

# Putrajaya Green City 2025

**S2A [Science + Policies =  
Actions]**

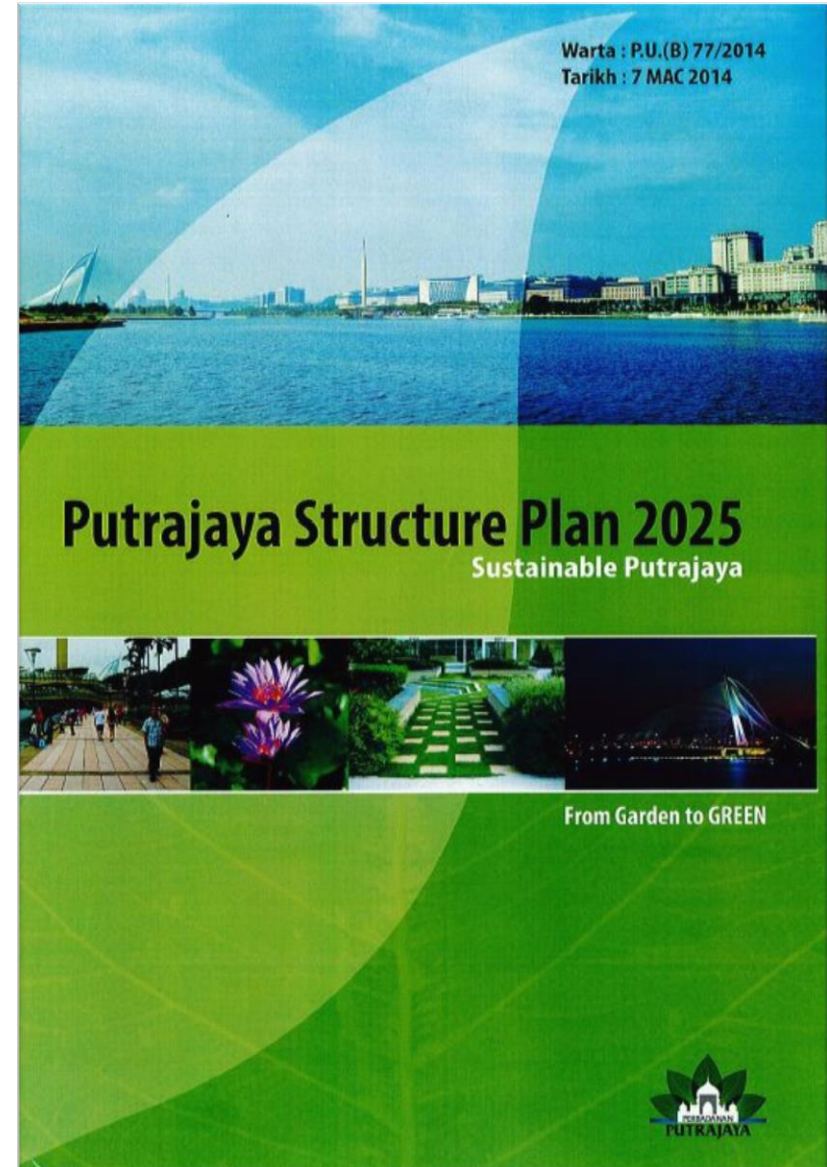
## POLICY 5: MOVING PUTRAJAYA TOWARDS GREEN CITY

Moving Putrajaya towards Green City requires improvement plans and road map that will guide the creation of green community, adoption of green technology and sustainable building practices that lead to the reduction of carbon footprint in the city.

Sustainable development practices have been long embedded in Putrajaya in line with its Garden City theme. Putrajaya has designated more than half of its area for parks, recreational areas and water bodies, created green linkages as one its city

Putrajaya will be moving towards a Green City through the following initiatives:

- |     |   |
|-----|---|
| 5.1 | Enhance ecology, water body and bio-diversity   |
| 5.2 | Application of green technology, infrastructure and practices in city planning and management |
| 5.3 | Adopting Sustainable Building Practices   |
| 5.4 | Establish model green community committed to reduction of carbon footprint                    |



# Putrajaya Green City 2025

## Three Quantitative Environmental Targets

Low-carbon  
Putrajaya

CO<sub>2</sub> emission  
Putrajaya  
-60%

Cooler  
Putrajaya

-2°C

3R  
Putrajaya

Final disposal  
& GHG emission  
-50%



# Putrajaya Green City 2025

Baseline and Preliminary Study

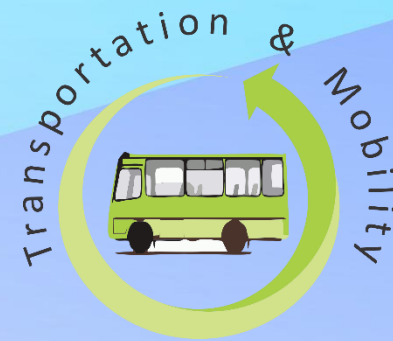
March, 2011

Universiti Teknologi Malaysia  
Malaysia Green Technology Corporation  
Putrajaya Corporation  
Kyoto University  
Osaka University  
National Institute for Environmental Studies, Japan

