

Putrajaya Structure Plan 2025 Sustainable Putrajaya



From Garden to GREEN



PUTRAJAYA STRUCTURE PLAN 2025

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Prepared for Putrajaya Corporation

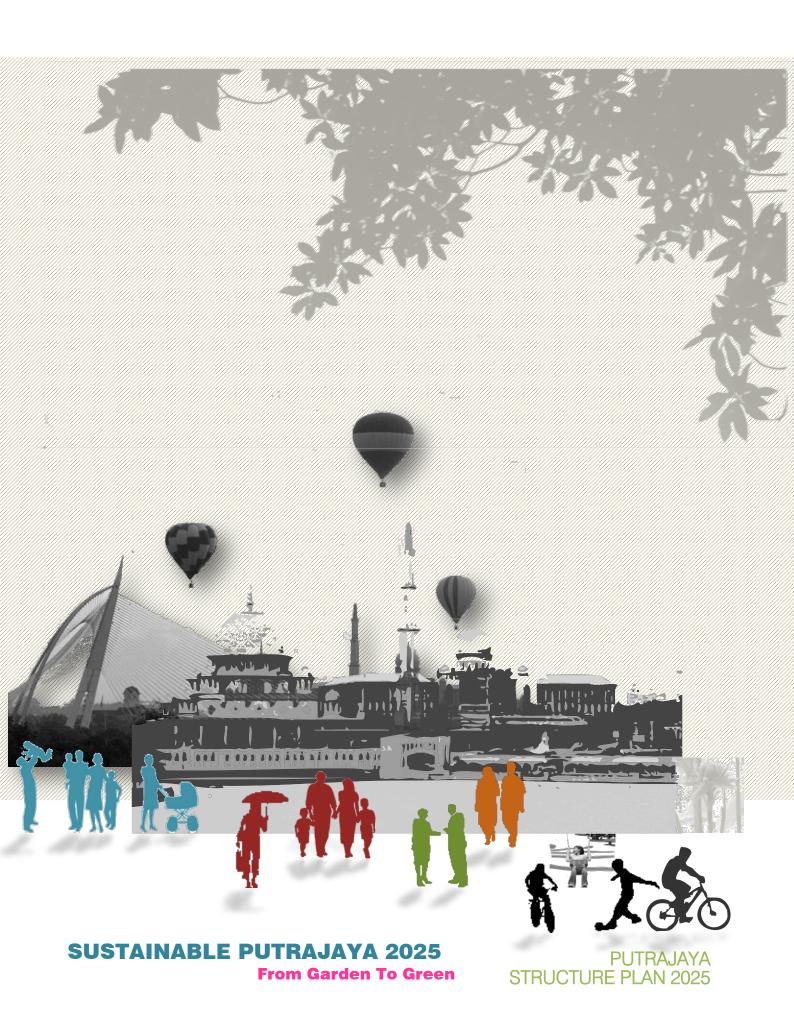
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VISION AT A GLANCE

A Snapshot of the 2025 Vision

1 Vision

4 Big Moves 8
Policies

Sustainable Putrajaya 2025

From Garden To Green

- Green
- Vibrant
- B Distinctive
- 4 Connected

- 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
- Moving Putrajaya Towards Green City
- 6 Implementing Integrated Transportation System
- 6 Employing Adaptable and Responsive Land Use Management
- 8 Adopting Effective Partnershipand Good Governance

32

Initiatives

Policy 1:

- Promote Putrajaya as a "Centre of Excellence" for public administration and international relations
- Encourage the setting up of educational and research institutions
- 3. Promote Putrajaya as the city for international organisations

Policy 2:

- 4. Expand tourism into a well defined cluster
- 5. Established a niche MSC-status city
- 6. Develop green economy
- 7. Provide competitive business

Policy 3:

- 8. Position Putrajaya as aninternational destination
- 9. Organise diverse tourism events and activities
- 10. Improve tourist's movements
- 11. Increase supporting tourism facilities

Policy 4:

- 12. Provide diverse type of housing units to meet the needs of future population
- **13.** Upgrade community shared facilities to addressincrease in population and its structural change
- **14.** Enhance content and convenience at recreational areas
- 15. Adopt and implement Safe City practices
- **16.** Promote Community Development Through Engagement in Community-based Activities

Policy 5:

- 17. Enhance ecology, water body and bio-diversity
- **18.** Application of green technology, infrastructure and practices in city planning and management
- 19. Adopting Sustainable Building Practices
- 20. Establish model green community committed to reduction of carbon footprint

Policy 6:

- 21. Pursue shift from private vehicles to public transport
- 22. Increase the connectivity within and between Putrajaya and external areas
- Implement the use of environmental-friendly vehicles
- 24. Increase road safety level
- 25. Encourage pedestrian and cycling

Policy 7

- Implement measures that support Core Island as an economic centre
- 27. Implement measures to enhance peripheral areas as residential neighbourhood
- Ensure integration of activities and connectivity between public transportation facilities and their surrounding
- Protect cultural identity, precincts character and sense of place through sustainable urban design practices

Policy 8:

- **30.** Adopt transparent, flexible and responsive management in city administration
- 31. Empower stakeholders in planning, decision making and city management
- 32. Encourage smart partnership in enforcement

1 PUTRAJAYA TODAY: STRENGTHS AND CHALLENGES

Summarises Putrajaya's in today's context, its strength from the foundation for future growth and challenges faced today.

2 PUTRAJAYA 2025

Introduces the vision and aspiration for future growth of Putrajaya and outlines big moves needed to propel Putrajaya in the future.

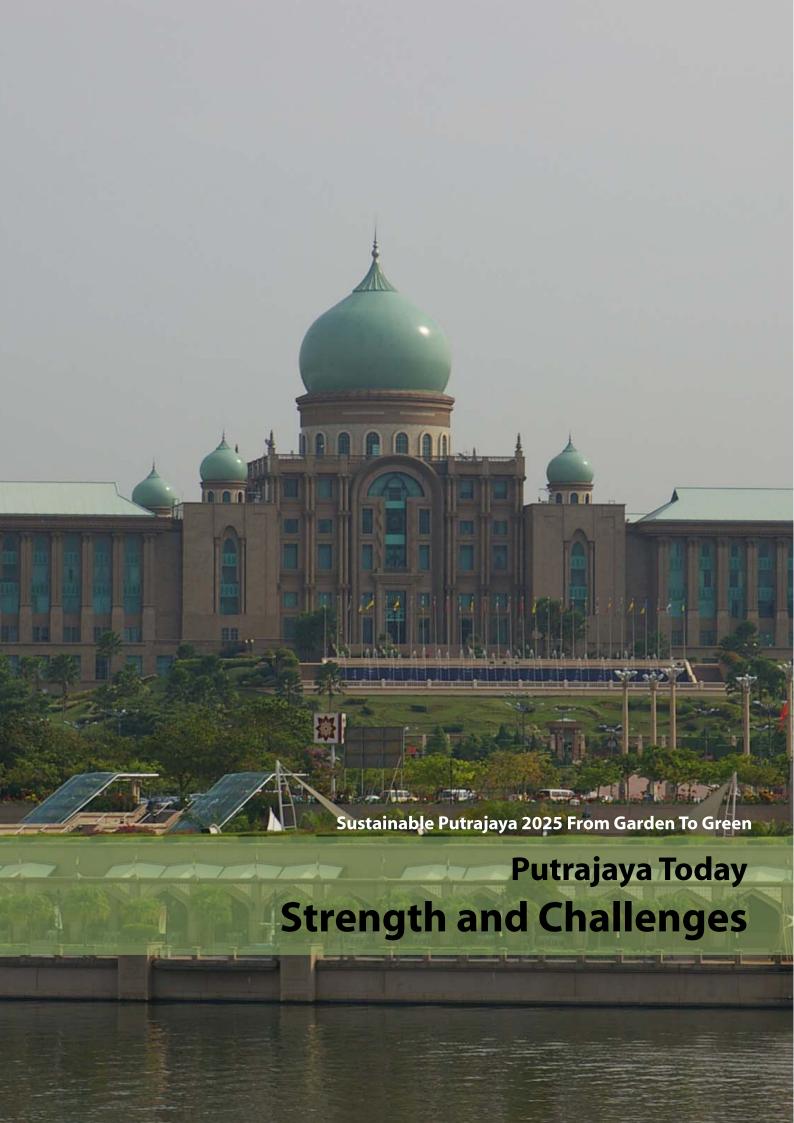
3 ACHIEVING THE PUTRAJAYA 2025 VISION

Elucidates policies and initiatives that will be implemented in support of the vision and big moves.

4 IMPLEMENTING THE PLAN

Outlines action and responsibilities for implementation.

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1.0

PUTRAJAYA TODAY: STRENGTH & **CHALLENGES**

Putrajaya, the Federal Government Administrative Centre is a special role city that was developed in 1995. The development was guided by a visionary Master Plan endowed with Garden City concept that embraces harmony between natural environment, iconic built environment and community. During the formation of Multimedia Super Corridor, Putrajaya was identified to play a role as an Intelligent City and carry the e-government flagship.

Putrajaya has progressed remarkably well since then. Landmark government buildings stand tall in the Government Precinct and along the ceremonial boulevard in the Core Island, portraying the sovereignty of a modern and developing country. Its world class infrastructure has the capacity to accommodate the demands of high technology operations and forward looking that is able to accommodate the needs for green technology. Its commitment towards community development is also exemplary with high standard of community facilities and innovative neighbourhood concept in its residential precincts.

The 3184.7 hectares city is already 65% developed (approximately 3,185 hectares). Most of government offices and government housing units are completed. There are about 2.74 million square meters of government office spaces in Putrajaya generating employment for about 51,400 workers.

Government housing represents 83% of the total 24,000 units, located in the peripheral areas (outside the Core Island) and developed based on innovative neighbourhood concept. The houses are without fences and the neighbourhoods are pedestrian friendly. Housing units are generally low-rise with only a few being high rise affordable units.

