



urban mobility solutions
urban electric mobility initiative

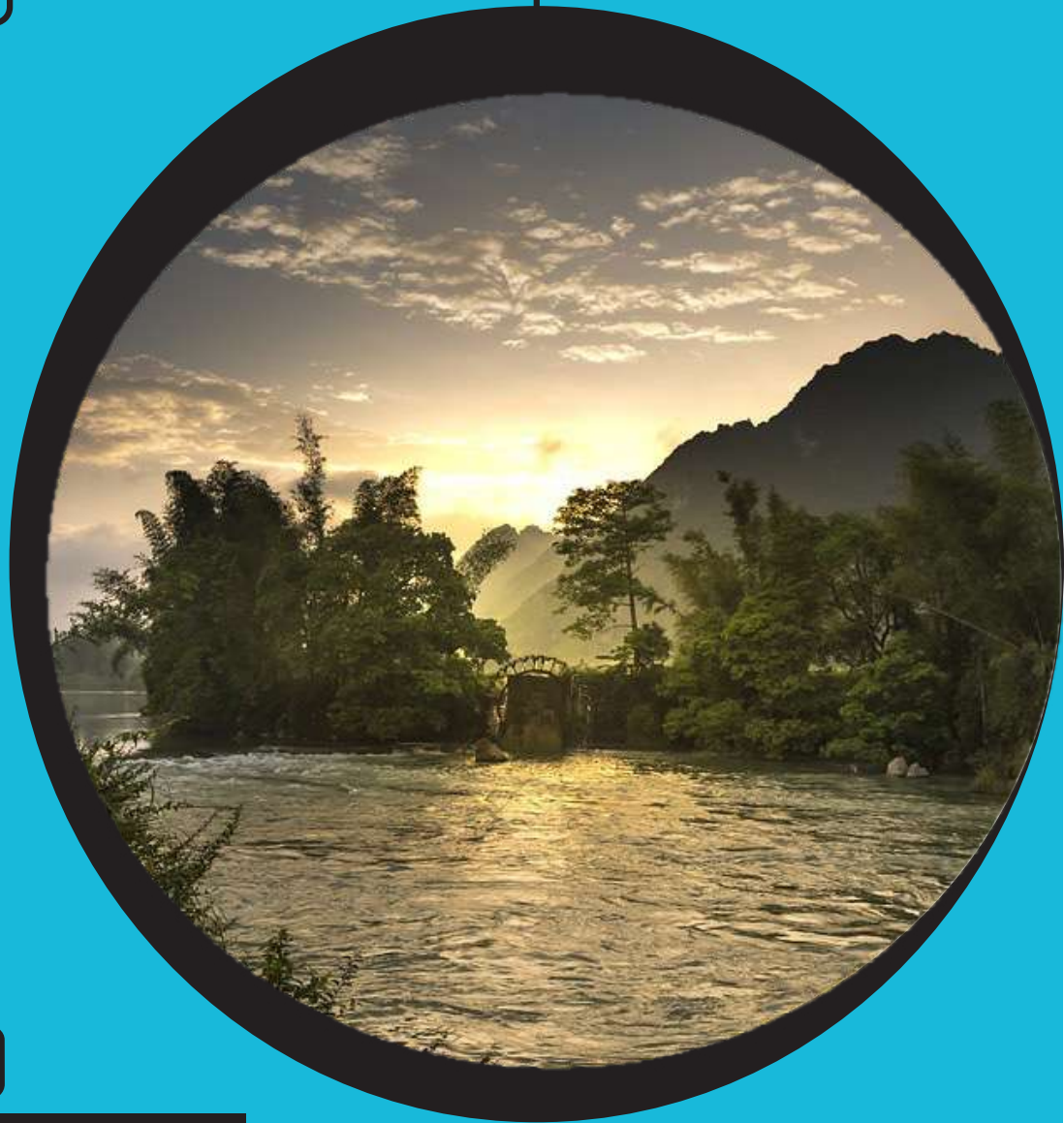
Bankable Project

along

Tam Bac River, Hong Bang District

Pilot Project Concept

2019



Vietnam Hai Phong

Shritu Shrestha (Wuppertal Institute)
Santhosh Kodukula (Wuppertal Institute)

