

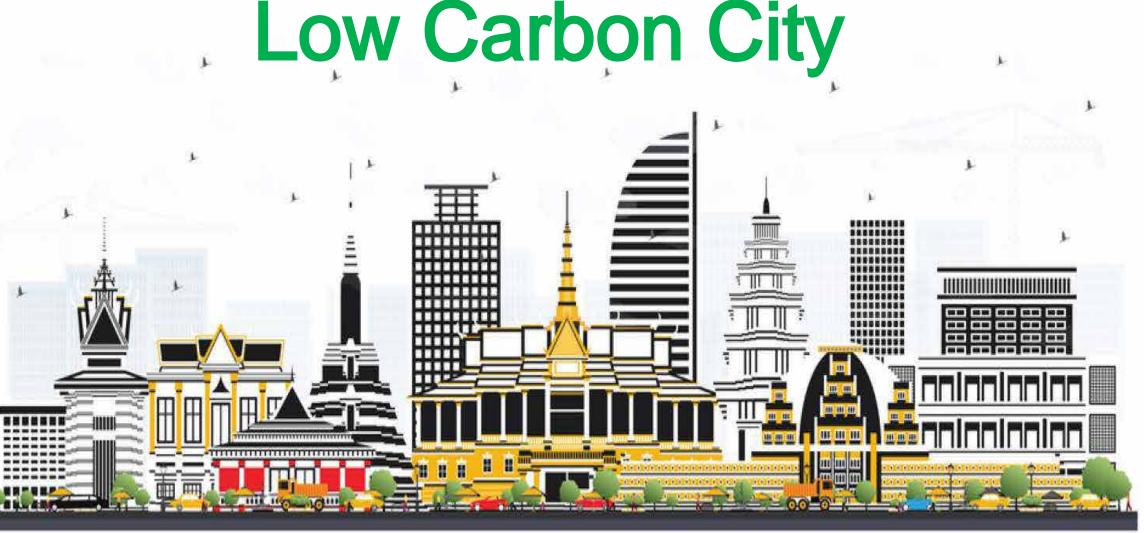


Subregional Office EAST AND NORTH-EAST ASIA



#### **Phnom Penh Capital Hall**

# **Phnom Penh's Effort Towards** Low Carbon City

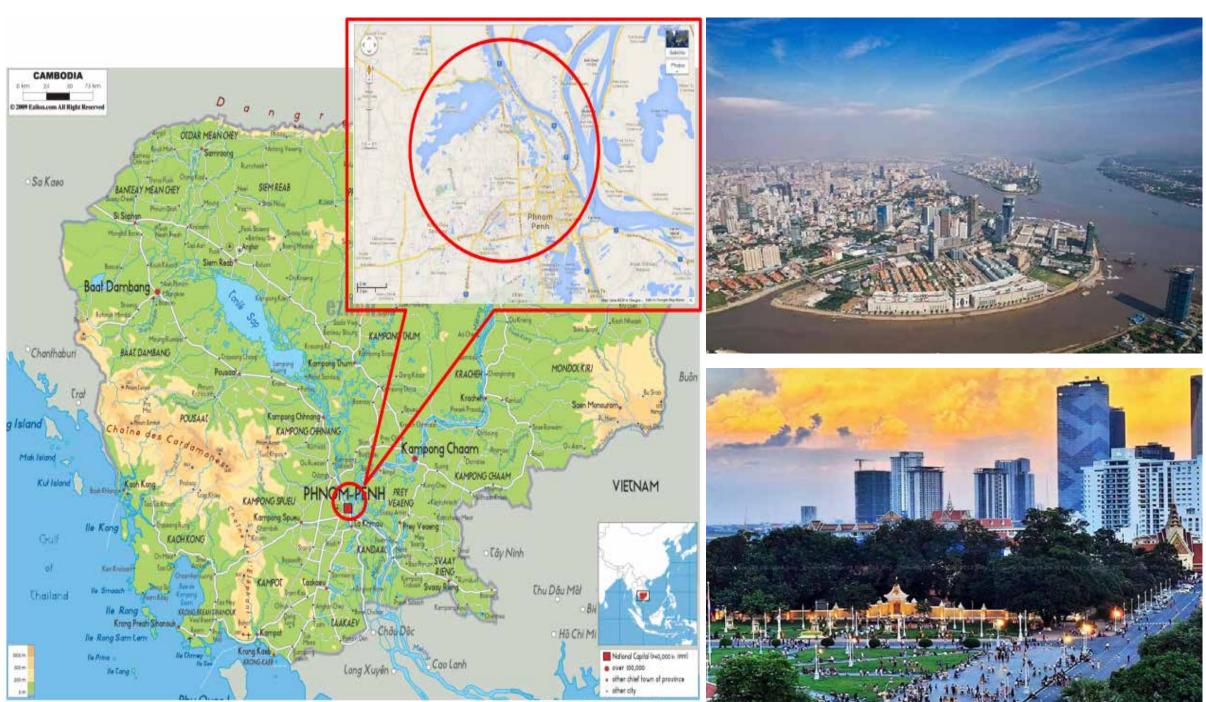


- Presented by Mr. Nuon Samnavuth
- Director of Waste Management and Environment Division
- Attending in the 4<sup>th</sup> International Forum on Low Carbon Cities in Kitakyushu, 7-9 October, 2024.

## Introduction

#### **q** Phnom Penh Profile:

- S Capital City of the Kingdom of Cambodia.
- Subscription Bases at the confluence of four great rivers including Upper Mekong, Lower Mekong, Tonle Sap, and Bassac rivers which form right in front of the Royal Palace.
- A hub of security, politics, economy, culture, heritage and diplomacy.
- S Over 2.5 million population (including daily inflow/outflow of tourists and local traders from outside of Phnom Penh city).
- **§** Total area:  $695,218 \text{ Km}^2$
- **§** Density: 3,295/Km<sup>2</sup>
- Administration divisions: 14 khans (District), 105
  Sangkats (Commune) and 953 villages.
- Climate: a tropical wet and dry climate (Temperature: from 22 °C to 35 °C)



