1. Key development issues and rationale for Bank involvement

Country Context:
Vietnam has a low level of urbanization compared to many comparator countries, but since the institution of Doi Moi policies has become one of the fastest urbanizing countries in the EAP region. The current urbanization level of 30% is growing at about 3.4% per annum, compared with a 1.2% national population growth rate\(^1\). With urban areas accounting for more than 50% of the country’s economic output in 2009 and the increasing flow of FDI toward cities – the complementary shift in the Vietnamese economy is clear. Economic opportunities in urban areas are propelling rapid growth in urban population with significant rural-urban migration. Urbanization is in turn fuelling further economic growth. Annual urban GDP growth has been about 12-13% p.a over the last decade, or about double the national GDP growth rate. Most of the developments are taking place in Hanoi and HCMC and their economic shadows, and some class 1 cities, including Da Nang, Hai Phong and Can Tho. The increasing pace of urbanization has led Vietnam’s policy makers to a growing recognition of and focus on the importance and quality of urbanization: In 2009, First Deputy Prime Minister Nguyen Sinh Hung said, “Vietnam will have only one chance to get urbanization right. If we fail at urbanization we will fail at industrialization and modernization”\(^2\).

\(^1\) 2009 National Census
**Sectoral and Institutional Context**

**Lack of infrastructure continues to be a major issue in Vietnamese cities**. Municipal infrastructure has not developed adequately to meet the demands of a fast developing economy and rapid urbanization. Rapid urbanization and the increasing GDP per capita are also putting pressure on municipalities to provide better quality infrastructure as households and industry seek higher quality of life and productivity gains from urbanization. Transportation, including public transport systems and environmental sanitation are identified as essential investments for sustainable urban development. Traffic congestion, flooding and water pollution are already identified as serious impediments to sustainable development in Hanoi and HCMC, and foreshadow the need for other fast growing cities to invest in such proper sanitation and to provide adequate mobility and transit options early in the urbanization process to avoid such negative externalities of the urbanization process in the future.

**Da Nang** is the fourth largest city in Vietnam and has provincial status, endowing it with a certain degree of administrative autonomy. It is widely viewed as a ‘forward looking’ city which is well planned, well governed and which enjoys a generally higher quality of infrastructure than other cities. The city leaders have committed to developing the city into a “green” city by 2025. Da Nang is the most important city in the central coastal region with aspirations to serve as a regional economic hub. Its urban population of about 770,000\(^3\) is growing at a moderately high rate making it well placed to achieve its ‘green’ objectives.

However, the **public transport service** in Da Nang is currently very poor, with a lack of strong institutional capacity and only 91 buses in operation and less than 3% of total daily trips carried out by public transport\(^4\). The city currently has more than 500,000 motorbikes and 30,000 cars, and most people travel by personal vehicles. While the traffic situation in Da Nang currently is not so severe as in Hanoi or HCMC yet, it is getting worse quickly as the number of private vehicles registered in Da Nang is growing at a high rate of 20-30% per year. Small, yet increasing, traffic congestion during rush hour periods have been increasing since 2010. To meet increasing mobility needs and to provide more mobility options, there is a need for investing in high quality public transport services, ahead of the growth of private vehicle dependency, in particular automobiles.

**Opening and improving access to new development areas** has proven to be an effective strategy to maintain orderly growth and guide the urban development process. As part of the integrated development process therefore, the Project will include construction of strategic access roads to the western boundaries of the city, which are considered poorer areas. This will facilitate future development of the region, and could serve as suitable areas for development of affordable housing options where the land is cheaper compared to the more central districts. These roads will be designed to include a future expansion of the public transport network to the benefit of future populations and allowing for a more integrated form of land use and transport development.

**Wastewater Service in Da Nang has been improving, but can be further improved** following the city’s approved wastewater management strategy, in support of its target to become a “green” city by 2025. With the planned investments in the wastewater treatment system, Da Nang could become the first city in Vietnam to have a municipal sewerage system that meets the government’s standards on wastewater treatment issued in 2008. This is particularly critical for a coastal city which derives considerable economic development from tourism. The wastewater management strategy is the first of its kind for a coastal city.

---

\(^3\) Da Nang has a total population of about 880,000 according to the 2009 National Census. Eighty eight percent live in the urban boundary

\(^4\) As a quick reference, cities in China with similar size of urban population to Da Nang normally have more than 1000 buses which carry more than 20% of total daily trips of the city.
major city in Vietnam and represents the institutional and planning advances made in the sector over the past several years, much of this with strong World Bank support.

