of investment. Whereas Decision 71-type of procurement has not been used so far, Decision 108-type projects have been used for many infrastructure projects already. The difference mainly lies in government involvement in the financing process and after the initial construction phase.

With Decision 71, the Vietnamese Government aims to encourage more investment from the private sector than was the case in Decision 108. These investors can be both domestic and foreign, and are expected to aid the funding requirements of infrastructure projects. Decision 71 sets out requirements regarding the allocation of financial resources to fund an eligible PPP project. More details on corporate and contract structuring of the project are also provided. With regards to the financial structure, on the basis of the total investment capital, Decision 71 and Decree 108 restrict the minimum and maximum thresholds of the financial participation of state and private thresholds investors. Such remarkably differentiate Decision 71 from Decree 108. It is important to notice that so far most procurement of infrastructure is done using the 2009 Decision 108 requirements. However, to deal with future withdrawal of ODA and increased spending on infrastructure projects, the Government hopes to fund more projects using the 2010 Decision 71 specifications.

Regarding State contribution, 49% of the total investment capital is the maximum threshold that State capital that may be contributed in a Decree 108-type project. The 49% mentioned in Decree 108 is reduced under Decision 71 where state participation - including state capital, investment incentives and relevant financial policies - cannot exceed 30% of the total investment capital.

3.2. Current Integration of Sustainability Criteria in Infrastructure Procurement

One of the first strategic documents mentioning all aspects of environmental protection and natural resource use, paving the way for sustainable development in Vietnam, is the National Environment and Sustainable Development Plan of 1991-2000.

Decision No 153/2004/QD-TTg (17 August. 2004) initiated the Strategic Orientation for Sustainable Development in Vietnam. The Strategy relates to cleaner production, environmental friendliness, and clean industrialization. One of the core principles of the Strategic Orientation is the clean development of production and environmentally friendly systems in the manufacturing industry. Technology that facilitates modern and clean production is to be prioritized. The implementation of a cleaner industrial process, and changes in production and environmentally friendly consumption patterns have also been acknowledged as priorities. And one important measure is the restructuring of production activities and consumer services.

Vietnam's National Environmental Protection Strategy to 2010 was the first strategic document that encompassed the breadth of environmental fields and natural resources in Vietnam. In order to achieve sustainable production and consumption, the strategy set specific objectives to be reached in 2010.

In September 2009, the Prime Minister signed Decision No. 1419/QD-TTg to approve the "Cleaner Production in Industry to 2020 Strategy" in which the overall goal is: "Cleaner production, to be widely applied in industrial production facilities to improve the efficient use of natural resources, materials and fuels; to reduce emissions and limit pollution; for environmental protection; and to improve environmental quality, human health and ensure sustainable development."

The Environmental Protection Law was enacted in 2005 and gives a comprehensive legal framework to contribute to managing environmental protection activities, including regulations on sustainable production and consumption. It addresses a number of key issues, relevant to government sponsored infrastructure projects. One of the more significant legal requirements in the law is stipulated in Article 18. This article mandates owners of infrastructure projects to elaborate environmental impact assessment before starting projects. Decree No. 04/2009/ND-CP providing for incentives and supports for environmental protection activities continues on from the 2005 Law on Environmental Protection and specifies the favourable treatment of land and capital, and free or reduced taxes and charges for environmental protection activities.

In the energy sector, the Government issued Decree No. 102/2003/ND-CP on the use of

energy saving and efficiency measures. This is considered the first normative for the implementation of the activities on the efficient use of energy in Vietnam. In November 2005, standards for energy savings in commercial buildings were issued, with the goal of reducing energy losses and improving energy efficiency and thrift in Vietnam for living conditions and work. In April 2006, the Prime Minister issued Decision No. 79/2006/QD-TTg approving the national target program on energy saving and efficiency. Recently, on 17 June 2010, the Law on Economical and Efficient Use of Energy was issued by the National Assembly and took effect from 2011.

In the construction sector, the Construction Law regulates the basic principles of construction activities, including environmental considerations such as the principles ensuring environmental hygiene (Article 4), requirements to invest in protecting the environment during projects of work construction (Article 36), and requirements related to the environmental impact assessment (Article 37).