True to its concept as a Garden City, Putrajaya is enveloped by pristine lake, parks, open spaces and recreational areas. A series of waterways forms the lake. At the northern part of Putrajaya where the source of water is, a man-made wetland is created to sieve the water impurities. The quality water is then released into the lakes traddling the central spine of the city, separating the Core Island and the peripheral areas. The lakes become a natural tourist attraction and host a series of water-based activities including

the international and national level boat races. The parks consist of regional parks, town parks and neighbourhood parks, offer unique experiences that are exclusive to Putrajaya such as the Botanical Garden, Wetland Park and Millennium Park. The lake, parks, open spaces and recreational areas cover a total of 1,918.66 hectares representing 38.91% of Putrajaya.

Currently, Putrajaya has around 50,000 population and 95.5% of them are Bumiputera. It has a young population with a median age of 23 years and low dependency ratio of 51%.

The economy of Putrajaya is currently dominated by government services while commercial and business services play a limited role. Commercial activities are still limited to retail, food and beverages as well as finance and banking services. Existing commercial spaces stand at a total of 439,400 square meters.

Putrajaya has a promising tourism sector having benefited from its function as a Federal Government Administrative Centre with pristine lake, iconic buildings and bridges, and lush parks. To date, it has attracted close to 1 million tourists annually.

Putrajaya is a well connected city, linked by highways, roads and rail to Kuala Lumpur, major towns within the Greater Kuala Lumpur/Klang Valley and the Kuala Lumpur International Airport. Internally, high standard roads link all the precincts. There is also a provision of park and ride facilities and rail link as part of Putrajaya's plan to have a modal split of 70:30.

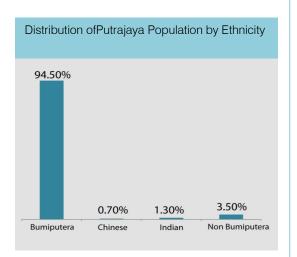
Putrajaya has achieved its first stage of development, building an elegant and functional Federal Government Administrative Centre (FGAC), the pride of the nation. Moving forward, the strength of Putrajaya as a Federal Government Administrative Centre with high quality infrastructure and living environment has created opportunities for further growth. Nevertheless, Putrajaya also faces uphill challenges in order to create multi-dimensional and vibrant economy, multi-ethnicity, improved public transport and living environment.

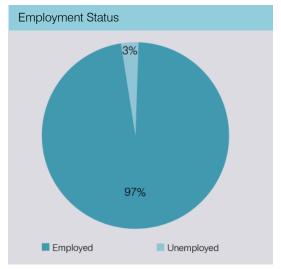


Exhibit 1.1
Putrajaya at a Glance (Base year 2008)

Population Estimates	2008 - 50,000
	2010 - 72,413*
Population Growth Rate	
(Average Annual Growth Rate)	32%
(2000-2007)	
Population below 15 years	32%
Population 15-64 years	67%
Population above 64 years	1%
Dependency ratio	51%
Median age	23 years
Male: Female Ratio	94:100
Ethnicity	Bumiputera (96%)
Labour Force	23,800
Total Employed	23,000
Unemployment Rate	3.4%
Average monthly household	About RM7,000
income	
Median household income	RM5,000
No of households	14,140
Household size	4.4
Households/unit	1.35
Total housing units	23,860
Government housing units	19,856 (20,800 current)
Occupancy rate	92%
· ·	
Acreage	4,931 hectares
Gross density	8 units/hectare
Residential density	56 units/hectares
,	,
Water supply capacity	54 million litres
Electricity supply capacity	540 MWA
Telecommunication	Main trunk - Fibre optic
. 5.550mmamoadon	& copper cable
Sewerage capacity	700,000 PE
Natural gas pipeline	Available
District Water Cooling	Available in Core Area
District Water Coulling	Available III Cole Alea

^{*}Source: Population Distribution and Basic Demographic Characteristics 2010, Department of Statistic Malaysia.





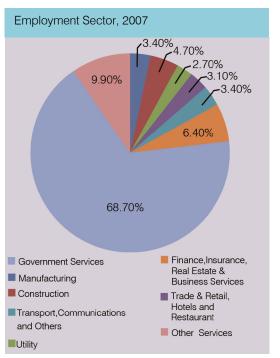
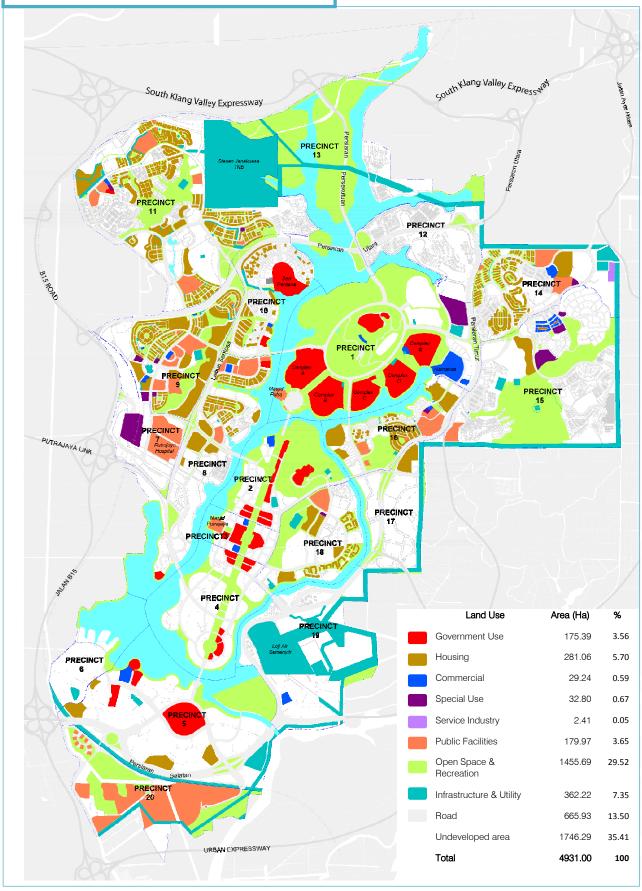


Exhibit 1.2
Existing Land Use (Base year 2008)



1.1 Strengths That Will Lead The City's Growth

Putrajaya, the pride of the nation, is a well planned city equipped with a high standard infrastructure and facilities befits a Federal Government Administrative Centre. With this strong basic foundation, coupled with its strategic location, excellent transportation linkages, panoramic built environment and iconic buildings, Putrajaya has desirable and right strengths to trigger further growth and become a full fledge city with strong and vibrant economy, conducive to live, work and play.

Putrajaya as a Federal Government Administrative Centre is also well known both locally and internationally, giving the city a unique platform for global exposure.

Putrajaya has several strengths that will be the foundation to lead the growth of the city in the future.

Strategically located within Greater Kuala Lumpur/Klang Valley and the Multimedia Super Corridor

Greater KL/Klang Valley¹ and the Multimedia Super Corridor (MSC Malaysia)² are two most prominent economic corridors in the country. Greater KL/Klang Valley is the most influential economic corridor anchored by Kuala Lumpur, the capital city which is 25km away to the north of Putrajaya. Greater KL/Klang Valley hosts major centres, well established industrial centres, an international port as well as an international airport. The MSC Malaysia which is part of Greater KL/Klang Valley is the hub for information and communication technology (ICT) development. Cyberjaya, the MSC's nerve centre is located in neighbouring Putrajaya and hosts a string of international and local R&D ICT companies.

Being strategically located within these two prominent corridors provides great exposure for the growth of economic sector especially for commercial, business services, tourism and ICT. THE STRENGTHS OF PUTRAJAYA

- Strategically located within Greater Kuala Lumpur/Klang Valley and the Multimedia Super Corridor.
- Excellent connectivity to major cities and the Kuala Lumpur International Airport.
- International exposure with its function as Federal Government Administrative Centre.
- Excellent Federal Government Administrative Centre.
- A promising tourism sector.
- Quality infrastructure that includes an ICT infrastructure.
- Quality and exemplary living environment.
- Availability land for development.
- Man-made wetland and lake are unique city features.

Excellent connectivity to major cities within Greater KL/Klang Valley and the Kuala Lumpur International Airport

Putrajaya has an excellent connectivity to major cities within Greater KL/Klang Valley that opens up the opportunities for synergic economic integration.

The KL-Putrajaya Highway, the North-South Expressway, the North-South Central Link via Putrajaya Link and the South Klang Valley Expressway provide link to Kuala Lumpur, Shah Alam, Petaling Jaya and Cyberjaya. These are prominent cities and centres for business, financial, ICT and manufacturing sectors that host major international companies generating high value economic activities.

Excellent connectivity to these cities allows Putrajaya to benefit from the network of tourist attractions and share the pool of tourists within Greater KL.

The North-South Central Link via Putrajaya Link provides a direct link to the Kuala Lumpur International Airport twenty minutes by road. This excellent connectivity is a key strength to attract multi-national companies to relocate their regional headquarters to Putrajaya. This international gateway also attracts tourists to visit Putrajaya.

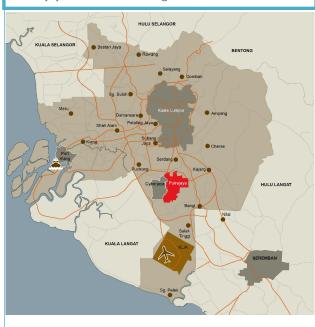
The excellent rail link further enhances the connectivity between Putrajaya and Kuala Lumpur and to the Kuala Lumpur International Airport especially with the fast train services by ERL that ply the route every thirty minutes.

Structure Plan: PUTRAJAYA 2025 1 - 4

¹ Greater KL / Klang Valley covers an area of 2,793.27 square km and is defined as an area covered by 10 municipalities surrounding Kuala Lumpur. The Greater KL/Klang Valley is one of the National Key Economic Areas that is identified under the Malaysian Government Economic Transformation Programme to spur growth and increase gross national income.

