

# Putrajaya Sustainable Low Carbon Green City 2025



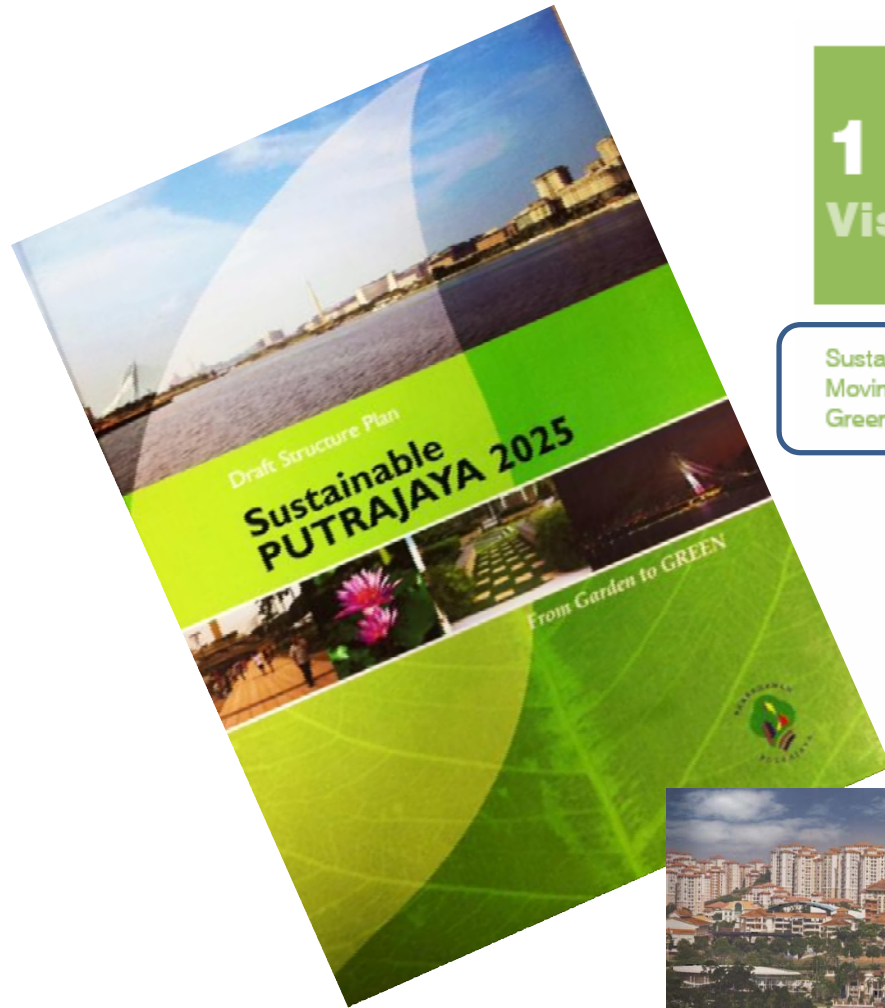
## Focus Area

1. Planning, building and urban design
2. Integration of nature into the urban fabric
3. Energy
4. Water
5. Transportation & mobility
6. Solid waste management
7. City administration & management



# Putrajaya Sustainable Low Carbon Green City 2025

## Structure Plan : Sustainable Putrajaya 2025



### 1 Vision

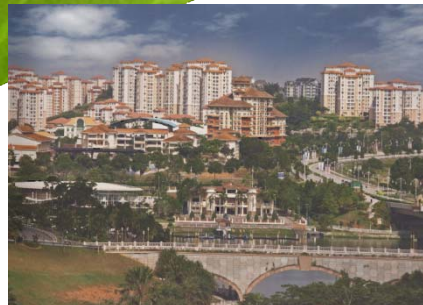
Sustainable Putrajaya 2025  
Moving from Garden City to  
Green City

### 4 Big Moves

- 1 Green City
- 2 Vibrant City
- 3 Integrated Transportation System
- 4 Distinctive Precincts

### 8 Policies

- 1 Elevating Putrajaya as an Excellent Federal Government Administrative Centre
- 2 Building a Progressive and Diverse Urban Economy
- 3 Strengthening Tourism as Key Economic Function
- 4 Enhancing Community Living Environment
- 5 Transforming Putrajaya as Green City
- 6 Implementing Integrated Transportation System
- 7 Employing Land Use Management that is Adaptable Responsive to City's Aspirations
- 8 Adopting Effective Governance and Partnership