Relationship to CAS

The project will support directly three of the four CPS themes/pillars: 1) Strengthening environmental management; 2) Strengthening social inclusion; and 3) Strengthening governance. More specifically, it will help deliver two of the CPS outcomes in the CPS results matrix: 1) More efficient and reliable provision of infrastructure services and 2) Improved policies and infrastructure to address the needs of urban poor and migrants. It will also contribute to the national urban policy as set out in the “Framework Master Plan for Urban Development in Vietnam to 2020,” and updated through the “Adjustment of the Master Plan for Urban Development in Vietnam to 2025 and Vision to 2050.” A focus on urban management strengthening at the city level will also lead to support of improved local governance. It is noted that the new CPS is currently under preparation. However, these strategic development goals are expected to remain relevant in the future CPS and will be updated in the PAD as needed.

2. Proposed objective(s)

Proposed PDO

The project aims to help Da Nang become a more sustainable city that benefits all citizens by improving urban environment and increasing urban mobility in a clean, safe, inclusive, and energy efficient manner.

3. Preliminary description

The proposed project, which is estimated to cost US$ 242.1 million (including land acquisition), would continue to support the upgrading and expansion of environmental infrastructure, construction of a pilot bus-rapid-transit (BRT) corridor and two critical sections of road infrastructure to facilitate future city development. It will also include capacity building in transport and traffic management and wastewater services. This project will be the first investment project in Da Nang using a combination of IDA and IBRD funding, with IDA financing in the amount of US$ 132.5 million and IBRD financing in the amount of US$ 40.0 million. The project consists of four main components outlined below:

Component 1: Drainage and Wastewater Improvement (US$ 116.8 million, of which IDA US$ 85.2 million). Leveraging investments under the previous two World Bank funded projects (3 Cities Sanitation Project, and ongoing Priority Infrastructure Investment Project), this component will help Da Nang further implement its wastewater management strategy to meet the wastewater and drainage improvement targets for 2030, including reducing flooding, upgrading and expanding wastewater collection systems in fast growing areas of Da Nang (including lagging area of Lienchieu). It will also focus on improving operations and maintenance of existing preliminary treatment plants in Hoacuon, Nguanhson and Phuloc until they reach capacity and their effluent is fully transferred to secondary treatment plants in Hoaxuan and Lienchieu. Key activities of this component are upgrading Hoaxuan WWTP (first phase construction is being designed and constructed under PIIP), construction of new secondary treatment Lienchieu WWTP, and upgrading and expansion of wastewater and drainage systems in Lienchieu.

Component 2: Bus Rapid Transit Development (US$ 40.2 million of which IDA US$ 31.0 million). This component will help Da Nang develop a pilot BRT corridor - an integrated public transport system - as part of the city’s efforts to provide high quality public transport services for its citizens. The corridor has been identified based on the city’s Master Plan up to 2025, the JICA funded Integrated Development Plan, the KFW funded bus service study, and the World Bank/AusAid funded Da Nang BRT Pre-feasibility Study (which was formally approved by the City Government). The corridor is approximately
22km long and connects the Hoa Khanh Industrial area in the north with the University Zone in the south. Proposed investments under this component include BRT stations/terminals, bus running ways, clean BRT vehicles, road safety and traffic management measures along the corridor and adjacent streets, and BRT operation and traffic command centers, as well as technical support to BRT operation and traffic management, including parking control.

**Component 3: Urban Strategic Roads (US$ 76.1 million of which IDA US$ 7.3 million and IBRD US$ 40.0 million).** Two new primary roads, with a total length of about 14km will be constructed under this component. Identified as strategic roads in the City’s Master Plan, both roads will improve connectivity of urban roads, especially east/west connections to the north/south City By-Pass and national expressway network. The connection of the northern link to the Da Nang north/south City By-Pass would be the last connection of the By-Pass to the City road network, as already been agreed between the Ministry of Transport and the City. The two roads will also help facilitate the development of two new zones in the western part of the city, which according to the Master Plan are critical for accommodating urban population growth in the near to medium term, particularly for lower and middle income populations. The roads will be constructed on a phased basis, taking into consideration current and future traffic demand as well as reserving the right of way for future inclusion of a dedicated public transport system. Due to urgent need for urban development, the city recently decided to use domestic funds to construct the first 2.7km out of 6.17km of the northern link road, and include the remaining sections in the proposed project.