²MSC Malaysia is a Government designated zone for Information and Knowledge base development. It aims to attract companies to enjoy the Bill of Guarantee and tax breaks.

Exhibit 1.3 Putrajaya and Surrounding Area



- 1. Kuala Lumpur-Putrajaya/Cyberjaya-KLIA growing economic corridor.
- 2. Direct link to the traditional economic corridor, KL-Petaling Jaya-Shah Alam-Klang that host major international manufacturing firms and maritime.

Greater KL

GDP (2010):

- W. P. Kuala Lumpur RM84, 582 mil.
- Selangor RM128,815

Population (2010):

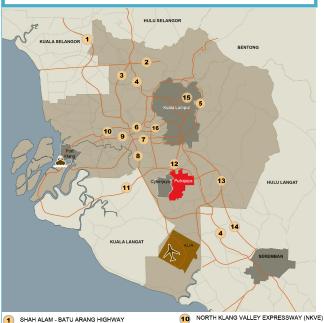
- W. P. Kuala Lumpur -1.67 mil.
- Selangor 4.46 mil.

Greater Kuala Lumpur (Economic Transformation Programme)

• GNI (2020): RM 649.6billions* • Population (2020): 10 million • Foreign talent base: 20%

*Source : Economic Transformation Programme Report 2010, PEMANDU

Exhibit 1.4 Regional Connectivity



11 SOUTH KLANG VALLEY EXPRESSWAY (SKVE)

12 KL - PUTRAJAYA EKSPRESSWAY (MEX)

14 KAJANG - SEREMBAN HIGHWAY (LEKAS)

15 DUTA - ULU KELANG EXPRESSWAY (DUKE)

13 KAJANG RING ROAD (SILK)

16 NEW PANTAI EKSPRESSWAY

- 1 SHAH ALAM BATU ARANG HIGHWAY
- 2 LEBUHRAYA ASAM JAWA TEMPLER PARK HIGHWAY (LATAR)
- 3 GUTRIE CORRIDOR EXPRESSWAY (GCE)
- A NORTH SOUTH EXPRESSWAY (NSE) 5 MIDDLE RING ROAD II (MRR2)
- 6 LEBUHRAYA DAMANSARA PUCHONG HIGHWAY (LDP)
- 8 NORTH SOUTH EXPRESSWAY CENTRAL LINK (ELITE)
- 9 FEDERAL HIGHWAY





International Tourism Exposure



International exposure with its function as the Federal Government Administration Centre

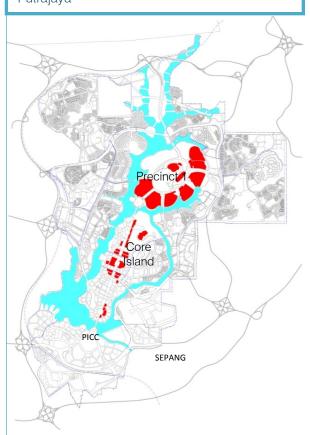
As the Federal Government Administrative Centre, Putrajaya involves in several bilateral, regional and multi-lateral relations with foreign countries and organisations in various aspects particularly matters on politics and economic affairs.

These provide international exposures and offer opportunities for Putrajaya to have an international branding and address to attract high net value investments, MICE (Meetings, Incentives, Conferences & Exhibitions) delegates and international tourists that will further propel Putrajaya's economy.

4. Excellent Federal Government Administrative Centre

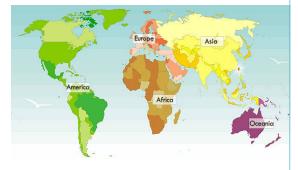
Putrajaya has successfully developed the Federal Government administrative function to an excellent level. Iconic buildings that accommodate the federal ministries and departments portray a modern, efficient and progressive governmental and public administration. This excellent status provides the opportunity for further expansion and diversification into related activities such as R&D, higher education, international nongovernmental relations and many others.

Exhibit 1.5
Federal Government Administration Activities in Putrajaya





Prime Minister's Office, the nerve of Federal Government Administrative Centre



Malaysia has diplomatic relations with 83 countries around the world.

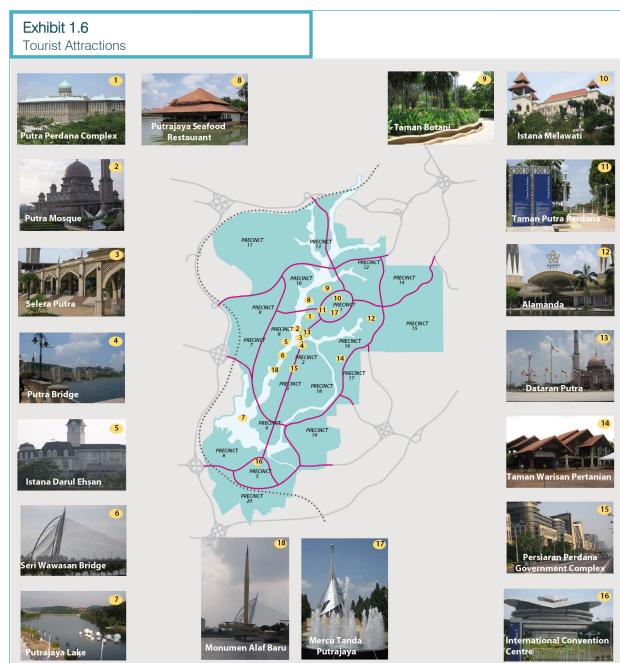
2010: 14 foreign diplomatic visits to Malaysia

5. A Promising Tourism Sector

Putrajaya possess variety of tourism products including quality convention centre and five and six star rated hotels, iconic buildings and bridges, beautiful and educational parks and quality sport facilities.

Putrajaya has attracted nearly 1 million tourists annually and has progressively improved the length of stay and the average tourist receipts that had reached RM330 per day. The future for the tourism sector is very promising with rigorous efforts focussing on unique and niche product clusters.





6. Quality Infrastructure

Infrastructure facilities in Putrajaya are of high quality and capacities that are able to support high technology operations. Each facility has service level agreement with the respective providers that assures uninterrupted.

These infrastructure capabilities are at par with cyber cities like Cyberjaya. Such capabilities will be able to attract regional multinational companies and other high net worth organization like oil and gas, information and telecommunication companies.

7. Quality and Exemplary Living Environment

Quality houses, social facilities and parks built within a community and environmental friendly neighbourhoods are attractive assets that can be promoted to attract diverse population to reside in Putrajaya.

Quality and exemplary living environment has the potential to progress and develop further into green living, a new forward looking approach towards reducing carbon footprint of a city.

ICT

- System range: fixed lines, mobile telecommunication, internal communication, digital leased line, cable TV and multimedia super corridor services.
- Supply lines are in the form of fibre optic and copper cables, supported by radio system in case of supply disruption.
- 50% for ICT infrastructure comprising of core, edge and access multimedia gateway (MMG) have been completed.











8. Availability of Land for Development

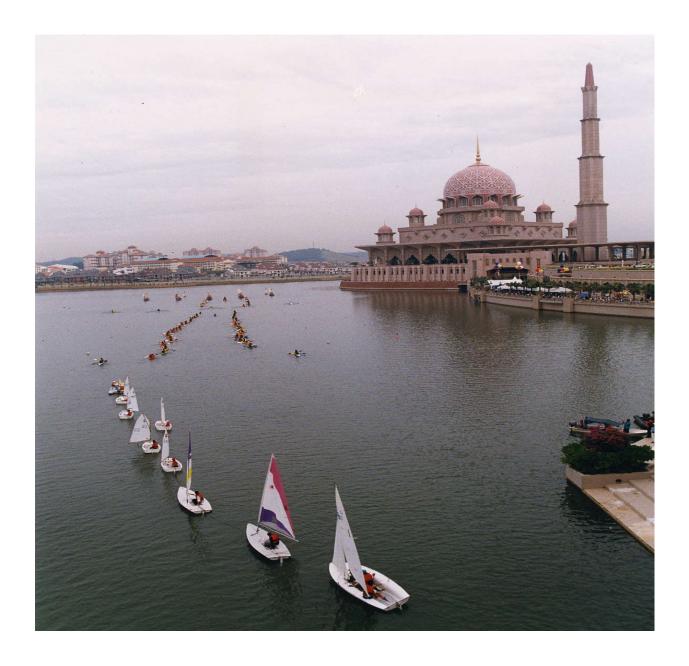
Availability of 1,746.3 hectares of vacant land allows Putrajaya to meet the needs of future investments and living lifestyles. The Core Island with ample commercial and mixed use land will have the opportunity to revise the planning and design guidelines to create a vibrant economy and lively activities.

The periphery areas will also have the opportunity to be reviewed to allow improved liveable community concept, green living and other current lifestyle. There is also an opportunity to increase the density to accommodate future population growth and change in population structure.

Man-made Wetland and Lake are Unique City Features

Man-made wetland and lake that are unique features in the built environment of Putrajaya have great potential to generate new economic opportunities. The successful implementation of wetland as a protection to lake water quality offers an opportunity for Putrajaya Wetland to become a research and development centre for wetland and related studies.

The Putrajaya Lake that is intrinsic in the city biodiversity also offers great venue for water sports including international level competitions and circuits.





1.2 8 Key Challenges

The aim for Putrajaya becoming a Federal Government Administrative Centre and a Garden City is partly fulfilled with successful implementation of the Federal Government function and Garden City environment. Putrajaya still has outstanding tasks to become a dynamic Federal Government Administration Centre comparable with other Federal Administrative Centres around the world.

There are 8 key challenges that must be overcome to ensure dynamic and sustainable city growth in the future.

1. To strengthen commercial and tourism activities at Core Island in order to ensure a lively and vibrant city

Commercial and business services are planned to component core economic alonaside Putrajaya's main function as the Federal Government Administrative Centre. The Core Island is planned to be city centre. However, while the role as the Federal Government Administrative Centre is thriving, the existence of commercial and business services is very limited. Rigorous and conscious efforts must be made to quantum leap Putrajaya as a vibrant, prosperous and dynamic city centre.

