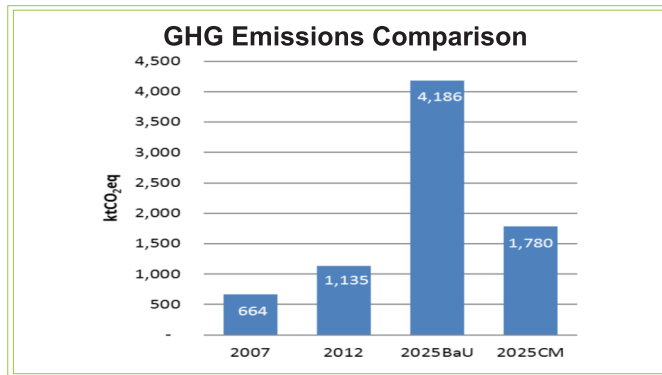


Inventory of Putrajaya Greenhouse Gas Emissions 2012

- Inventory of Putrajaya Greenhouse Gas Emissions (GHG) for the year 2012 was conducted in August 2013.
- GHG emissions were calculated based on seven sectors namely residential, government departments, commercial, public amenities and facilities, passenger transport, freight transport and solid waste.

Inventory Result

- The city's overall greenhouse gas emissions were about 1.7 times higher in 2012 as compared to 2007. The total emissions for 2012 were 1,135ktCO₂eq as compared to 664ktCO₂eq in 2007.

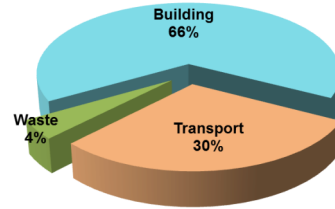


Comparison of GHG Emissions by Seven Sectors (ktCO₂eq)

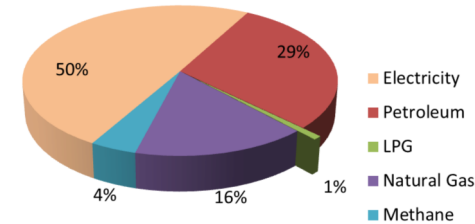
| | 2007 | 2012 | 2025BaU | 2025CMU |
|-------------------------------|------|------|---------|---------|
| Residential | 23 | 59 | 266 | 150 |
| Government departments | 180 | 461 | 363 | 139 |
| Commercial | 65 | 207 | 1435 | 769 |
| Public amenities & facilities | 67 | 21 | 240 | 112 |
| Passenger transport | 161 | 316 | 1314 | 368 |
| Freight transport | 20 | 23 | 156 | 89 |
| Waste | 148 | 49 | 414 | 189 |
| Total emissions | 664 | 1135 | 4186 | 1816 |
| Carbon sink | | -24 | | -35 |
| Net emissions | 664 | 1087 | 4186 | 1780 |

- Emissions per capita for 2012 were 12.3tCO₂eq as compared to 12.6tCO₂eq in 2007.
- Inventory result shows that highest greenhouse gas emissions were from the building sector which contributes 66% (748ktCO₂eq), followed by the transportation 30% (338ktCO₂eq) and solid waste 4% (49ktCO₂eq).
- The highest source of GHG emissions about 50% (563ktCO₂eq) is from the use of electricity, followed by petroleum 29% (333ktCO₂eq) and natural gas 16% (181ktCO₂eq).

GHG Emissions by Three Scopes



GHG Emissions by Source



Putrajaya

Sustainable Low Carbon Green City 2025



For further information, please contact:

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2nd Edition

Background:

- To further promote green technology activities in Malaysia, the Prime Minister, in the 2010 Budget Speech has announced to develop Putrajaya and Cyberjaya as pioneer townships in Green Technology as a showcase for the development of other townships.

Definition:

- Cities with programs and initiatives to conserve the natural environment and resources which serve to minimize and reduce the negative impact of human activities onto the environment.

Our Aims:

- to minimise negative environmental impacts and degradation.
- to encourage human interaction back with nature.
- to reduce the carbon emission from human activities.

What have been done so far?

- Putrajaya is a planned city and its development is based on the 'City in the Garden' concept. Sustainable development has always been in the core of the concept, as such, "green city" has always been ingrained in its development right from its inception stage. The initiatives in transforming Putrajaya into a Green City are implemented through seven focus areas:

PLANNING, URBAN DESIGN & BUILDING



- Planning principles that contributes towards reduction of carbon emission;
- Innovative reuse of local resources for construction;
- Green Building Design.

INTEGRATING NATURE INTO THE URBAN FABRIC



- Land use planning of open spaces (40% designated as parks & open space);
- Creation of lakes and wetlands;
- Greening of Putrajaya through tree planting programme



Integrating nature into the urban fabric

TRANSPORTATION & MOBILITY



- Integrated planning of transportation network with the rail based transport as the back bone supported by park & ride facilities;
- Provision of environmental friendly public buses (NGV NADI PUTRA buses);
- Extensive networks of pedestrian walkways & cycleways. Make cycling & walking as preferred transportation option.



ENERGY USAGE



- Encouraging the use of Solar Photovoltaics for power generation
- Encouraging the use of energy efficient lighting fixtures and appliances.



WATER USAGE

- City wide rain water harvesting programme;
- Implementation of rain water harvesting system for residential development
- Centralised sewerage treatment plant.



SOLID WASTE MANAGEMENT

- Provision of 3R facilities;
- food & green waste composting;
- waste separation at source.
- innovative reuse of waste



CITY ADMINISTRATION & MANAGEMENT

- Extensive use of online services to reduce usage of paper and the need to travel.

Awards & Recognitions:

Putrajaya's collaborative efforts in the implementation of these initiatives have received various awards & recognitions:

- Asean Environmentally Sustainable City Award 2011
- Putrajaya Lake & Wetlands as Ecohydrological Operational Site by UNESCO-IHP - 2011
- The International Awards for Liveable Communities 2012.
 - 2nd place winner for the "Whole City Award",
 - 2nd and 3rd place winner for 2 projects
- Participation in the 19th Conference of the Parties (COP19) to the United Nations Framework Convention on Climate Change (UNFCCC) 2013.
- Ministry of Urban Wellbeing, Housing and Local Government
 - Recognition for the implementation of green neighbourhood initiatives 2012 & 2013
 - Award for Sustainable City (MURNInets Programme) 2010 & 2012