Author: Shritu Shrestha (Wuppertal Institute)
Santhosh Kodukula (Wuppertal Institute)

Editor: Oliver Lah (Wuppertal Institute)

The graphic design was prepared by Barbara Lah (CAIF)

Berlin, 2018

Urban, Electric Mobility Initiative

UEMI

secretariat@uemi.net

Oliver Lah
+49 (0)30 2887458-16

Project Office
Schwedter Strasse 225
10435 Berlin



The project has received funding from the European Union's Seventh Framework Programme and Horizon 2020 under the grant agreements no 604714 (SOLUTIONS) and no 723970 (FUTURE RADAR)

UEMI

Urban Electric Mobility Initiative (UEMI) was initiated by UN-Habitat and the SOLUTIONS project and launched at the UN Climate Summit in September 2014 in New York.

UEMI aims to help phasing out conventionally fueled vehicles and increase the share of electric vehicles (2-,3- and 4-wheelers) in the total volume of individual motorized transport in cities to at least 30% by 2030. The UEMI is an active partnership that aims to track international action in the area of electric mobility and initiates local actions. The UEMI delivers tools and guidelines, generates synergies between e-mobility programmes and supports local implementation actions in Africa, Asia, Europe and Latin America.

Future Radar

Future Research, Advanced Development and Implementation Activities for Road Transport (FUTURE-RADAR) project will support the European Technology Platform ERTRAC (the European Road Transport Research Advisory Council) and the European Green Vehicle Initiative PPP to create and implement the needed research and innovation strategies for a sustainable and competitive European road transport system. Linking all relevant stakeholders FUTURE-RADAR will provide the consensus-based plans and roadmaps addressing the key societal, environmental, economic and technological challenges in areas such as road transport safety, urban mobility, long distance freight transport, automated road transport, global competitiveness and all issues related to energy and environment.

FUTURE-RADAR will also facilitate exchange between cities in Europa, Asia and Latin America on urban electric mobility solutions. The FUTURE-RADAR activities include project monitoring, strategic research agendas, international assessments and recommendations for innovation deployment as well as twinning of international projects and comprehensive dissemination and awareness activities. Overall it can be stated that FUTURE-RADAR provides the best opportunity to maintain, strengthen and widen the activities to further develop the multi-stakeholder road transport research area, for the high-quality research of societal and industrial relevance in Europe.

Hai Phong Overview

With a population of 1.96 million (2015), Hai Phong is the third largest city in Vietnam. The city plays a critical role within the region owing to its strategic location within the Red River Delta and along the coast of the South China Sea, as well as its proximity to the capital city of Hanoi, situated 100 km to the east. The Port of Hai Phong is the largest container port in northern Vietnam, which has resulted in the city becoming one of the largest marine distribution centres.

From the perspective of low-carbon urban development, Hai Phong's local governmental policies are connected with corresponding national strategies. Three of these policies are especially important. The first one is the National Green Growth Strategy (2012) which aims at a 30% GHG emission reduction by 2030. Based on this policy, the city has framed its own Green Growth Strategy Action Plan (2014). Along with the intent of achieving low-carbon growth for urban and industrial areas, this plan also aims at developing Hai Phong as a 'Green Port City'.

The second major policy document is the National Socio-economic Development Plan (SEDP). Based on the SEDP's directives, the local department for planning and investment (DPI) prepares the city's five-year master plans (the current one being for the 2016-2020 period). The plan sets targets for GDP growth, poverty reduction, industrial production, taxation and public expenditure.

Thirdly, Hai Phong also adheres to a spatial master plan prepared at the national level by the MOT, which guides the city's urban planning and port development projects. For effective implementation of these multiple plans, it is essential that the local government builds synergies between diverse actions and facilitates coordination among all line agencies.