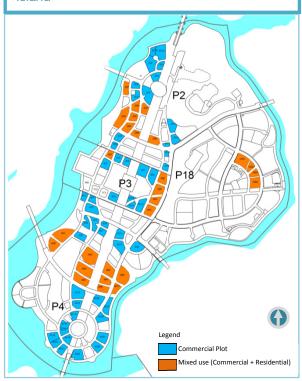
CASE FOR CHANGE

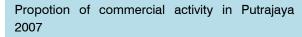
- 80% in sundry, basic retail, informal food and beverages.
- Less than 10% commercial activity along boulevard (excluding Alamanda in Precinct 1).
- Low participation especially from the corporate sector. Employment in commercial and business sector is estimated at 4,000.

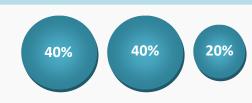




Exhibit 1.8 Commercial and Mixed Use Zones in Core Island







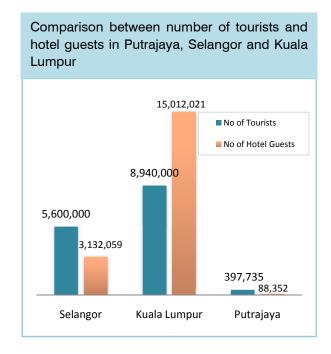
total commercial floor spaces/land are vacant (2007)

2. To promote Putrajaya extensively locally and internationally in order to propel the tourism sector

Key challenge in strengthening tourism sector is to create unique and diversified products that are able to compete and meet the needs of wider market segments. Extensive promotional coverage that includes both local and international levels will be required.

CASE FOR CHANGE

- More than 80% are domestic tourists of which half are daily trippers from Klang Valley.
- Low hotel occupancy rate with average 51.8%.
- PICC, parks, lake and other products have high potential if they are properly packaged and promoted.







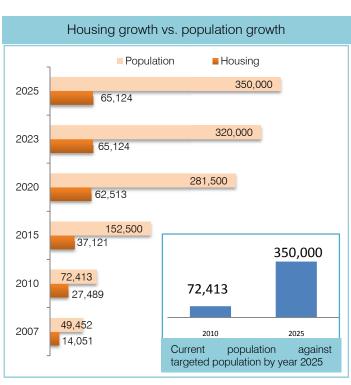
3. To promote Putrajaya as a Cosmopolitan City The right employment opportunities, living

environment and facilities are vital to attract cosmopolitan population – a multi-ethnic city population adaptable to cross culture living and highly connected socially and physically.

It is an uphill challenge to change the population ethnicity structure that will require synchronisation with progressive economy.

CASE FOR CHANGE

- 73% of the housing units are government quarters and population is dominantly Bumiputera.
- Meeting targeted population is highly dependent on the housing development programmes.

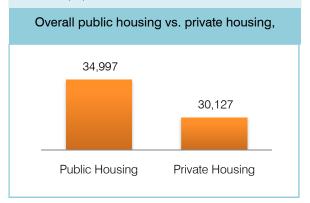


To provide sufficient residential, social facilities and infrastructure to meet population needs

The current young population base and the future multi-ethnic population with a mixture of foreign talents will require different level of needs for social facilities and infrastructure. housing, Simultaneously, the needs of elderly and disabled population shall not be neglected.

CASE FOR CHANGE

- The right type of residential facilities, social facilities and infrastructure will help to attract non-Bumiputera population and generate a balance ethnic structure.
- The changing patterns in housing needs among urban population.



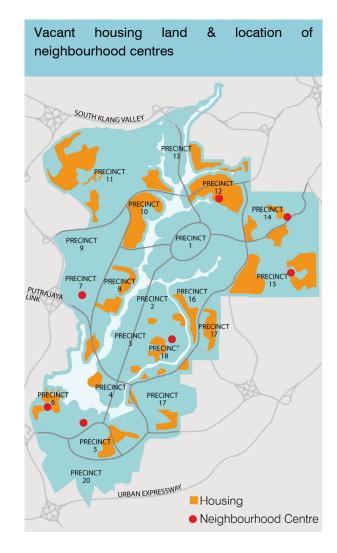
5. To facilitate seamless integration between land use and public transportation

Achieving seamless integration between the buildings and the stations will involve high level design solutions and serious commitment from various parties. The initiative must be led by a single stakeholder who has the authority and able to draw smart partnership with relevant parties.

Seamless integration with neighbouring land use can increase patronage and viability of public transport projects.

CASE FOR CHANGE

- Existing Park & Ride and transport hub require immediate integration with surrounding land use activities to increase their usage.
- Seamless integration between neighbouring activities and transport stations and stops may address low usage of public transport.





To promote Putrajaya as a Model City for Sustainability and Liveability as well as Green City

Creating a model city for sustainability and liveability requires commitment from the authority and participation from stakeholders to protect, maintain and sustain high quality environment. It is also important to nurture the culture of maintenance and sense of belonging among community.



- To protect and maintain all existing open spaces and recreational areas to preserve the image and identity of Putrajaya as a Garden City.
- 30% of parks, recreational areas and open spaces are yet to be gazetted.
- Link the existing green spaces to create urban biodiversity.
- Ensure serious commitment towards the reduction of carbon footprint among stakeholders and communities.



7. To realise the public transportation as a major mode of transport

Effective regulations are required to encourage the usage of public transport especially among local residents and workers. Strict regulations, however, must be complemented by beneficial incentives. All efforts must be focussed towards providing convenience to users especially in service efficiency, seamless connectivity and comfort.

CASE FOR CHANGE

- Increase the usage of public transport and reduce private vehicles and achieve the targeted modal split of 70:30.
 From the current 30:70
- Encourage the use of existing park & ride facilities.

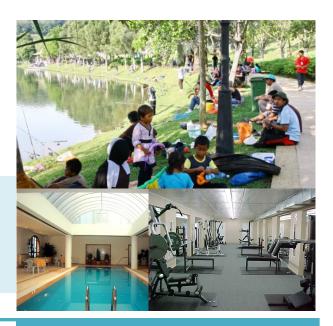


8. To manage and maintain public assets efficiently

Public assets in Putrajaya including government buildings, bridges, monuments and parks are iconic and have cultural and heritage values that need to be protected for the future generation. It is an appreciation towards dynamic interpretation of the Malaysian identity.

CASE FOR CHANGE

- Increase the participation of stakeholders and residents in maintaining buildings and neighbourhoods.
- Strengthen management structure of city administration.



What the Community Need

The preparation of Draft Putrajaya Structure Plan 2020 began in 2008. It involved several stages, from Inception Report stage to the Report of Survey and the Draft Structure Plan.

The process of preparing this Structure Plan gathered input from various stakeholders and public at every stage.

Baseline data was gathered from the respective stakeholders before analytical observation were made and concluded supported by primary data from field surveys, interviews and site observations. Baseline data, findings and preliminary proposals were subsequently presented in the Report of Survey. Further feedbacks were obtained from the public at this stage.

Input from the public and stakeholders were then used to help formulate the plan direction, policies and initiatives which form the Draft Structure Plan.

Several focus group discussions were held with the stakeholders to discuss and sieve the plan direction and policies before being presented again to the public for their feedback.

Input from Public and Stakeholders

- Need to attract more cosmopolitan population into
- Identify and ascertain catchment population.
- Temporary "micro-retailing" complex such as "Uptown" concept and "Textile City of Nilai 3" in the absence of permanent commercial & mixed use development to create a vibrant city.
- Budget hotels to attract various types of tourists.
- Increase places of interests and tourism infrastructure.
- More promotional efforts to help the tourism sector.
- Variety of affordable housing.
- Provision of religious educational facilities, private hospital, training institutes, colleges, university and museums.
- Rail based public transportation.
- Reduce traffic congestion at Precinct 1 & 2.
- Wi-Fi services should be made available widely.
- To form a Recycling Learning Centre.
- To implement "Putrajaya Urban Biodiversity" project.



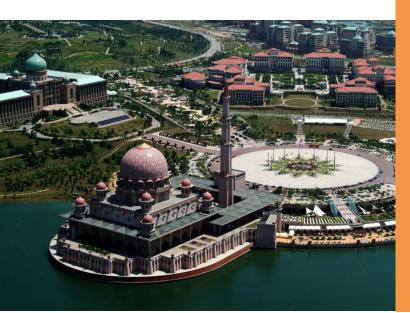


2.0 THE STRATEGIC **FRAMEWORK**

Sustainable Putrajaya 2025 is a strategic document empowered by the provision of Section 8 of the Town and Country Planning Act 1976 (Act 172). Sustainable Putrajaya 2025 which is the Structure Plan for Putrajaya aims to elevate Putrajaya to another level and transform Putrajaya from an administrative dominant function to a well balanced economic structure contributed by other fast driven sectors like commercial and tourism. Economic transformation will be accompanied by a structural change in population, responsive land use and community lifestyle that embrace the Green City principles.

Putrajaya 2025 shall address the challenges and continues its effort to be a well managed, vibrant, liveable and prosperous Federal Government Administrative Centre that fulfils the socioeconomic, recreational and spiritual needs of the residents, workers and visitors.

Putrajaya 2025 is a planning and development blueprint prepared for the next thirteen years. As the highest hierarchy of development plans for the City, it sets the key directions for a sustainable growth by outlining policies and initiatives that will guide strategies and decisions for the city's planning and development implementation.



2.1 Vision

Sustainable Putrajaya 2025 - From Garden to Green

the next thirteen years, Putrajaya will be moving from a Garden City to a Green City and making it the most livable city of the nation.

Exhibit 2.1

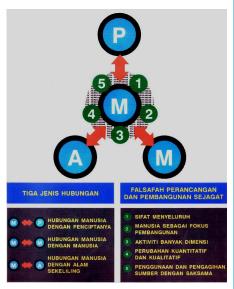
Guiding Framework for Sustainable Putrajaya 2025

Sustainable Putrajaya 2025 is guided by several planning and development principles of the country towards achieving Vision 2020. This vision stresses on the need for economic development which is mutually reinforced by the need for it to be environmentally sensitive and socially responsible. The achievement of this vision is further elucidated in the several important documents guiding physical development of cities in Malaysia, including Putrajaya.