Source: http://www.ezilon.com

## **Introduction (Cont')**

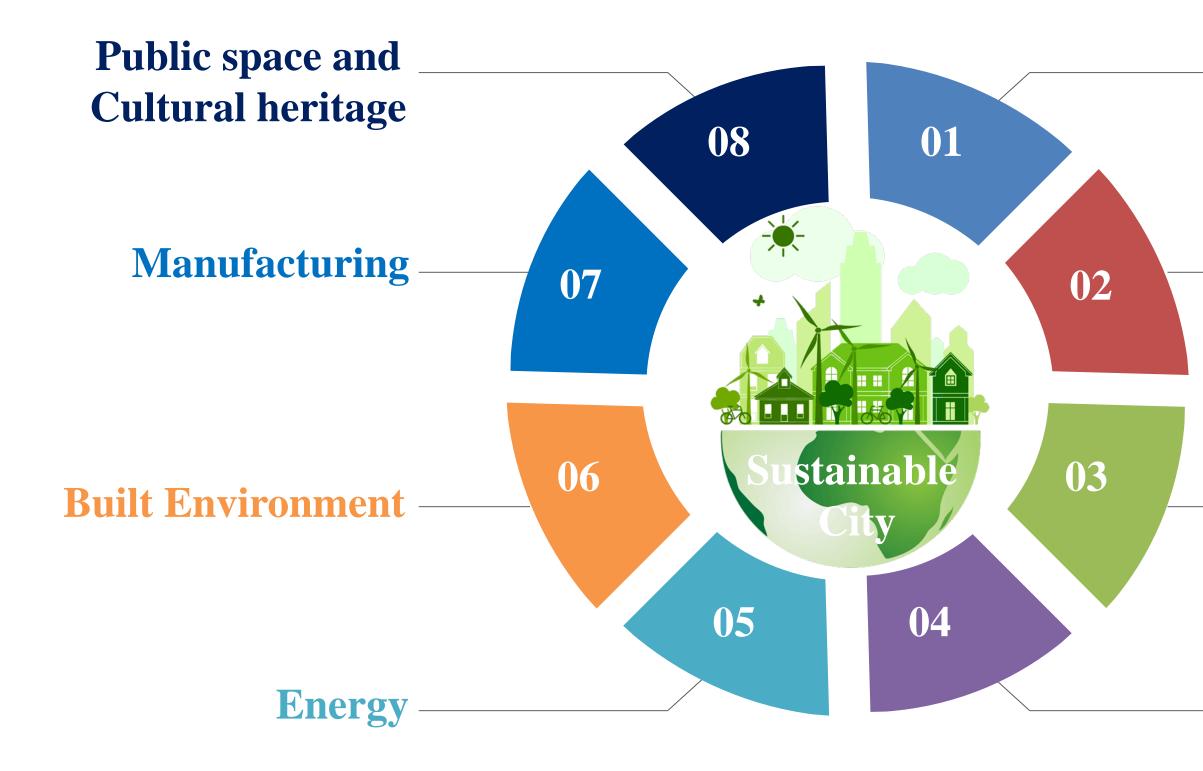
- Phnom Penh is an economic center of Cambodia as it accounts for a large portion of the country's economy. It is also the center of resource consumption, whereby energy, water and other natural resources are utilized by industries and consumers to drive economic development.
- The rapid urbanization of Phnom Penh over the last two decades has caused many challenges such as population growth, inadequate infrastructure, environmental degradation, high energy consumption, increased levels of inequity and social exclusion. So, there is a strongly need for a better city plan in order to settles these issues.
- As a result, Phnom Penh Capital Administration (PPCA) in associate with National Council for Sustainable Development (NCSD) and Global Green Growth Institute (GGGI) develop the Phnom Penh Sustainable City Plan **2018-2030** as our roadmap to pursue the implement of urban green growth in the city, thereby, tackling climate change, while pursuing economic growth, environmental sustainability, poverty alleviation, strengthening development, and social inclusion.







## Phnom Penh Sustainable City Plan 2018-2030



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## **Urban Planning**

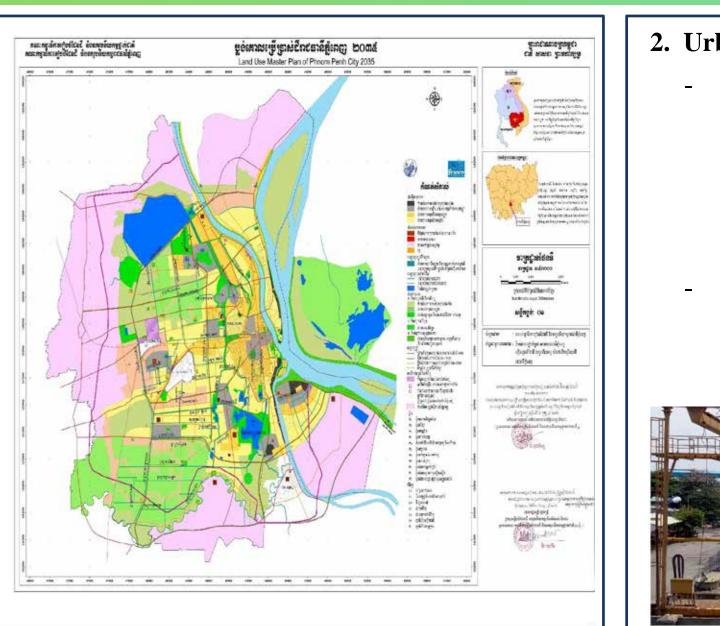
## **Urban Vulnerability**

### **Solid Waste**

## **Transport**

#### **1. Urban Planning:**

In December 2015, the Council of Ministers approved a new Master Plan on Land Use 2035 for managing urban development in Phnom Penh.