Hai Phong plans to make a major shift to sustainable urban development by 2025. In the last few decades, the city's economy grew rapidly with significant changes in urbanisation and infrastructure development. Hai Phong at the same time is facing environment pollution and traffic congestion, especially in the centre of the city. The city lacks efficient public transport and the dependence on motorcycles is extremely high in the city. To address the present lack of efficient public transport, the city could invest in strengthening the existing bus network. The city also has a proposal of introducing 220 electric buses, which is yet to be implemented.

The project concept is developed to reduce the vehicle flow and develop pedestrian street along Tam Bac river in Hong Bang district in Hai Phong.



Problem Statement

Hong Bang District is Hai Phong socio-economic centre with historical, cultural and recreational importance. The population of this district is 108,101 with a density of 7,471 people/km². Beside a growing population, in 2017 Hai Phong received approximately 7 million visitors, which included 1 million international visitors. One area of great significance and high touristic attraction is the Hong Bang District's Tam Bac park, named after the Tam Bac river flowing through the district.

Due to tourism flows and commercial activities in the area, vehicular movement is very high with huge risks to pedestrian. Pedestrian safety is also low due to the lack of allocated walking space, further evident with frequent and high volume of traffic accidents. With this in mind, the Tam Bac river front has the potential to be developed into a pedestrian friendly space by reducing vehicular movement, implementing energy efficient street lighting, and improving waste management. Hence, Hai Phong city plans to develop a project to redevelop the area along the Tam Bac river and Tam Bac Park to prioritise pedestrians and create an amiable public space for the citizens and the environment.



Figure: Current situation of the Tam Bac river front

Project Concept: Pedestrian Street along Tam bac River

The proposed urban renewal demonstration project is an initial step towards a larger urban transformation in Hai Phong city. The current action will be implemented at the Tam Bac river front in the Hong Bang district of Hai Phong city. The district has a socio-economic importance. It is a destination for employment to many people, and for tourist visiting the cultural and heritage sites.

The increased importance of the river front of the Tam Bac River and its centrality to the Hong Bang District provides significant rationale for support to redesign and develop the area to include pedestrian friendly mobility. The central aim of the development is to increase the social wellbeing of the residents and visitors in Hong Bang district. The current situation in Hong Bang does not allow an increased and safe movement of pedestrians and people with special needs. Lack of people friendly infrastructure forces an increased use of motorized modes of transport, which are unsafe for both the riders and for the other road users. The objectives of the project are to:

1. Redesign and develop an existing area along the Tam Bac river in Hai Phong city, making it a tourist attraction centre, and maintaining historical and cultural importance;
2. Demonstrate the activity to citizens that attract urban public spaces have the potential to increase active mobility and can be well integrated with public transport;
3. Create convivial and pedestrian only public space to promote public health and increase the safety of pedestrians from fast moving motorised traffic;
4. Influence the urban planning paradigm and shift it towards a people focussed policy;
5. Integrate the project with other sectors such as energy and resource management to amplify the climate mitigation potential.



Planned Actions

By implementing a demonstration project along the Tam Bac river, the action not only provides access to a safe, green and inclusive urban space, but also encourages the city to undertake similar future projects. A demonstration project will allow the citizens in the area to experience first-hand a people friendly urban area.

Further, the action will also integrate other important urban sectors viz. energy and waste management into the design and implementation. Street lighting with energy efficient means and effective waste segregation and collection shall be an integral part of the action. A shift from motorized modes to active mobility (i.e. walking and cycling) shall be encouraged through pedestrian precincts and dedicated bicycle tracks and infrastructure that are designed with international standards adapted to the local context.

The redesigning and redevelopment action will be preceded by a series of fact-finding exercises and analysis of existing urban policies in the city. This shall be the initial stage of the action. Additionally, in the initial phase the project will employ a series of urban space assessments and surveys to get a quantified result on the activity in the proposed area.