Holistic Planning and Development Doctrine

The crux of holistic planning and development doctrine is embracing three symbiotic relationships that exist in the universal society – the relationship between man and environment, man and the Creator, and man and man. This is further translated and implemented through five philosophical characteristics – (i) comprehensive, (ii) man as the focus of development, (iii) multidimensional activities, (iv) quantitative and qualitative change and (v) equitable utilisation and distribution of resources.

Putrajaya Garden City master plan has adopted all the guiding principles and characteristics of this Holistic Planning and Development Doctrine that will continue to be the guide in the making of Sustainable Putrajaya 2025 – Moving Toward to a Green City.



The National Physical Plan 2005-2020 (NPP)

The National Physical Plan that sets the long-term national planning framework has identified Putrajaya as a Special Role Town with a dedicated function as a Federal Government Administrative Centre. The NPP also set Putrajaya as a major town within the Kuala Lumpur Conurbation alongside Shah Alam, Petaling Jaya, Klang and Seremban. Major towns complement the role of Kuala Lumpur City as the national capital and a business hub. The function of Kuala Lumpur Conurbation is further enhanced in the Second National Physical Plan (NPP-2) where it elevates the Kuala Lumpur Conurbation as the National Growth Conurbation which will be linked to other conurbations via rail system.

KL Conurbation and Greater KL/Klang Valley Plan

KL Conurbation recognises Putrajaya as part of a megacity consisting of Putrajaya, Cyberjaya and KLIA, created during the formation of Multimedia Super Corridor. Although Putrajaya has not been exclusively classified as one of the cybercities, it was identified as an Intelligent City with e-government as its niche proposition.

Greater Kuala Lumpur/Klang Valley

The plan for KL Conurbation has been intensified in the government's Economic Transformation Programme. KL Conurbation is now part of the Greater KL/Klang Valley National Key Economic Areas and this includes Putrajaya. Greater KL/Klang Valley envisions among top 20 most liveable cities by the year 2020 and has big plans to position itself as a global city and hub for top regional multi-national corporations and headquarters. Its population is expected to grow rapidly due to the increase in foreign talent and in-migration. One of the initiatives of Greater KL is to reinvigorate Putrajaya to attract activities beyond public administration.

2.2 Development Thrusts

Three key development thrusts that encapsulate sustainability and livability values will be the drivers for realizing the vision of Putrajaya 2025. These development thrusts will be instilled in all policies, initiatives and programmes and become the binding values in creating a newly transformed Green City of Putrajaya.

SUSTAINABLE PUTRAJAYA 2025







/ERSITY EXCELLENCE

Diversity

- variety, multiplicity, mixture in economy and urban activities, built environment and green initiatives.
- diversity in ethnicity and age group that will enhance growth in economic, cultural and communal activities.
- cultural diversity that will lead to creation of a vibrant city as the city celebrates different festivities and culture.
- choice in housing types and diverse types of recreational facilities and commercial spaces to cater for the growth and urban needs.

Excellence

- built environment rich with cultural heritage; lakes, vast parks and beautiful gardens represents excellence in environment; and excellent and superb infrastructure, utilities and social facilities,
- excellent implementation and monitoring by the local authority through stringent control on its built and natural environmental quality.
- continue to uphold the element of excellence in administrative function as a centre of excellence for public administration.
- excellent natural environment will be enhanced as a showcase for Green City and a centre for research and development.

Connected

- physical, virtual as well as social connectivity. Physical connectivity includes linkages via roads, rail and public transport internally and regionally.
- virtually connected through quality information and communication technology and Putrajaya as an intelligent city is one of the pillars of the MSC.
- Green connectivity is to enhance the city's biodiversity within lakes, parks and throughout the city of Putrajaya.
- Social connectivity is to uphold liveability and sustainability through the provision of social and recreational facilities within the neighbourhoods.

Diversity is entrusted as the first key thrust where it represents variety, multiplicity, mixture that is required in Putrajaya to energize its economy and urban activities, change the population structure, enhanced built environment and encourage green initiatives. An economy that began with government services sector a decade ago will require active participation from other diverse economic sectors to ensure continuous rapid growth and greater economic impact. Putrajaya's administrative function will be complemented by other anchors like commercial, tourism and other services sub-sectors.

A dynamic city requires diversity in ethnicity and age group that will enhance growth in economic, cultural and communal activities. Today Putrajaya enjoys in-migration of population from all parts of the country as they represent the majority of government employees residing in Putrajaya. With further economic and urban growth, new emerging communities are expected and this includes international communities to live in Putrajaya creating a diversity of communities for the City.

Diversity in community also means cultural diversity and this in turn will lead to creation of a vibrant city as the city celebrates different festivities and culture. The city will also provide for choice in housing and diverse types of recreational facilities and commercial spaces to cater for the growth and urban needs.







Excellence is a thrust that is synonym with Putrajaya, entrenched from the very beginning in its Masterplan and continued throughout development stages. The government complexes stand elegant and of high quality reflecting excellence in cultural heritage; its lakes, vast parks and beautiful gardens true to its Garden City theme represents excellence in environment and the infrastructure, utilities and social facilities provided in Putrajaya are also the epitome of excellence. Elements of excellence are also embodied in the implementation and monitoring through stringent controls on the built and natural environmental quality by the local authority.

Putrajaya will continue to uphold its element of excellence in administrative function, where it will further expand to become a centre of excellence for public administration. Putrajaya's excellent natural environment will be promoted as a showcase and a centre for research and development. Its high standard of community living environment will be improved towards green living, a new lifestyle towards excellence in sustainable environment.

These centres of excellence and sustainable lifestyle will help generate new niche economic activities; making it a choice for place to live and work that will propel the growth of Putrajaya in the future.



Connectivity is a thrust that encompasses physical, virtual as well as social connectivity. Physical connectivity includes linkages via roads, rail and public transport internally and regionally to increase mobility and accessibility that will support the urban economy. Improved linkages to neighbouring areas will enlarge population catchment thus creating a critical mass that is crucial to help trigger the economy especially the commercial and services sectors.

This thrust also ensures that Putrajaya is virtually connected through quality information and communication technology which is important as Putrajaya is part MSC, Malaysia and Putrajaya as an intelligent city is one of the pillars of MSC.

Green connectivity is also important to enhance the city's biodiversity not only within its localized area of lakes and parks but also throughout the city of Putrajaya. Connectivity between the parks and green corridors including road reserves and pockets of green within the city core is most important to encourage the survival of fauna and flora habitats and create green linkages for the communities.

Social connectivity is another aspect of the thrust that is important to uphold liveability and sustainability. Social connectivity is attainable through the provision of social facilities and recreational facilities within the neighbourhoods that encourages social integration. In addition, social connectivity can also be realised through place-making elements that create "sense of belonging" among the communities. encouraging community participation in the wellbeing of their built environment and neighbourhoods.

The three thrusts represent a wide spectrum of sustainability and liveability values that are strong and sufficient to become the pillars and support the vision besides guiding the formulation of policies. Each policy carries a set of initiatives and programmes and these will be further elaborated in Chapter 3 of this document. They address the issues and challenges faced by the city and at the same time sets a visionary framework to address potential prospects and opportunities.

2.3 A Sustainable Growth

Putrajaya 2025 will support an optimum population of 350,000 people. This is beyond its original design and targeted population of 320,000¹ (which is expected to be achieved by the year 2023). This higher population will support the Greater KL/Klang Valley NKEA targeted population of 10 million by the year 2020 to fulfil employment requirements to achieve the aspired high income nation.

Exhibit 2.2
Putrajaya Population

Projected Population	320,000 people (expected to be achieved 2023)
Optimum Population	350,000 people (expected to be achieved2025)
Number of Housing Units (2025)	65,124 units
Household Size (2025)	4.4

Putrajaya has a young population structure with a median age of 23 years old; implying an active work force to meet the demand in employment. In building a progressive and diverse economy for Putrajaya, its employment is targeted to be 79,000 by the year 2025.

To support urban growth, land resources in Putrajaya is limited to only 1,746.3 hectares. Being a new city, there are no brownfield sites available in the city and the available land have designated use, densities and plot ratios. The structure plan calls for more flexible use of these available lands to cater for its future growth and new emerging economies encouraged by its new policies.

Based on the available land bank, 60% will be earmarked for residential, public amenities, parks and open spaces. This is to meet the needs of population growth in 2025. The next thirteen years will observe more development in the commercial, mixed use, special uses and service industry apart from the residential uses. It is also important to note that mixed use is a new land use component that this structure plan has introduced.

Exhibit 2.3

Comparison Between Future Development and Land Use in 2025 Difference Overall (%) **Future** Land Use Land use Development 2025 (ha) Government 49.99 225.38 22.18 Use Residential 429.81 733.64 58.59 Commercial 110.17 139.41 79.03 Mixed Use 100.00 40.82 40.82 Special Use 105.41 132.92 79.30 Services 8.82 78.54 11.23 Industry Public 164.30 344.27 47.72 **Facilities** 474.74 1,918.66 Recreation 24.74 and Open Space Infrastructure 482.57 120.63 25.00 and Utilities Transportation 241.60 902.10 26.78

1,746.29

35.41%

4,931.00

100.00%

Exhibit 2.4

Total

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PRECINT PRECIN

¹Putrajaya was earlier planned to accommodate 320,000 by 2020 which set the basis for the allocation of housing land, social and recreational facilities as well as demand for infrastructure and utilities in its earlier masterplan.

2.4 Big Moves

Big Moves encapsulate key transformations and changes undertaken by Putrajaya 2025 in response to the challenges faced in current times. The Big Moves are the summary of directions and focus of all policies, initiatives and programmes. Four Big

Moves have been identified as the key focus of the policies and initiatives to transform Putrajaya to a diverse, excellent and connected City of the 2025 Vision.