3.3. Opportunities and Hurdles for the Integration of Sustainability Criteria in Infrastructure Procurement

Mainstreaming of environmental factors in the process of procuring public assets and goods has been applied in many countries but is a relatively new process in Vietnam. State agencies using their budget for procuring assets and infrastructure do not seem to be interested in environmental issues. This is partly because the legal instruments on procurement do not have specific requirements on environmental criteria.

Modification of main legal structures

Governmental respondents point out that if the government wishes to include more sustainability criteria, it should work on a specific roadmap. The current strategies are insufficient and too abstract. A roadmap will be necessary to give the private sector sufficient time to implement changes, while also giving much-needed certainty to construction companies and investors about what the requirements will be in the foreseeable future.

Increase the role of government for structural adjustment

There are legal avenues that have not been addressed yet. For example, there are no social and environmental standards taken up in the bidding law. Many respondents nevertheless identify this bidding law as a central document that could give significant guidance to other governmental agencies and the market.

Public and private sector awareness

Awareness-raising activities should focus both on the private and the public sector. Many respondents indicate that sustainability standards such as ISO 26000 are either not known among governmental officials, or their value and necessity are underestimated. To date, standards are not integrated in the cognitive process of many government ministries. This poses a significant problem, both in terms of reaching sustainability objectives through public procurement policies, as well as incentivizing the Vietnamese market to adjust their processes to meet international standards, which will be crucial for the exportoriented segments of the Vietnamese market.

Integrate standards in the listing process, not the bidding process

So far, if standards are included, they are included in the technical specifications of the bids. This means standards are dependent on every project and that every procurer can choose what type of sustainability criteria to include. However, only integrating standards at the specification stage leaves out an important tactic to encourage markets to address their processes in a more sustainable, long-term manner. Many respondents suggest including sustainability criteria, such as standardization, in the listing process. One respondent suggests that centralized, governmental а and independent body should conduct such a type of pre-selection. Ideally the body would consist of experts, who are highly paid and enjoy independence, comparable to the independence a central bank enjoys in its work.

The future role of Public Private Partnerships

As described above, public private partnerships could allow the involvement of the private sector and project developers in the operation and maintenance of the facility. This could reduce life-cycle costs, as project developers would be encouraged to raise initial capital investments to gain savings during the lifetime of the infrastructure. In addition, it could lower the burden on government expenditures at a time Vietnam is observing a decrease in ODA funding due to its economic development. PPPs are thus seriously considered to become the main method of financing current ODA projects such as water works in the future.

4. Recommendations

Taking into account the above findings, and inputs and contributions from the government officials, international donors and representatives from the infrastructure supply sector, the following recommendations could be made to the government.

- Sustainable public procurement of infrastructure can be introduced and implemented with the consensus and support of the central government and with the cooperation between ministries through the issuing of policies and detailed guiding documents.

- Including sustainability standards efficiently will require the following steps:

(1) A review of the procurement process and the roles of different ministries and agencies. These ministries and agencies will have to collaborate closely to achieve efficient integration. There should be more legal clarification and consistency. Sustainability criteria should be included at all stages of the procurement cycle. Specifically, their integration in the pre-selection of infrastructure developers would send a strong signal to the market.

(2) A review of national standards under the leadership of STAMEQ. There should be a careful assessment of what standards can be implemented incrementally. The government should develop a roadmap to sustainable procurement of infrastructure. This should cover detailed information on the next steps and future legal requirements.

(3) An awareness-raising campaign in both the public and the private sector. This campaign should be complemented with the training of government officials in SPP of infrastructure and the training of companies, in particular SMEs, to adjust their processes to become more profitable and sustainable.

(4) Transparent information platforms. Valuable information should be collected and disseminated. This includes information for government agencies on how to approach SPP in drafting their legal documents, as well as information for the private sector on how it can obtain sustainability certificates.

- Demonstration and pilot projects could establish the benefits of sustainable public procurement the best. Such projects could be started in a specific sector in a specific region where the local government is more open to sustainable, profitable infrastructure development. In addition, a pilot project with a relatively low technical complexity could allow more clear results and implementation. It is further of crucial importance that demonstration is initiated through pilot projects that will deal with corruption as little as possible. Construction and infrastructure procurement and development lack transparency. This, however, is a necessary precondition for the success of SPP implementation.