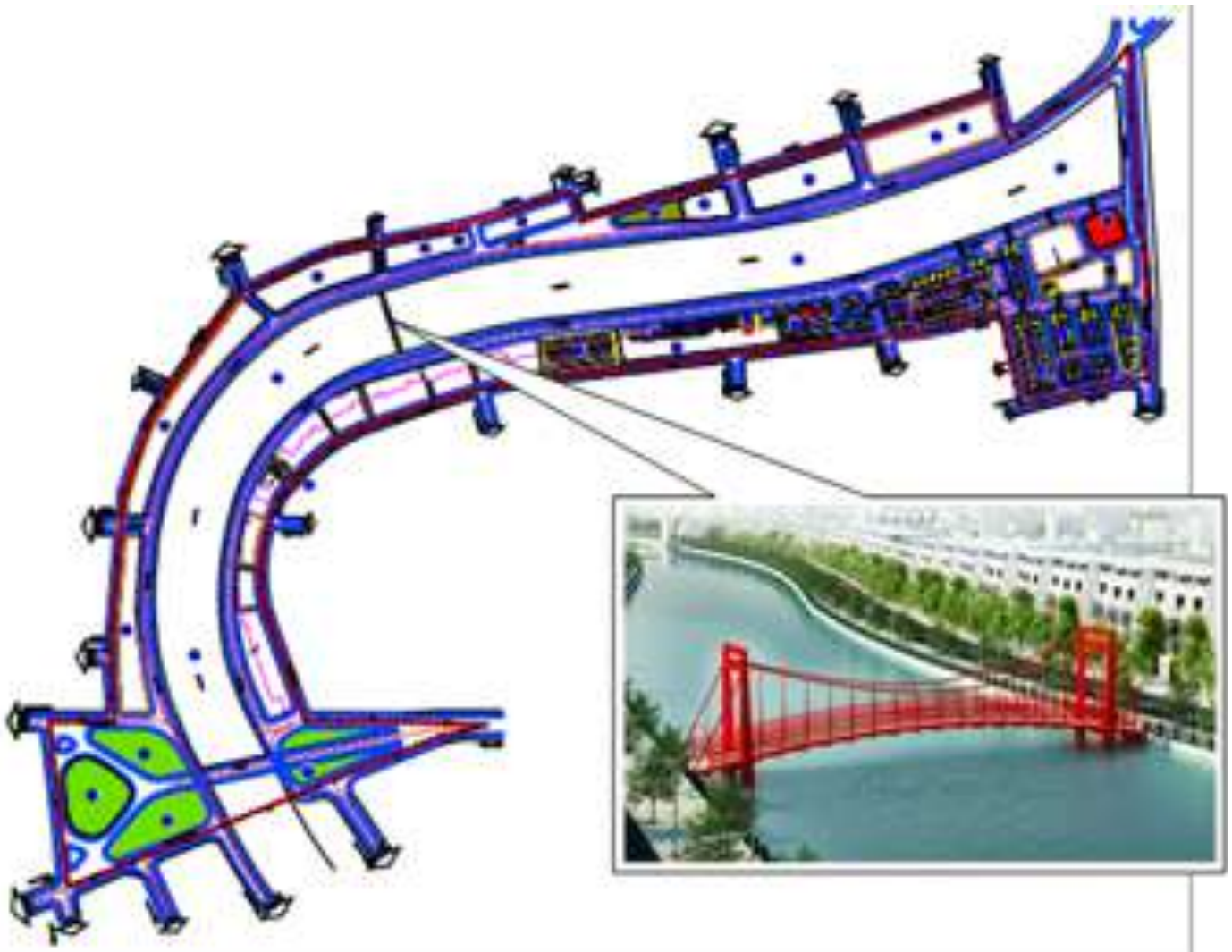


Figure: Tam Bac river area

In the first phase, the surveys and assessments will support a participatory workshop that will bring together various stakeholders (e.g. city officials, traffic police, residents, visitors, local businesses, academia, international experts, etc.). The initial participation workshop will result in identifying the existing gaps in comprehending the importance of safe public space. The workshop will identify key areas for the river front development that needs to be explored further and identifying the gaps in standards for implementing the action. The workshop will also focus on the institutional setup and define criteria to enable effective public space planning.

