ADB ASIAN DEVELOPMENT BANK

Viet Nam: Smart and Energy Efficient City Project, Phase 1

Project Name	Smart and Energy Efficient City Project, Phase 1
Project Number	53333-001
Country	Viet Nam
Project Status	Proposed
Project Type / Modality of Assistance	Grant Loan Technical Assistance
Source of Funding / Amount	Loan: Smart and Energy Efficient City Project, Phase 1 Ordinary capital resources — US$ 95.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth
Drivers of Change	Partnerships Private sector development
Sector / Subsector	Energy - Energy efficiency and conservation
Gender Equity and Mainstreaming	Some gender elements
Description	Smart and Energy Efficient City Project (SEECP) (Phase I) is included in the country operations business plan 2020-2022 for Viet Nam. The project is aligned with the Viet Nam National Energy Efficient Program 3 (VNEEP 3 2019-2030), and has the following three outputs: (i) energy efficiency of streetlighting and public buildings increased in Can Tho, Da Nang, Ha Noi, and Hai Phong special administrative cities; and Quang Nam and Quang Ninh provinces in Viet Nam; (ii) policy and regulatory environment improved; and (iii) capacity strengthened and awareness increased of various stakeholders. The project has the following impacts: (i) national energy saving targets met, and (ii) national GHG emission reduced. The outcome will be fossil-fuel dependent energy consumption reduced in the six targeted cities and provinces.
Project Rationale and Linkage to Country/Regional Strategy	Viet Nam is increasingly dependent on energy imports and faces uncertainties in future power supply. High reliance on imported fossil fuels could lead to increasing energy costs and carbon emissions, putting pressure on climate change. On the other hand, Viet Nam has a rapidly growing energy demand. Its electricity elasticity is 1.67 in 2020, reflecting a high consumption of electricity per output of gross domestic product. The draft Power Development Plan (PDP) VIII for the period of 2021-2030 with overlook to 2045 called for this ratio to be reduced to 1.24 by 2030 and identified energy efficiency as one of important planning considerations. The PDP VIII is expected to be approved in 2021. The government also approved Viet Nam National Energy Efficiency Program 3 (VNEEP 3) for the period of 2019-2030 in March 2019, which requires stronger measures to achieve energy efficiency targets. However, the energy efficiency market is not yet fully developed due to relatively low electricity tariffs, no mandatory targets, limited capacity of energy service companies (ESCOs) and related industries, lack of awareness on energy efficiency benefits by energy users, and underdeveloped financing facilities. In general, cities consume about 80% of global primary energy and emit roughly 50% of the world's total greenhouse gases (GHGs). Due to rapid urbanization, these numbers are likely to rise, requiring a fundamental rethinking on how to supply and use the energy most efficiently to achieve a sustainable and low-carbon development path. Advanced energy efficient solutions have become more affordable, such as light-emitting diode (LED) lamps with smart controls; energy management systems; optimized heating, ventilation, and air-conditioning systems; rooftop solar PV; and battery energy storage. Local governments can apply these solutions to improve energy efficiency in their office buildings, public schools and hospitals, and street lighting to reduce energy consumption, save on electricity costs, increase operational efficiency, and reduce carbon emissions. This will further improve the quality of streetlights and public buildings, thereby contributing to the safety and ambience of cities and provinces, and convenience and comfort of using public services. Some cities in Viet Nam have already started replacing older street lighting systems with LED technology, but only on a pilot or a small-scale basis: LED represent less than 5% of total public lighting in Viet Nam. Some technical studies have also revealed that Viet Nam's buildings have high energy saving potential of around 10 40% using its most up-to-date energy efficient building code standards; and up to 60% using international best practices. Local governments can demonstrate the impacts of energy efficiency investments, create business opportunities, and provide examples and lessons that can be carried over to the private sector. Local governments can also leverage energy efficiency planning to achieve not just energy efficiency, but also other economic, social, and environmental goals; and climate resilience and mitigation objectives. While local governments are keen to use a PPP/ESCO approach for smart and energy efficient city development, this requires significant enhancement of relevant regulations and policies. In this regard, ADB is proposing a holistic approach in two phases: Phase I with public financing modality and Phase II with PPP/ESCO approach. During Phase I, ADB will support local government's energy efficiency investment with a public financing modality while at the same time helping to improve the regulations for PPP/ESCO. During Phase II, ADB will use a PPP/ESCO approach with private sector participation under enhanced legal and regulatory environment.
Impact	Impacts the Project is Aligned with National energy saving targets met a and national GHG emission reduced
Outcome	Fossil-fuel dependent energy consumption reduced in the six targeted cities and provinces
Outputs	Energy efficiency of streetlighting and public buildings increased Policy and regulatory environment improved Capacity strengthened and awareness increased of various stakeholders
Geographical Location	Can Tho, Da Nang, Haiphong, Hanoi, Tinh Quang Nam, Tinh Quang Ninh

Safeguard Categories	
Environment	C
Involuntary Resettlement	B
Indigenous Peoples	C

Summary of Environmental and Social Aspects
Environmental Aspects
Involuntary Resettlement
Indigenous Peoples
Stakeholder Communication, Participation, and Consultation
During Project Design
During Project Implementation

Responsible ADB Officer	Lee, Hyunjung
Responsible ADB Department	Southeast Asia Department
Responsible ADB Division	Energy Division, SERD
Executing Agencies	Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550, Philippines Can Tho City People's Committee 02 Hoa Binh St. Ninh Kieu District, Can Tho City Da Nang City People's Committee Danang City Administration Building, No. 24 Tran Phu Street Ha Noi City People's Committee 79 Dinh Tien Hoang Street, Ha NoiCity Hai Phong City People's Committee Hai Phong, Vietnam Quang Nam Provincial People's Committee 62 Hung Vuong, Tan Thanh Ward Tam Ky Town, QN Viet Nam Quang Ninh Provincial People's Committee Administration Building No. 2, Hong Ha Commune, Ha Long City

Timetable	
Concept Clearance	27 Dec 2019
Fact Finding	14 Jun 2021 to 30 Jun 2021
MRM	30 Nov 2021
Approval	-
Last Review Mission	-
Last PDS Update	14 Apr 2021

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