EXHIBIT 2.5The Four Big Move

1 Green

•Transforming Putrajaya into a green city, one that commits towards continuously improving the quality of life of its communities by ensuring that its urban activities and development reduce carbon emission, encourage green business in the economy and a community that embraces green lifestyle.

2 Vibrant

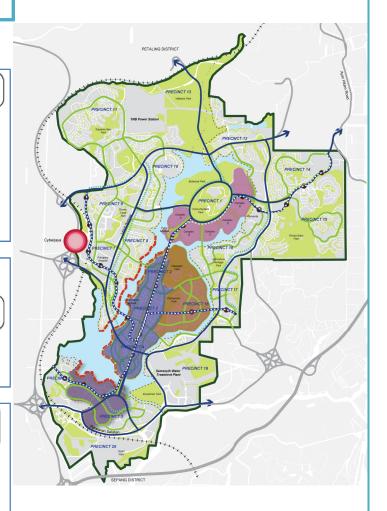
•Invigorating the city through diverse economic activities, allowing activities and creating spaces that encourage a more vibrant city that is liveable.

3 Distinctive

• Enhancing further the Government Precinct, the Core Island, and the Civic Precinct to be more dinctint in its function and legibility within the City's context.

4 Connected

•Integrating measures that holistically address a greener travel plan for the city. They include providing facilities and infrastructures that encourages people to walk, cycle and use public transportation in their daily activities.





Move 1 GREEN

Putrajaya shall be the pioneer City in Malaysia to embark on a comprehensive initiative to reduce its current carbon emission at a city scale level. This move is in the light of the Malaysian Government's commitment for reduction of the country's carbon dioxide emission intensity to 40 percent per GDP by 2020 compared to the 2005 level².

In this move, the progression of Putrajaya will be a natural one as its Garden City status has already set a foundation for the city's green density, its quality built and natural environment that co-exist and its public transport policy that has been crafted since its first masterplan.

Green City move is to ensure that all its green initiative reduces carbon emission and decisions made on its activities and investments for infrastructure or approvals for development commits serious consideration its contribution to carbon reduction.

Putrajaya's green density contributes towards the creation of an eco-system and an urban bio-diversity that must be protected, further enhanced and showcased to the world. Its 1,930 hectares of green areas contributes towards a ratio of 1 person: 55 sq.m.³ This will allow Putrajaya to share its experience and create a centre of excellence for green initiatives.

Putrajaya shall be the destination for green companies to locate their businesses, headquarters and research centres. These new emerging economies are expected to emerge strongly in Malaysia and Putrajaya is on excellent locations where its green, clean physical ambience would be the choice for the companies.

Green buildings⁴ will be a feature for future buildings in Putrajaya. This will not only further reduce carbon emissions but it will also provide for the building premises to house green business and meet the needs of investors that are conscious on green issues. Green living will be promoted and communities will also be encouraged to recycle their household solid wastes, reduce consumption of energy in houses and change their travel modes.

Green infrastructure will be further enhanced and applied in Putrajaya. The sewerage system available in Putrajaya can be further enhanced by reducing discharge and reusing water for irrigation of parks, gardens and landscape areas which covers a large surface area of the city. Other measures include rainwater harvesting, and alternative energy sources and solid waste facilities.

- ² Copenhagen Accord 2009 drafted and ratified in the United Nations Climate Change Conference, commonly known as the Copenhagen Summit.
- ³ The World Health Organisation's recommended standards stands at 1 person:16sq.m. of green space and the National Physical Plan is 1 person: 20 sq.m. of green space.

⁴Building produces 40% of the total greenhouse gas emission in cities.





Centre of Excellence for green initiatives

Establish centre of excellence to showcase good green practices in creating natural environment: (i) R&D centre for urban biodiversity & green related practices and (ii) nationentre for man-made lake and wetland. To be located at Taman Wetland and suitable park.



Green economy

Promote green business and green technology as niche economic sector: (i) R&D centre for Green technology and (ii) incubators for green business and green technology. Both to be located in Core Island (Precinct 2,3 or 4).



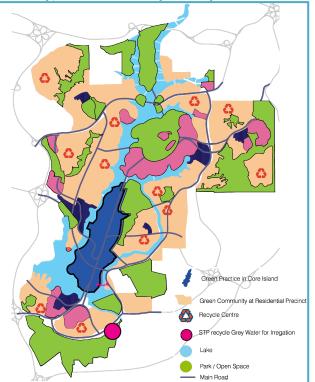
Green Building initiatives

Encourage retrofitting existing buildings, construct new buildings with green building certification and usage of green building materials. Encourage for buildings at Core Island.



Green living

Promote green community through green living. Encourage Green living practices: (i) create recycling centre at precinct 9 (ii) composting centre at Taman Warisan Pertanian, Taman Wetland & Taman Botani, (iii) solicl waste separation at source,(iv) green travel through public transport and cycling.



Move 2 VIBRANT

Putrajaya is a resident city, where the population is expected to be 350,000 by 2025; it is also a tourist city as it currently attracting 1 million tourists annually into the city coming from all across the world. However the challenge now lies in making the city more vibrant by providing the residents and tourist with facilities as per their requirements and these not only includes business, houses and employment. It needs higher learning institutions to encourage younger population into the city, celebrate arts and promote diverse cultural events, provide retailing activities, provide choice for housing and promote sports and leisure activities that use the parks and public places more actively.

Vibrant cities reflect an atmosphere of a dynamic city that attracts businesses and investments into the city and subsequently attracts people to live in Putrajaya.

The move will involve encouraging more diverse economic activities for Putrajaya. From an administrative function city, the city will attract government-linked and multi-national corporations to house their headquarters here.

It will also establish a cyber city area at the Core Island by focusing on e-government, e-administration and green technology enterprises. The cyber city status will enable Putrajaya to attract global companies and encourage local enterprises in the areas concern to locate at Putrajaya.

Putrajaya targets to increase tourist arrivals up to 3.4 million by the year 2025 and the move includes providing facilities and amenities that will enhance Putrajaya as a tourist city. This includes the building of an international exposition centre to complement the PICC and promote MICE further. A city library and an Urban Planning Exhibition Centre are also proposed to be developed in Putrajaya in creating attractions into the city.

In facilitating a dynamic city growth and the fast emerging urban economies, a flexible and mixed use land structure is proposed for Putrajaya. This would facilitate complementary (non-conflicting) new business to emerge in Putrajaya without any change to the city's development plans. The land use structure will be integrated with public transport and creates transit oriented development (TOD) as well as encourage pedestrian oriented development (POD) where pedestrian priority zones encourages walkability, reduces parking provisions and enhances access to public transport facilities.

EXHIBIT 2.7 Move 2 – VIBRANT



Diverse economic activities

Promote multi-dimensional economic sector in Core Island: (i) commercial – retail, food & beverages, business and corporate services, (ii) tourism, (iii) public administration related business, (iv) R&D, (v) education,(vi) non-governmental activities.



Centre of excellence

Establish centres of excellence to showcase good practices at Core Island and suitable parks: (i) Public administration, (ii)Wetland and lakes, (iii) Urban biodiversity and green



Flexible and mixed land use

Allow more activities on commercial land at Core Island: (i) Educational services, (ii) Research & development, (iii) Government use,(iv) Limited residential, (v) TOD.

Ensure retail at street level along Pesiaran Perdana and facing promenade and waterfront within Core Island.

Allow temporary commercial & mixed use development at Core Island



Corporate city

Core Island to be centre for government-linked corporations and multi-national corporations headquarters. Promote green business and corporations.

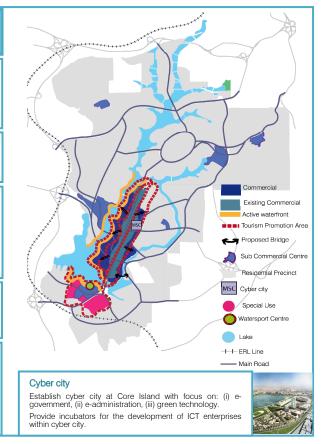


Tourist city

Build international exposition centre to complement PICC and promote MICE.

Encourage development of tourists facilities at Core Island and its waterfront, and Precinct 5: (i) hotels (ii) shopping complex (iii)bazaar (iv) food kiosks (v) souvenir outlets (vi) art rallerv.

Develop national water sport centre at Precinct 6.



Move 3 DISTINCTIVE

The Putrajaya masterplan introduces precincts to significantly distinguish the city's urban pattern, its land use components and city functions. The built environment today has witness most of the government precinct, city centre (core island) and civic precinct (Precinct 5 and 6) and residential precincts being developed. The legibility in terms of images and functions has somehow faded in some of the precincts. The move now calls for further enhancement of these precincts to be more distinctive in representing its key function.

Precincts that require special attention are the Government Precinct, Core Island, Civic Precinct and the precincts at the peripheral area.

The Core Island is the city centre and has the most commercial and mixed land use. It is important to ensure that the city centre functions well with the support of dynamic city structure. Activities at street level must be addressed and linked to create vibrancy. It is also the only precinct that is surrounded by water bodies, thus offers opportunities to be the most vibrant among the precincts.

Civic Precinct will be the centre for civic, culture and arts activities supported by tourism and business facilities set at international standards. In addition, the linkages between the various parcels within the Government precincts need to be enhanced. This would assist in addressing traffic and parking problems faced currently at the Government Precinct and Core Island.



Move 4 CONNECTED

Green travel is a move towards comprehensive efforts to encourage Putrajaya residents to have greener travel choice and this includes plans to support walking, cycling and initiatives to improve public transport. Green travel will also ease congestions that urban activities contribute. reduces carbon emissions increases levels of physical activities in the city. This would lead to healthier lifestyles, reduced carbon footprints and greater environmental stewardship that Putrajaya has long acclaimed.