# Putrajaya Sustainable Low Carbon Green City 2025

## Putrajaya Green City 2025 : Baseline & Preliminary Study (PGC2025)

- Cooperation between PPj, Universiti Teknologi Malaysia (UTM), Kyoto University, Okayama University, National Institute of Environmental Studies (NIES) & Malaysia Green Technology Corporation (MGTC).
- **3 main environmental targets:**
  - Low carbon Putrajaya: reduce CO<sub>2</sub> emission intensity by 60%.
  - Cooler Putrajaya: reduce peak temperature by 2 degree Celcius
  - 3R Putrajaya: reduce final disposal of solid waste & CO<sub>2</sub> per waste generation by 50%





# Planning, regulatory framework & policy

## Putrajaya Green City 2025 : Baseline & Preliminary Study (PGC2025) (cont)

- Estimation of GHG emission for the **base year 2007**
- Estimation of GHG emission in the case of **business as usual** for the year **2025**
- Estimation of GHG emission in the case introduction of **countermeasures** for the **year 2025**

Based on the analysis/measurement above, **12 actions** has been suggested as below:

No.	Action	Environmental targets	GHG emission reduction (%)
1.	Integrated City Planning & Management	Low Carbon Putrajaya	15.5
2.	Low Carbon Transportation		29.0
3.	Cutting Edge Sustainable Buildings		33.2
4.	Low Carbon Lifestyle		3.5
5.	More and More Renewable Energy		2.5
6.	The Green Lung of Putrajaya		1.8
7.	Cooler Urban Structure and Buildings	Cooler Putrajaya	3.2
8.	Community & Individual Actions to Reduce Urban Temperature		
9.	Use Less Consume Less	3R Putrajaya	0.2
10.	Think Before You Throw		6.7
11.	Integrated Waste Treatment		4.4
12.	Green Incentives & Capacity Building	Cross Category	-
	Jumlah keseluruhan		100





# Putrajaya Sustainable Low Carbon Green City 2025

## Putrajaya Green City Action Plan Study

- A study under a joint effort project by the Malaysian Government & NEDO
- 4 Roadmaps have been identified under these categories:
  - Building & Energy (13 actions, 29 programmes)
  - Urban Transportation (16 actions, 35 programmes)
  - Waste Management (12 actions, 22 programmes)
  - Urban Environment (5 actions, 7 programmes)



Low Carbon City Action Planning Project  
In Putrajaya  
Final Report



March, 2012

IBM Japan, Ltd  
MIDENSHA CORPORATION  
NTC CORPORATION  
SHIMIZU CORPORATION  
TOSHIBA CORPORATION  
Yamato Corporation  
Yamato Corporation  
Yamato Corporation

Table 4-7 Road Map for Building & Energy

Counter-measures	Category	Sub-category	Phase 1			Phase 2			Phase 3				Key player	CO <sub>2</sub> Reduction (in CO <sub>2</sub> -e)
			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
Introduction of energy-efficient appliances	Facilities	Introduce & implement Green Building Code for Putrajaya											PIC, KATTHA	156.1
		Promote Green Design and recycling facilities in buildings											PIC, KATTHA, Building owners	
		Promote retrofit for government buildings											NR, IEDA, KATTHA	
		Promote introduction of high energy efficiency equipment and systems in residences											KATTHA, PIC, SPR, Property Management Division	
District Cooling	Improve efficiency of District Cooling system												GDC, KATTHA	200.8
BEMS Building Energy Management System	Residences	Improve existing energy management system											NR, KATTHA, GTS	10.3
		Introduce integrated energy management system including Demand Side Management											KATTHA, NR, TIB, Building owners	
		Promote introduction of high energy efficiency equipment and systems in residences											KATTHA, PIC, SPR, Property Management Division	
		Promote introduction of high energy efficiency equipment and systems in residences											KATTHA, IEDA, MGT, PIC	
Renewable Energy	Renewable Energy	Implement the feasibility study of utilizing biomass and other resources for renewable energy in Putrajaya											PIC, Building owners, KATTHA	-
													KATTHA, IEDA, MGT, TIB	

Preparation  
Implementation