In the second phase of the action, the partners will work together with local urban designers and academia in developing proposals for redesigning the safe public space in the city. This part of the action can be achieved through a competition call for design ideas for redeveloping the Tam Bac river front. The redesign competition will focus on designing a public space that encourages social interaction, active mobility, social cohesion and energy efficiency. The participants will be asked to develop a public space based on the needs of the city, formulated by a multi-stakeholder group established in phases one and two. Such an approach ensures that the citizens learn more about the area that will be transformed. Thus, increasing the sense of stewardship of the project. During this stage the city may also implement temporary measures e.g. road closures, car-free days, critical mass for cycling, etc.

In the third phase, a survey is conducted for people to vote on the designs shortlisted by the stakeholders of the participatory workshop. In parallel, the partners together with the city will develop a set of indicators to establish a baseline in the area of implementation. Some example indicators in the area are, number of vehicles plying, public transport ridership, number of accidents and fatalities, change in air quality, citizens' perception of the public space, energy used for street lighting, amount of waste collected, etc. From the results of these indicators an initial estimate of GHG emissions in the area is estimated.

In the fourth phase, a design that fulfils the criteria for implementation and is financially feasible is selected for implementation. Then its procurement process is initiated by the city for the demonstration project.

In the fifth phase, the project measures the effects of the implementation and compare to the baseline, developed in the third phase. In parallel, the project will also be scaled-up to see its effect if similar interventions were implemented city wide. With the support of the project partners the city will also approach various funding entities (including the national government) to explore the possibility of implementing future scale-up activities.

As this project will approach the issue through a multi-stakeholder involvement, the views of the residents and local business in the neighbourhood will be considered. The design criteria for the project will incorporate the opinions and concerns of the local actors. Thus, creating a design and a project that matches the direct needs of the citizens. The local stakeholders will also be a part of workshops that increase the awareness of people friendly urban spaces, this approach will address any misconceptions about urban design and sustainable development.

Expected outcomes and indicators

Outcome	Indicator
Phase 1: Multi-stakeholder group, Fact finding, surveys and assessment	
1.1 Establish a multi-stakeholder group consisting of local government officials, traffic police, local businesses, NGOs, civil society, academia etc.	1.1 Multi-stakeholder group is established and headed by the mayor of the city or an appointee;
1.2 Public space survey and assessment of the project area is carried out in cooperation with the international knowledge partner;	1.2 Public space survey and assessment reports are reviewed and approved by the multi-stakeholder group;
1.3 Gaps for technical awareness raising are identified and workshops are held.	1.3 Stakeholders have taken part in training courses on urban design and people friendly urban planning conducted by international experts
Phase 2: Minecraft challenge, awareness raising, demonstration activities	
2.1 A design competition for public space design using Minecraft has been launched for local designers and aspirant designers;	2.1 Participants have registered for the competition to design the Tam bac river front urban space;
2.2. People in the city are sensitized through demonstration projects such as critical-mass activities, temporary road closures for automobiles etc. have been implemented.	2.2. Media reports and evaluation reports of the activities, stakeholder contributions recorded (business involvement, community engagement, citizen participation).
Phase 3: Public survey, baseline development, traffic management plan	
3.1 Public opinion decides the final design for Tam Bac river front design;	3.1. Public survey responses and votes on the shortlisted designs. Media Report, public announcement;
3.2 A baseline for the project area in terms of GHG emissions and other socio-demographic factors is established;	3.2 Approved report on the indicator set and the analysis of the data;
3.3. Tam Bac river front development ensures the future free flow of traffic.	3.3 A revised traffic management plan is developed together with the traffic department, police, and stakeholders.
Phase 4: Procurement and implementation	
4.1 Services for the final design implementation are procured according to the city regulations;	4.1 Procurement report for the services;
4.2. Successful design has been developed and implementation is explored;	4.2 Final project report;
4.3. Urban policy is influenced by intervention.	4.3 Approved urban policy changes catering for people friendly infrastructure and measures;
Phase 5: Monitoring, scale-up and financial sustainability	
5.1 Project implementation effects are measured;	5.1 Monitoring report of the project post implementation against the baseline;
5.2 Scale up potential of the project is calculated;	5.2 Report documenting the projected effects of project scaling up to the city level are calculated;
5.3 Potential for future funding and financing explored.	5.3 Report on the results of the contact with funding entities for scaling up the project.