Putrajaya's initial masterplan was supported by a Public Transport masterplan that has drawn upon model splits that focused on public transportation especially in the core island. With more than 75% of the population residing here also works in Putrajaya, one would think that it would be easy to achieve a higher rate of public transport ridership. However, till today this is still a challenge for Putrajaya to ensure that the modal split remains. Therefore, it requires an integrated approach to provide for the enabling environment to encourage residents to choose greener travel modes in the city.

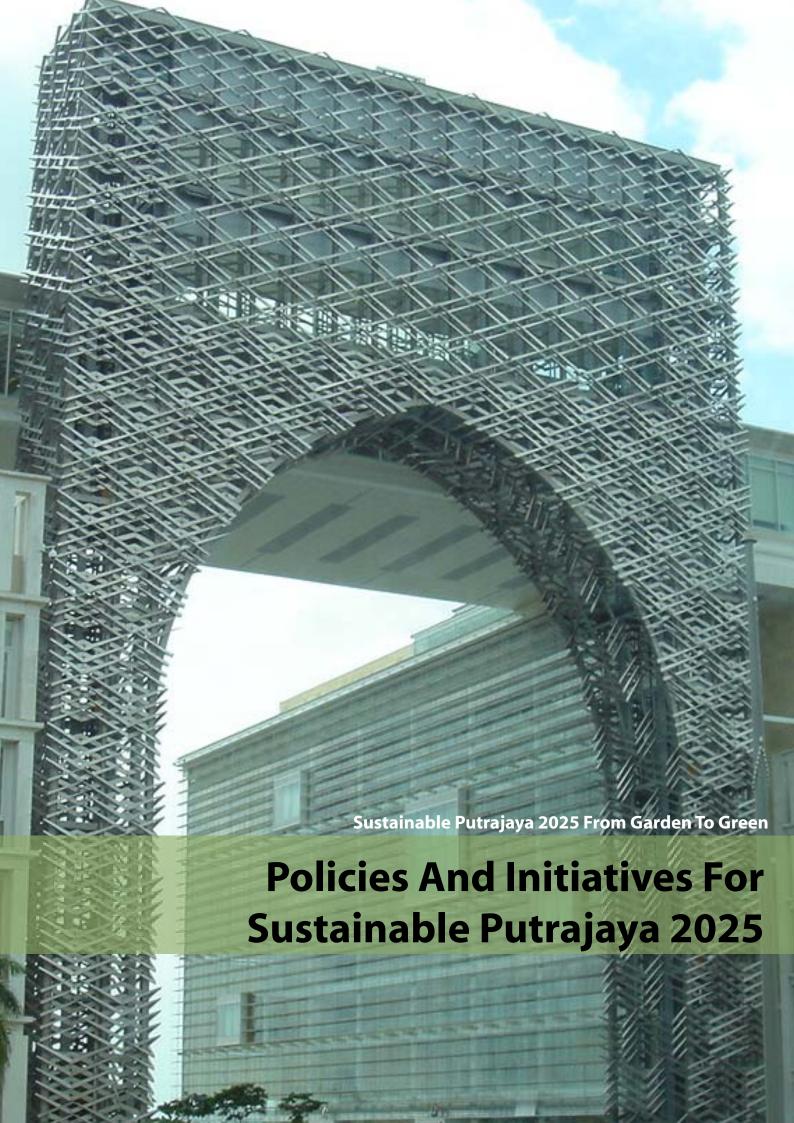
The move looks into focusing on multi types of public transportation i.e. from light rail to buses, to water taxis. It also looks into measures to reduce private car vehicles in the core island and the provision of infrastructures that will encourage the use of electric/hybrid cars.

With public transport being the key mode of transport, transit stations need to be integrated with urban development and this calls for transitoriented development. Mixed use activities and higher intensity development are encouraged in transit areas and a walking priority zone can then be established within the immediate surrounding areas of the transit stations. Parking facilities will be managed within these zones and transit centres becomes the focal points of the area.

Putrajaya will also enhance its pedestrian networks and areas within the city that prioritises pedestrian will be identified to provide a seamless and barrier free connectivity. Neighbourhood areas will be pedestrian priority zones and linkages to parks, school and religious reserves will be made legible and barrier free.

EXHIBIT 2.9 Move 4 - CONNECTED Reduce private vehicles Implementing: (i)road area pricing, and (ii)car pool. Maximum development charges for additional parking for any development at Core Island. Green vehicle and transport Provide well connected and covered walkway Encouraging: (i)cycling, (ii) green buses, (iii)green taxis and (iv) hybrid vehicles. Introduce: (i)water taxi. Transit oriented development Seamless connectivity within the building and to neighbouring buildings. Link rail stations and commercial buildings. Increase development intensity within 400meters Sub Commercial Centre Putrajaya Sentral (Multi Modal Terminal) Park and Ride Improve public transportation and modal Lake Providing: (i)shuttle buses, (ii) priority bus lanes, (iii)park& ride facilities at Precincts 5, 7, 12, 14, 17 & ERL Line Rail Extension Line Implementing: (i)high parking charge at Core Island, (ii)rail services and (iii) BRT. Rail Lines BRT route corridor Ensure seamless connectivity.





3.0

POLICIES AND INITIATIVES FOR SUSTAINABLE PUTRAJAYA 2025

Future directions of Putrajaya will be guided by a set of policies and initiatives. These policies and initiatives are formulated based on the needs to overcome prevalent issues identified in Putrajaya and to achieve Putrajaya's vision. Eight (8) policies have been formulated which covers different aspect of planning and development. Some of these policies are multi-dimensional and covers several aspects. The policies are supported by the facts and justifications which explain on Putrajaya's current and future situations.

Initiatives are specific measures that act to support each policy in achieving its aim. Such initiatives will have their own programmes that will ensure effective achievement of the policies and visions. Some of the programmes have set targets as performance and inventory measures.

The initiatives and programmes summarised in Key Diagram at the end of this chapter, linking them; from strategic perspective; to its locality in Putrajaya. Their locations will be translated at specific implementation level by Local Plans for every precinct in Putrajaya, Special Area Plans where applicable and necessary and implementation plans by Perbadanan Putrajaya and/or its strategic partners.



8 POLICIES

- 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 Fnvironment
- 5. Moving Putrajaya towards Green City
- 6. Implementing Integrated Transportation System
- 7. Employing Adaptable and Responsive Land Use Management
- 8. Adopting Effective Partnership and Good Governance

8 Policies
32 Initiatives
120 Programmes

POLICY 1:

ELEVATING PUTRAJAYA AS AN EXCELLENT FEDERAL GOVERNMENT ADMINISTRATIVE CENTRE

The role of Putrajaya as a Federal Government Administrative Centre will be enhanced to an excellent level with a focus on advanced administrative services and niche knowledge-based sectors.

Putrajaya has successfully positioned itself as a special function urban centre. Putrajaya as the Federal Government Administrative Centre has flourished incredibly where the government service has become the main economic driver, steering the development of residential, commercial and public amenities. Its special role will be further expanded and strengthened to spearhead future development in tandem with commercial and tourism sectors. Putrajaya will be elevated to be an excellent Federal Government Administrative Centre.

Elevating Putrajaya to an excellent level will be achieved through the advancement administrative services and the creation of new niche sectors related to its administrative role. The knowledge-based industries such as education, research and development, and information technology are sub-sectors that are relevant to Putrajaya and will be nurtured as key activities. These knowledge-based sub-sectors will help to push Putrajaya to the forefront as they are the agents for change, developing human capital that is vital in achieving a developed economy.

Elevating Putrajaya as an excellent centre will also improvina Putraiava's international standing. Putrajaya as the Federal Government Administrative Centre enjoys international exposure that creates an opportunity to develop a new niche activity. Putrajaya will be promoted as a host for international organisation regional offices or branches.

To elevate Putrajaya as an excellent Federal Government Administrative Centre, Putrajaya 2025 has the following initiatives:

1.1	Establish Putra	ijaya as	a "Centre of
	Excellence"	for	public
	administration	and	international
	relations		

- setting 1.2 Encourage the educational and research institutions
- Promote Putrajaya as a city for 1.3 international organisations

Experiences learnt from many specially-planned Federal Government Administration Centres throughout the world indicated that government services sector are able to trigger other related economic activities such as defence, education, media, communication and information technology. Many have also emerged as cultural and entertainment cities.

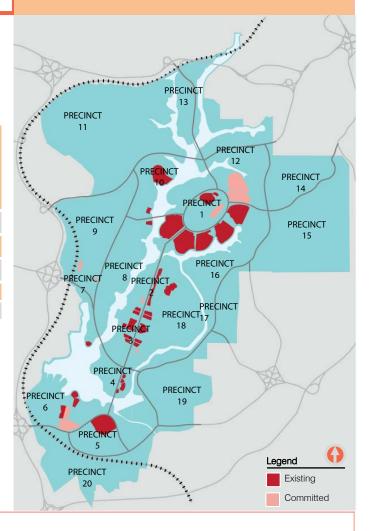
A strong government and related services will create an auxiliary economic sector, contributing to the growth of Putrajaya in the future.



Exhibit 3.1 Location of Government Parcels

Total land allocated for governmental use in Putrajaya by 2025 will be 163.8 hectares. They are largely located at Precinct 1 with 131.2 hectares. Small plots of governmental use are found in Precinct 2, 3 and 4.

Precinct	Land Area 2009 (ha)	Additional Area (Undeveloped/(ha)	Total 2025 (ha)
1	98.2	33.0	131.2
2	15.1	0.8	15.9
3	8.5	0.0	8.5
4	7.6	0.6	8.2
Total	129.4	34.4	163.8



Government sector contributes close to 70% of today's total City workforce. By 2012, all planned relocation of government ministries is expected to complete, with a total government workforce of 53,200.

Presence of large numbers of government agencies in Putrajaya mark a strong role as the key stakeholder in Putrajaya.