- 7 Satellite Cities have been approved & developed to respond to city growth and affordable housing project is also needed.







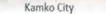








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Koh Pich City Jro

Jroy Jongva City

ING City

Grand Phnom Penh City

Penh City Boeng Kak City

ak City Gai

#### 2. Urban Vulnerability:

PPCA collaborated with JICA to improve its drainage infrastructure in the city center from phase 1 to phase 4 (2001 - 2021). Now, they are implementing the phase 5 to improve its drainage and sewerage system in the 5 peri-urban districts.

Households in the peri-urban areas use improved and secure sanitation systems that will prevent pollution dispersion during high rain and flooding events.



#### Choeuk Ek Wastewater Treatment Plant



#### Fecal Sludge Treatment Plant





3. Solid Waste Management

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#### 4. Energy

- The Royal Government of Cambodia (RGC) has set clear national targets of energy saving of 34% and 25% in residential and commercial buildings, respectively, by 2030 in the National Energy Efficiency Policy 2022-2030.
- Under the financial support from the Federal Government of Germany, the RGC launched the project of the Asia Low Carbon Buildings Transition in Cambodia on 8 May 2024. This project will conduct analyses, develop low carbon building tools, provide training, pilot low carbon solutions, prepare robust policy recommendations, and establish financial pathways for low carbon buildings transition.



**ISPP School** 

#### 5. Transport

Phnom Penh City Bus put into function in September 2014 with three lines and other lines have been gradually added in successive years until 2024, with 21 lines to cover key transportation corridors in the city.

Parking regulations are enforced.

A system of inducements to encourage the use of low-emission vehicles in place (for example of hybrid or electrical vehicles)

Introduce Sulphur content limits for transportation fuel in line with regional standards (in the region of 50 ppm reduced from current 1,000 ppm)

A system of daily air quality monitoring put in place across the city for key air pollutants (PM10, PM2.5, SOx, NOx, CO and O3).



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#### 6. Built Environment

Adoption of green building standards for buildings to be constructed from 2020 onward.

Reduce energy consumption in existing buildings.

Low-income housing units designed or retrofitted to be resistant to natural disasters.

#### 7. Manufacturing

Develop industrial zoning provided with supportive green infrastructure.

Reduce water pollution from the manufacturing sector.

Carry out energy efficiency audits and put in place energy efficiency management plans for large manufacturing plants.

Large manufacturing companies have water use audits conducted and water use management plans put in place.