Action Plan

Within the project duration of a year, following activities are planned:

1. Multi-stakeholder group at the city level

- Establish a multi-stakeholder group consisting of local government officials, traffic police, local businesses, NGOs, civil society, academics etc.

2. Stakeholder workshop

- Needs finding workshop to determine the status quo of public space policy, design practices and urban development framework in the city

3. Public activity

- Initial awareness raising activity such as car-free day, critical mass for cycling

4. Workshops

- A series of technical workshops on urban space design, urban planning, energy efficiency and resource management
- Workshop on Minecraft for urban design

5. Surveys, assessments, baseline development

- Multi-stakeholder group to develop requirements for the urban design and function of the river front development
- In cooperation with international experts and local partners design and conduct surveys and assessment of local project area
- Develop indicator set for developing a baseline for the city and project area

6. Public Activity

- Awareness raising activities such as car-free days, critical mass for cycling, with the involvement of local stakeholders

7. Urban design competition

- Launch of the urban design competition for the Tam Bac river front development
- Announce the winner of the competition (at the end of the 2nd month)

8. Urban Policy interventions

- Review the urban policy of the city to enable the implementation of the urban design
- Work with the traffic enforcement authorities and public transport agencies to adjust the traffic management plan for the implementation of the project

9. Implementation

- Implement the urban design project based on the available resources and less cost intensive measures

10. Monitoring, scaling up and review

- Monitor implementation effects through the indicators developed and analysed against the baseline
- Potential for scaling up the activity at a city level and the resulting benefits are analysed
- Urban policy is revisited and the revisions are submitted to the city council for approval
- Potential to attract funding from various entities is explored and suitable entities (incl. the national government) are approached for future project funding

Project Financing and implementation

The proposed demonstration project will be a part of an overall urban transition strategy of Hai Phong city. Hai Phong Department of Transport will be the key local partner and the implementer of the demonstration projects and activities with the support from “Urban Pathways” project – funded by the International Climate Initiative and implemented by UN-Habitat, Wuppertal Institute and UN Environment.

The project is submitted to UN-Habitat call on Small public space implementation projects' in 2018.: <https://unhabitat.org/call-for-proposals-small-public-space-implementation-projects-18-october-2018/>
The total estimated project budget is 171,400 Euros.

Project Sustainability

The current action is envisaged to complement the existing effort of Hai Phong city towards low carbon future. The city is already committed to implementing low carbon solutions especially in the urban mobility sector. Through the Urban Pathways project the city is exploring options to move towards shared electric mobility systems. Currently project will bolster the efforts of the city and expand the scope of the city's efforts.

As the project aims to influence urban policy in the city and increase the technical capacity of the city staff it is expected to incorporate the newly availed knowledge in future urban projects.



Vietnam

Bankable Project

2019

along
Tam Bac River, Hong Bang District

 **UN HABITAT**
FOR A BETTER URBAN FUTURE



 **Wuppertal
Institut**

Urban, Electric Mobility Initiative

UEMI

secretariat@uemi.net

Oliver Lah
+49 (0)30 2887458-16

Project Office
Schwedter Strasse 225
10435 Berlin