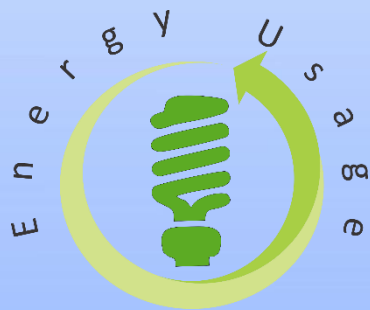


# Putrajaya Green City 2025

## Transforming Putrajaya into *Green City*



### Green Initiatives by Seven Focus Areas





# City Planning & Building

- i. Planning principles that contributes towards reduction of carbon emission
- ii. Reuse of Local Resources for Construction
- iii. Green Initiatives for Building Sector by lifecycle



## NEW BUILDINGS

### GREEN BUILDING DESIGN REQUIREMENTS:

- 12 completed
- 19 under construction/design

### DISTRICT PLAN FOR ENERGY EFFICIENCY (Gas District Cooling)

Stage 1 – Before Use Phase

Planning, Design, Construction

## EXISTING BUILDINGS

**BECO<sub>2</sub>R** (Building Sector Energy Use & Carbon Reporting Programme)

**Retrofitting** (EE & RE) by building owners

**Green practices** in building maintenance (e.g: Government Green Procurement )

**Green Building Certification** (O&M) by building owners (8 govn bldg)

Stage 2 – Use Phase  
(80%-90% of emissions)

Operational & Maintenance

Future programme

Stage 3 – After -Use Phase

Deconstruction/  
Demolish

Building lifecycle CO<sub>2</sub> emissions<sup>(1)</sup>

(1) : UNDP-SBCI & WRI, 2010





# Integrating Nature into the Urban Fabric

- Landuse Planning for Open Spaces
- Gazetting Open Spaces
- Putrajaya Greening Programme
- Putrajaya Urban Farming Programme







## Transportation & Mobility

- Extensive Networks of Pedestrian Walkways & Cycleways
- Environmental Friendly Public Buses (NGV & EV)
- Electric Vehicles for tourist (electric bicycle/ trishaw/ECORide).





# Energy

- Renewable Energy
- Energy Efficiency
- Energy Conservation



**Sensor & energy saving lights**

A screenshot of an email client interface. The email is titled "bincangan - Sesi Perbincangan Apec L...". The body of the email contains a "Go Green!" sign with an "Energy Saving Reminder!" and a smiley face. The sign says: "If you are the last to leave the room, please TURN OFF the lights. Thank you." Below the sign is a light switch. The email body also contains a list of ICT Hijau Perbadanan Putrajaya initiatives and a "SAVE A TREE PLEASE DON'T PRINT THIS E-MAIL UNLESS IT'S NECESSARY" message.

**Energy Saving Reminder!** 😊  
If you are the last to leave the room, please **TURN OFF** the lights. Thank you.  
**Go Green!**

Inisiatif ICT Hijau Perbadanan Putrajaya:  
- Logoff peralatan ICT bila tidak digunakan  
- Gunakan emel dalam berurusan  
- Cetak bila perlu  
- Mesyuarat tanpa kertas (Pancarkan melalui screen monitor)  
- Gunakan perkhidmatan atas talian (on-line)

SAVE A TREE  
PLEASE DON'T PRINT THIS E-MAIL UNLESS IT'S NECESSARY





Wetland cell

Centralised sewerage treatment plant (STP)



Gross pollutant trap

SCADA (early warning system to detect pollution)

Items	2002-2018
Annual Lake Water Consumption (mil. litre)	1,530
Saving of water cost (mil. RM) <sup>(1)</sup>	2.5
Annual Water Consumption <sup>(2)</sup> (person)	20,056

## Water

- Alternative Water Resources (Putrajaya Lake Water, rainwater, treated waste water).
- Water Quality Control (Wetland, GPT, STP)



# Solid Waste Management

- Provision of 3R facilities
- Innovation Reuse of Solid Waste
- Separation at Source
- Food & garden waste composting
- Encouraging reuse / upcycling through: Creativity 3R







## City Administration & Management

- i. Extensive Use of Online Services
- ii. Encouraging Low Carbon Lifestyle through Community Programme
  - Children-led climate change adaptive initiative (GreenROSE@Putrajaya)
  - Environmental Awareness programme
  - Putrajaya inter-park ride, bicycle fun ride@Putrajaya,
  - fun walk with President PPj on Wednesday.
- iii. Awards & Recognition





# ***PUTRAJAYA GREEN CITY 2025***



*Thank you for contributing to the CO<sub>2</sub>  
reduction in Putrajaya*

[www.ppj.gov.my](http://www.ppj.gov.my)