- Assuring compliance with existing criteria will be necessary. The government will have to safeguard the enforcement of existing laws and criteria. To preclude the problem of SMEs being unable to carry costs, it is important that existing laws are enforced immediately. This implies that

more resources and trained personnel will be allocated to the verification of compliance, including the follow-up of Environmental Impact Assessments. The idea of installing a system in which a government accredited external auditor would have to verify compliance and carry liability after doing so should be assessed.

References

- General Statistics Office of Vietnam (2011), "Key indicators on National Accounts", retrieved October 2011 from http://www.gso.gov.vn/default_en.aspx?tabid=468 &idmid=3&ItemID=9911
- [2] EconStats (2011), "Vietnam", retrieved October 2011 from World Economic Outlook data, IMF: http://www.econstats.com/weo/CVNM.htm
- [3] General Statistics Office of Vietnam, (2011), "Key indicators on National Accounts", retrieved October

2011 from http://www.gso.gov.vn/default_en.aspx?tabid=468 &idmid=3&ItemID=9911

- [4] CIA world fact book website.
- [5] Government of Vietnam (2011), "Vietnam's Fiveyear Socio-Economic Development Plan, 2006-2010", retrieved November 2011 from http://www.chinhphu.vn/portal/page?_pageid=439,4 4703553&_dad=portal&_schema=PORTAL&pers_ id=1091359&item_id=1091460&p_details=1
- [6] Socialist Republic of Vietnam (2003), "National Strategy for Environmental Protection until 2010 and Vision toward 2020", Ministry of National Resources and Environment, Hanoi.
- [7] Data from: http://www.gso.gov.vn/default_en.aspx?tabid=468 &idmid=3&ItemID=9911
- [8] Nguyen Xuan Thanh, D. D. (2009), Vietnam's Infrastructure Constraints, Harvard Kennedy School, ASH Institute for Democratic Governance and Innovation. Harvard.

Đánh giá khả năng tích hợp các tiêu chí bến vững trong mua sắm công cơ sở hạ tầng ở Việt Nam

Nguyễn Tùng Lâm¹, Hoàng Hồng Hạnh¹, Nguyễn Minh Khoa¹, Tom Moenhout²

¹Viện Chiến lược, Chính sách Tài nguyên và Môi trường, Số 479 Hoàng Quốc Việt, Cầu Giấy, Hà Nội, Việt Nam ²Viện Quốc tế về Phát triển Bền vững (IISD), Trụ sở,161 Portage Avenue East, Tầng 6, Winnipeg, Manitoba, Canada R3B 0Y4

Tóm tắt. Cùng với những nghiên cứu về các chính sách hướng tới "tăng trưởng xanh" hiện nay ở Việt Nam, rất cần thực hiện nghiên cứu chính sách liên quan trong lĩnh vực mua sắm công nhằm đánh giá khả năng tối ưu hóa các chính sách của Việt Nam về bảo vệ môi trường để thực hiện thành công mua sắm xanh. Bài viết này xem xét những khuôn khổ hiện hành về đầu tư công trong cơ sở hạ tầng để đưa ra các khuyến nghị về việc làm thế nào có thể "xanh hóa" được hoạt động này. Thiếu một hệ thống cơ sở hạ tầng hiệu quả hiện đang được nhiều nhà đầu tư nhìn nhận là vấn đề khó khăn để đầu tư tại Việt Nam, và điều đó có khả năng có thể làm chậm tăng trưởng của Việt Nam. Bài viết này trình bày kết quả của một nghiên cứu chung giữa Viện Chiến lược, Chính sách Tài nguyên và Môi trường (ISPONRE), Bộ Tài nguyên và Môi trường Việt Nam (MONRE) và Viện Quốc tế về Phát triển bền vững (IISD), Canada. Bài viết phân tích các khuôn khổ pháp lý và thể chế mua sắm công truyền thống và quan hệ đối tác công-tư trong đầu tư cơ sở hạ tầng, cũng như các rào cản và cơ hội để tích hợp các tiêu chí bền vững trong những phương pháp mua sắm công trong lai.