**Component 4: Technical Assistance and Capacity Building (US$ 9.0 million to be financed by IDA).** Continuing the technical assistance on urban infrastructure management being conducted under the ongoing PIIP, this component will help Da Nang implement a comprehensive capacity building plan (including training, focused studies, demand-driven technical assistance and mentoring, and peer learning and knowledge sharing with other cities) which will strengthen Da Nang’s institutional capacity for sustainable urban development, with a particular focus on: (i) strategic planning and effective management of drainage and wastewater collection and treatment systems, including in the areas of technical capacity strengthening, improving financial sustainability and introducing private sector participation in the operations and maintenance of wastewater treatment plants; (ii) public transport operation, road safety, urban traffic management including parking control; and as well as (iii) integrated city planning and possibly urban energy efficiency improvements. The latter would build from recommendations of the Tool for Rapid Assessment of City Energy (TRACE) technical assistance being provided by the Bank to Da Nang. Detailed activities under this component will be identified during project preparation.

4. **Safeguard policies that might apply**

Environmental Assessment (OP/BP 4.01): An Environmental Impact Assessment (EIA) will be carried out during project preparation. The project is tentatively considered to be a Category A project, because of the major scale of the investments in major infrastructure. Careful attention will need to be given to potential impacts but preliminary scoping indicates the impacts will be largely or entirely mitigable and reversible over time. A detailed scoping report has not yet been prepared.

Major potential impacts are expected to result from the following:

x) Upgrading and/or construction of two wastewater treatment plants (WWTPs). In addition to construction impacts, the EIA will need to look at all issues relating to effluent quality and potential impacts on receiving waters. Significant quantities of sludge will be produced by the WWTPs and the EIA will need to consider where and how the
sludge will be disposed of, the potential level of contamination of the sludge, and transportation of the sludge. Minor environmental impacts might arise from operation of the WWTPs such as odor problems, occupational health and safety considerations, noise, disturbances to traffic patterns, and visual landscape impacts.

x) the BRT component will involve upgrading and/or construction of dedicated bus lanes and other related infrastructure. These investments will involve typical impacts of construction activities in dense urban areas such as disturbance of traffic, temporary or permanent impacts on businesses, noise, safety, air pollution.

x) Construction of 14 km of urban roads. Typical impacts of urban road construction will need to be carefully addressed in the EIA such as disturbance of traffic, temporary or permanent impacts on businesses, noise, safety, air pollution, possible impacts on natural habitats (to be determined). The EIA will have to cover any potential secondary investments related to the roads such as borrow pits, feeder roads, or access roads.

The EIA will include an analysis of alternatives, particularly for the BRT component for which there are potentially a range of other conceivable solutions to the same traffic problems and which may have different types of environmental impacts. An environmental management plan (EMP) or plans, as needed, will be developed as part of the EIA. These will lay out detailed plans for the mitigation of any identified impacts and will address institutional responsibilities, costs and financing, and monitoring. Environmental codes of practice (ECOPs) will be detailed in the EMP and will be included as appropriate in all eventual bidding documents.

Natural Habitats (OP/BP 4.04): The project infrastructure investments will wholly take place within the highly urbanized area of Da Nang which contains very few remaining areas of natural habitats. It is therefore considered unlikely that the project will cause any significant impacts to natural habitats but project scoping will need to be carried out to look at the possibility that a relict area of natural vegetation might be impacted or that any area of receiving waters constitutes a potentially affected natural habitat.

Physical Cultural Resources (OP/BP 4.11): Project scoping will need to be carried out in the areas where infrastructure will be build (WWTPs, urban roads, etc.) to determine if there are any known physical cultural resources such as graves, temples, or archeological sites. If such resources are found, the policy will be triggered and appropriate mitigation measures will be developed. In any event, a Chance Finds Procedure will be prepared, in the event that project activities result in discovery of any currently unknown PCR, and this will be included in the EMP and in all bidding documents, as appropriate.

Involuntary Resettlement (OP/BP 4.12): Preliminary surveys have showed that about 53 ha of land would be required for the road component development, most of which (about 47 ha) is agricultural land. In addition, some land would be required for development of the sewage system in three districts of the city as well as for a resettlement site development for about 280 project DPs to move to. An RPF will be prepared for the whole project and an RP will be developed for the investment known before project appraisal. During project implementation, if there will be land acquisition, RP(s) will be developed based on the approved RPF.
5. Tentative financing
Source: ($m.)
BORROWER/RECIPIENT 69.7
International Bank for Reconstruction and Development 40.0
International Development Association (IDA) 132.5
Total 242.2

6. Contact point
Contact: Cuong Duc Dang
Title: Sr Urban Spec.
Tel: 5777+346
Fax:
Email: Cdang@worldbank.org
Location: Hanoi, Vietnam (IBRD)