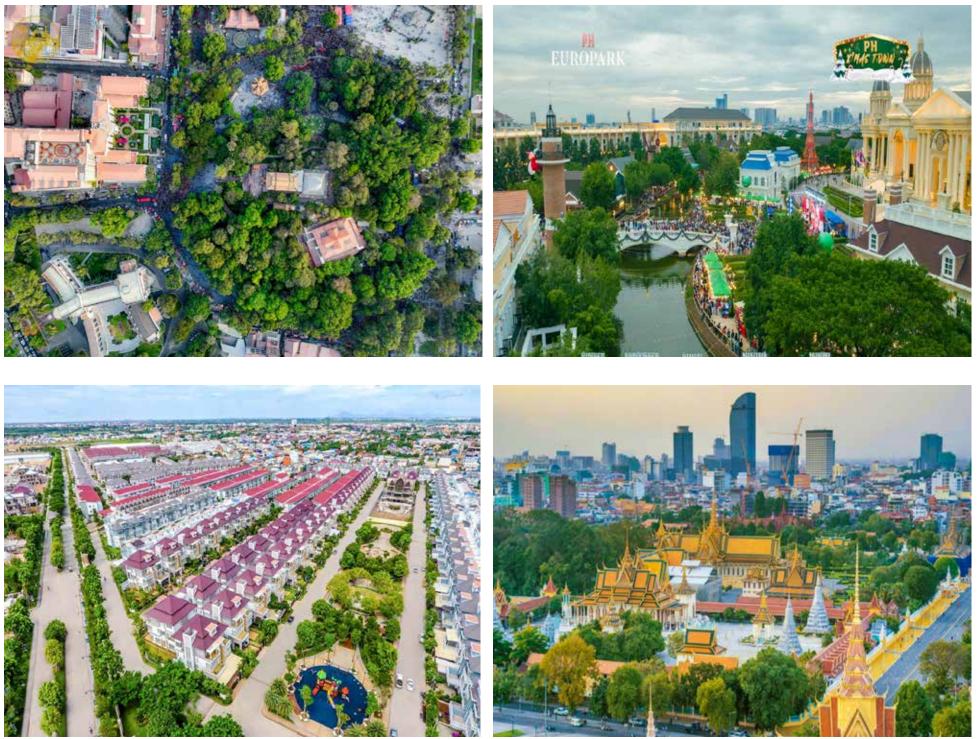


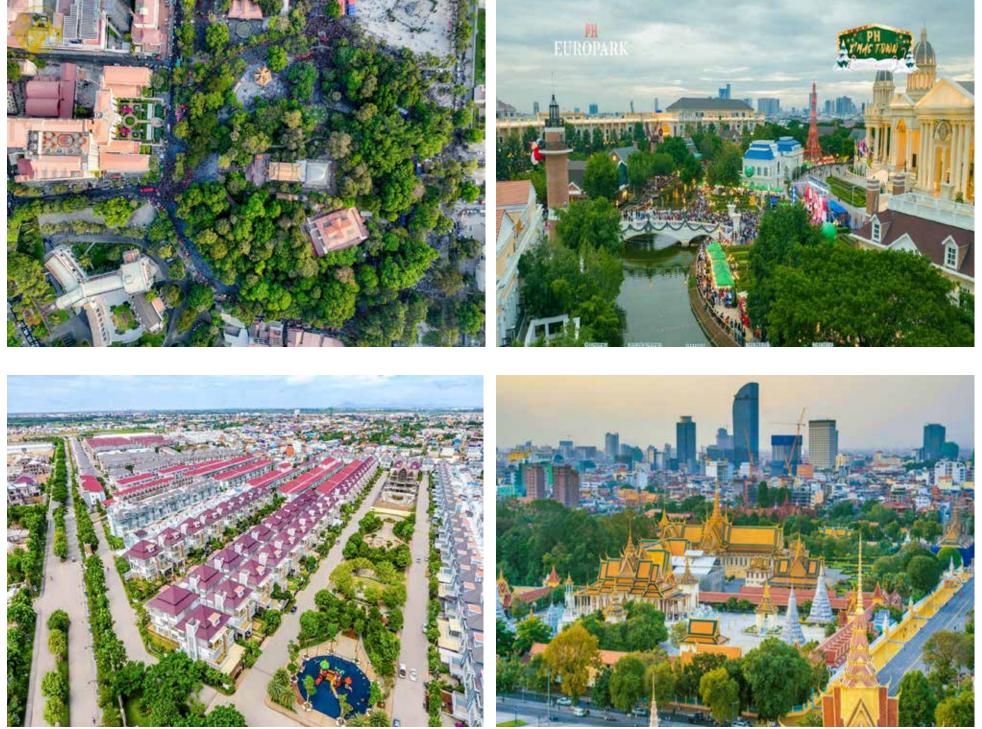


#### **Public Spaces and Cultural Heritage Objectives** 8.

- Increase the green canopy coverage of the city (number of new native trees q planted)
- Increase public green space in the city (number of hectares from current q baseline of 70 ha)
- Develop a strategic plan to preserve urban cultural heritage (number of q historic buildings inventoried and protected)
- Increase in tourism as a result of improved cultural heritage management q (number of tickets sold at key urban sites). Furthermore, PPCA is now joining with the RUPP to develop a Pedestrian Street project in Phnom Penh in order to attract even more tourists to visit Phnom Penh.









# Thank You!

