

📍 Phnom Penh, Cambodia

## Build4People

### Enhancing quality of life through sustainable urban transformation

The project encourages research into sustainable building and urban development as well as the development of sustainable practices in Phnom Penh, the capital of Cambodia. Integrated sustainable urban transformation approaches are designed to offer city dwellers a higher quality of life. For instance, stakeholders from science and practice, develop and test new approaches and innovative concepts in living labs for a more sustainable Phnom Penh of tomorrow.

## Project Objectives

The project aims to establish and meaningfully coordinate new relationships between behavioral and environmental dimensions and relationships between technologies and policies. The aim is a gradual transition from a rather technocratic and top-down oriented planning culture to a people-oriented process and dialogue culture. In this way, the foundations are laid for an integrated urban development. As overall aim, the urban quality of life is to be improved through sustainable buildings, sustainable neighbourhood development and expanded green infrastructures. There is also a focus on strengthening resilience to the consequences of climate change. Thereby, the constant transfer of knowledge between international stakeholders from science, politics, urban citizens and the corporate sector is being regarded as essential for sustainable urban transformation.

## Challenges

Dynamic economic growth and an accompanying massive construction boom are currently reshaping urban space in Cambodia. These processes are strongly dominated by short-term profit interests, however. Despite high electricity prices and a long tradition of climate-adapted architecture, newly constructed buildings are often neither energy-efficient nor adapted to the tropical climate. In addition, the development of a modern consumer society in Cambodia leads to resource-intensive lifestyles with rapidly increasing ecological footprints. Sustainability issues are insufficiently discussed by relevant ministries, city administrations, educational institutions, building users and actors in the construction sector. Against this background, Cambodia faces complex challenges in implementing a sustainable urban transformation. Viable concepts are to be developed for achieving the overarching goal of an improved quality of life in the project context. Not only technological, but also social, cultural, economic and political aspects will be considered.

**Addressed Sustainable  
Development Goals  
of the United Nations**





Image provided by Build4People

## Research Approach and Methods

Based on a transdisciplinary research design, the Build4People project establishes participatory formats such as living labs or social innovation platforms. In this way, local actors from politics, business and civil society generate know-how together with researchers, which can promote a sustainable urban transformation. Experts from environmental psychology, civil engineering, urban planning, architecture, urban climatology, remote sensing and human geography are involved. Collaborative research methods such as living labs (»Ecocity Transition Lab«) and strategic niche management approaches (»Incubator for Sustainable Building«) are applied. In the »Arena for Sustainable Construction«, local sustainability pioneers will develop joint visions and strategies and prepare projects for subsequent implementation. In a final step, the application of the empirical results in action research processes should also lead to an integration of the knowledge created and a subsequent expansion of the theory.

## Focus Topics

- Sustainable urban transformation
- Energy and resource-efficient building
- Integrated urban neighbourhood development
- Promotion of urban quality of life
- Urban greening and urban climate
- Environmentally friendly behaviour and sustainable lifestyles



»I am very excited to work with Build4People as it is really important for Phnom Penh. The main course of our urban planning work in the City Hall is how to improve the urban quality of life for the population in Phnom Penh. Against the background of a steadily growing population, finding comprehensive solutions to the problems that arise represents a major challenge.«

**Vannak Seng.** Director of Administration of Phnom Penh Capital Administration



**Group Picture at Presentation Conference of Build4People Ecocity Transition Lab at Phnom Penh City Hall, March 2020.** Image provided by Build4People

## Expected Solutions and Innovations

Build4People made a point of designing solutions for a people-oriented inclusive urban development. For example, a catalogue of strategies, guidelines and criteria for urban sustainability will be developed in way of co-design. These transdisciplinary processes will result in various target group-oriented products. These include, among others a toolbox for sustainable urban neighbourhood planning, a handbook for healthy housing and sustainable living, and a framework for a campaign to promote more sustainable lifestyles. A key result will be the development of a human-centred model for urban quality of life. Based on this model, concrete theory- and data-based strategies and planning proposals for improving the urban quality of life in Phnom Penh will be derived.



»More recently, it has become increasingly apparent that sustainable urban transformation is by no means only a technological challenge, but above all a social, cultural, economic and political one. At the same time, it is becoming increasingly clear that science can only work out solutions for sustainable urban development together with the urban society.«

**Dr. Michael Waibel**

## Cooperation Partner

### German Partners

- Magdeburg University
- Stuttgart University
- Eble Messerschmidt Partner
- Eberswalde University for Sustainable Development
- Institute for Climate and Energy Concepts

### Cambodian Partners

- Royal University of Phnom Penh
- Institute of Technology of Cambodia
- Paññāsāstra University of Cambodia
- Royal University of Agriculture
- Cambodian Institute of Urban Studies
- Phnom Penh Capital Administration



### Project Coordination

**Dr. Michael A. Waibel**  
University of Hamburg

Department of  
Earth Sciences

☎ +49 40 42838-5030

✉ [michael.waibel@uni-hamburg.de](mailto:michael.waibel@uni-hamburg.de)

**[build4people.org](http://build4people.org)**