



# PPIAF

Enabling Infrastructure Investment

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## PPIAF Supports Private Sector Participation in Green Infrastructure Investment in Da Nang, Vietnam

Following Vietnam's national agenda, the Da Nang City government made a strong commitment to sustainable urban development and green growth with the adoption of its city environmental plan in August 2008. In 2013, PPIAF, in collaboration with the World Bank Sustainable Urban Energy and Emissions Planning (SUEEP<sup>1</sup>) program in the East Asia and Pacific (EAP) Region, supported Da Nang in developing a long-term sustainable energy and emissions plan. The SUEEP program aims to promote solutions that would help de-link high levels of carbon-intensive energy use from urban growth in the EAP region. This collaboration helped establish the process to identify and prioritize green infrastructure investment opportunities to attract private-sector participation. The PPIAF assistance identified financing options and set out a project-development methodology for preparing, procuring and implementing green investment projects. PPIAF also assisted in the development of institutional capacity within Da Nang's government to scale up green investments.

Fast-growing cities in the EAP region will define the region's energy future and its greenhouse gas (GHG) footprint. Rapid urbanization and growing standards of living present a major opportunity for EAP cities to become global engines of green growth by choosing energy-efficient solutions to meet their infrastructure needs. In an effort to promote solutions that would help de-link high levels of carbon-intensive energy use from urban growth, the World Bank's EAP region initiated the SUEEP program in 2011. Its aim is to identify opportunities that can maximize energy-efficiency (EE) outcomes within three pilot cities in the region by developing a framework for the identification and prioritization of green investments in major infrastructure sectors.

Da Nang, the fourth largest city in Vietnam, was selected to be the first pilot city to implement the SUEEP framework. Environmental protection and green growth have been at the forefront of the city's

development policy. Its comprehensive environmental plan, “The Plan for Developing Da Nang – The Environmental City <sup>2</sup>,” includes commitments to greater energy efficiency and more widespread use of renewable energy. The implementation of the Da Nang SUEEP program is expected to further confirm the city’s credentials as an environmental city.

In this context, additional support to the City focused on:

- improving the institutional capacity for the identification, prioritization and implementation of “green infrastructure” projects, and
- developing public-private partnerships (PPPs) and mobilizing financing via the prioritization and systemic evaluation of green-infrastructure investments at the city government level.

## PPIAF SUPPORT

Partnering with the SUEEP program in 2014, PPIAF provided technical assistance (TA) to support the initiative in creating the enabling environment for private-sector participation in energy-efficiency projects, which can be applied to future projects in Da Nang. As part of the initiative, the SUEEP program and PPIAF worked together to help the city implement the identified green-investment projects. The SUEEP program produced a Green Growth Energy and Emission Plan (GGEEP), which provides the city with a comprehensive project-planning approach to maximize energy efficiency across sectors and to improve energy management and GHG mitigation. Meanwhile, PPIAF assisted with the production of a Green Business Plan (GBP), which lays out the process for identifying and prioritizing investment opportunities to harness energy-efficiency projects to attract private-sector investments.

More specifically, PPIAF’s support focused on:

- developing financing options for priority investments (as part of the GBP); improving the institutional capacity of the city government to use private-sector participation in energy-efficiency projects; and
- producing best practices and lessons learned regarding the use of private-sector participation in energy-efficiency projects, which can be applied to future projects in Da Nang.

As part of the GBP, the SUEEP program identified an initial shortlist of 14 energy efficiency and renewable-energy projects. Of these, five were deemed as potentially attractive to private-sector

investors. Some of the projects identified include an efficient street-lighting retrofit using LEDs; septage collection and waste-to-energy; landfill gas waste-to-energy at the landfill site; large-scale solar-power provision to industrial zones; and a bus rapid transit feeder route.

## OUTCOMES

The PPIAF assistance contributed to the development of financing options for the shortlisted projects, and recommended further steps to be undertaken to procure and implement the projects with private-sector participation. The study helped in identifying three procurement options for green-infrastructure projects, depending on the role of city government. The options identified include specific grant and loan programs/instruments for green investment sources, such as: multi-lateral and bi-lateral development financial institutions; loans from local commercial banks, state-owned banks, or international banks; and bond issuance through capital markets.

In general, PPIAF support contributed to laying the foundation for Da Nang to implement projects that would help the city to become more energy efficient and sustainable. The city has great momentum to proceed in the development and implementation of energy efficiency and GBP projects, adapting and applying best practices in structuring and financing through private-sector participation. For the next steps, Da Nang has requested further support to operationalize the proposed GBP and promote private-sector participation in PPP projects.

## DONOR COORDINATION

This grant has been closely coordinated, with the World Bank leading the SUEEP program, which was financed by Australian Aid. Moving forward, further support is being prepared jointly by PPIAF and the World Bank Group, which includes the International Finance Corporation (IFC) and potentially other interested Donors. This follow-up assistance will aim to support Da Nang to operationalize the GBP and further build the capacity of city officials for the implementation of PPPs.

### Footnote

<sup>1</sup> <http://wbi.worldbank.org/energy/sueep-sustainable-urban-energy-and-emissions-planning>

<sup>2</sup> <https://wbi.worldbank.org/energy/case-studies/da-nang-environmental-city>