Projected Workforce

	Year	Government workers	Government Office Gross Floor Areas (m2)	Total Floor Areas Occupied by Government Departments (m2)	Additional Floor spaces Based on Employment Projection (m2)
	2008	40,939	2,216,630	2,216,630	-
	2010 / 2011	51,361	2,736,198	2,736,198	-
ĺ	2015	60,300	3,000,000	-	263,800
Ì	2020	73,600	3,400,000	-	663,800
	2025	79,000	3,560,000	-	823,800
	2015 2020 2025	73,600 79,000	3,400,000 3,560,000	- - ed on sa m/employee	663,800

Note: Projected GFA (2015, 2020 & 2025) is based on sq. m/employee

Projection for workforce from government sectors is derived from relocation schedule of the Federal Government up to the year 2012. For post 2012, it is based on the following growth rate:

- 2015 4.30% per year
- 2020 4.10% per year
- 2025 1.40% per year

This statistics is based on government employment trend between 1990 and 2005.

Initiative 1.1

Establish Putrajaya as a Centre of Excellence for public administration and international relation

Developing government sector into a cutting edge and advanced sector through the creation of "Centre of Excellence" specializing in public administration and international relations.

A Centre of Excellence is an advanced step of any activity and it portrays outstanding achievements by showcasing successful practices, researches and development in an exclusive centre or complex.

In Putrajaya, Centres of Excellence will be encouraged to showcase the success of several government initiatives, administrative procedures and work culture. These centres will continue to conduct research, organise trainings in improving public administration and international relations and also act as a resource centre for public administration, international relations and other related fields.

Prominent institutions and organisations with an outstanding performance in public administration, international relation and related fields will be identified to be the leaders in this initiative. Examples of these prominent institutions include the National Institute of Public Administration (INTAN), Institute of Strategic and International Studies (ISIS) and National Integrity Institute (NII).

Three programmes have been planned to support this initiative.

P1.1A Develop a Centre of Excellence for public administration and international relations

The proposed Centre of Excellence shall display the success of national public administration, development planning and international relations since Independence. Exemplary national policies and public administration system such as Malaysian 5-year Plans, Vision 2020, Malaysian Incorporated, Privatisation, assimilation of Islamic values in administration, e-government, the Government Transformation Programme are some

Programmes

P1.1A	Develop a Centre of Excellence for public administration and international relations.
P1.1B	Establish an institute for advanced studies in public administration.
P1.1C	Establish a city gallery and a specialised library.

valuable national achievements that can be showcased at the Centre.

The Centre of Excellence is best led by MAMPU or any other relevant agencies. The Centre shall have a prominent location within the Core Island. The complex may not necessarily be sprawling but can be in the form of a multi - storey tower within the mixed use zone.

P1.1B Establish an institute for advanced studies in public administration

The institute shall become the nerve for developing new ideas and approaches in public administration. It shall offer postgraduate studies and professional training for government executives and members of Administrative bodies. The institute may extend its role to include research, consultancy and counselling on the public sector. INTAN or other related agencies will take the lead in the implementation of this institute in association with local and international universities.

In addition, an institution like the Institute of Diplomacy and Foreign Relations located in Kuala Lumpur will also be encouraged to be located within Putrajaya in the immediate future. The institute is most suitable to be located in Putrajaya as it dealt with international relations and diplomacy. This institute is best located within the Core Island and built based on the city campus concept.

P1.1C Establish a city gallery and a specialised library

The proposed city gallery and specialised library shall act as a resource and reference centre on Putrajaya's success story. See Case Study.

Suitable land parcel for the gallery and specialised library shall be identified within the Core Island or Civic Precinct. The City library can also be sited within Perbadanan Putrajaya headquarters.

Case Study

Many other cities have set up an urban or city related centre of excellence for city planning and administration. These centres become referral point for city planning, not just within the respective city or country, but also other cities around the globe. The most notable and established within this region is the Singapore Urban Redevelopment Authority City Gallery. Other similar centre is the Madinah Urban Observatory.

Putrajaya can become the excellence centre for city planning as it has been conceptualised from a forward looking master plan to implementation. Today, Putrajaya has become a city with vast experience in city planning, urban design, architecture, garden city and landscape as well the leader in green city initiatives in the country.



Spread over two levels, Singapore City Gallery is the nation's version of a city exhibition that captures Singapore's planning efforts in a nutshell. It is visited by more than 230,000 visitors every year. The gallery showcases interactive exhibits from model to compute animated information booths as well as other medium of exhibitions. It has proved to be an important reference centre on urban planning as well as one of the major tourist attractions to Singapore.









Initiative 1.2

Encourage the setting up educational and research institutions

Higher learning and research institutions will propel the value change in the economy and set Putrajaya as a centre for high skilled human resources

Higher learning and research institutions are two components of the knowledge-based economy that will complement the special function of Putrajaya. These are key components to be promoted to enhance the value chain in the local economy through development of a high-skilled human capital. The initiative will also propel Putrajaya as a new centre for highly skilled human resources.

In attracting new higher learning institutions, focus shall be given to those related in public policy, political science, human resource management, environmental study and green technology. These fields are closely related to Putrajaya's role as the Federal Government Administrative Centre and its status as a pioneer Green City.

New universities like United Nation University, Commonwealth University, and ASEAN University are among new international universities that can be encouraged to be located in Putrajaya.

Putrajaya shall also encourage the setting up of National Centre for Wetlands Research and Lake Management and Centre for Botany Science and Urban Horticulture. These proposed centres will be expansion programmes of existing Visitors and Information Centres located at the respective parks.

Specific follow-up actions shall be required to pursue this initiative to ensure successful implementation. Marketing Action Plan to identify the targeted institutions or universities and to execute further strategic actions shall be prepared. Appropriate zone for these institutions shall be identified. Careful zone selection is required as these activities require good accessibility, public transport and affordable supporting facilities.

In order to encourage the setting up of higher learning and research institutions, Putrajaya has three proposed programmes.

Programmes

P1.2A Establish a Putrajaya University.

P1.2B Set up a National Centre for Wetland and Lake Management.

P1.2C Expand the function of botanical park to have the centre for botany science and urban horticulture

Case Study **Higher Learning Institutions**

Most of the administrative centres in the world are inspired by higher learning institutions. Cities like La Paz in Bolivia have 22 institutions of higher learning, while The Hague in the Netherlandsas the nerve centre for international relations. international laws and international development academic institutions.



P1.2A EstablishPutrajaya University

The proposed Putrajaya University shall specialise in:

- i. Public policy, political science and international relations: and
- Sustainable development, green technology and environment.

The university is encouraged to be set up as city campus, located in mixed use or commercial zones within the Core Island or Civic Precinct. Locating the university within the Core Island will create a critical mass to support the Core Island as a city centre. This city campus will be the magnet to create human capital, attract talents and visitors to Core Island, thus boosting the commercial and retail activities at the Core Island, and the economy of Putrajaya in general.

P1.2B Set up a National Centre for Wetland Research and Lake Management

The Centre will be involved in conducting research and studies as well as developing new techniques and findings on wetland habitat, wetland eco system and lake management system.

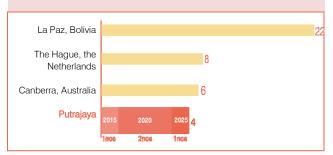
The centre shall become an educational centre to educate the role and function of wetland and its eco-system. It also shall be a promotional and referral centre for man-made wetland. Smart partnership with selected universities shall be encouraged in the setting up of this Centre.

The Centre is proposed as an expansion of existing Visitor and Information Centre located at the Wetland Park. See also Initiative 5.1.

Target

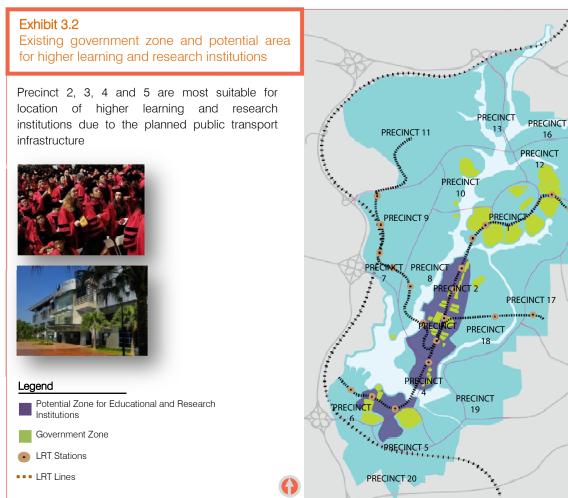
Putrajaya will have 4 institutions of higher learning and research centre by 2025. They are:

- Institute for Advanced Study in Public Administration
- Putrajaya University
- National Centre for Wetland Research and Lake Management
- Centre for Botany Science and Urban Horticulture



PRECINCT

PRECINCT 15







P1.2C Expand the function of the botanical park to house the centre for botany science and urban horticulture

The expansion shall include herbarium, research for plant taxonomy and related botany science as well as urban horticulture. The herbarium where preserved plant species are collected and catalogued is essential for the study of plant taxonomy and geographic distribution of species.

As an urban horticulture centre, it shall showcase design and plants that are attractive, sustainable and can be replicated at home. The centre for botany science and urban horticulture shall also promote awareness on urban biodiversity and sustainability.



Initiative 1.3

Promote Putrajaya as the city for international organisations

Putrajaya will strengthen its international standing as host to governmental and nongovernmental international organisations.

Putrajaya the Federal Government Administrative Centre experienced excellent international exposure thus creating a unique opportunity that no other cities in the country can match. Putrajaya has ties with several foreign countries and hosts numerous international level functions involving both governmental and nongovernmental organisations and bodies. International governmental and non-governmental organisations and bodies like the United Nations Organisation (UN), Organisation of Islamic Conference (OIC), Association of South-East Asia Nations (ASEAN) and many others have their own sub-organisations that are suitable to be located in Putrajaya. Some already have their offices in Kuala Lumpur which can be enticed to Putrajaya with good packages including incentives such as lower office rental.

However, the focus shall be to bring in new offices especially those involved in human resources, training, environment and sustainability. United Nations Institute for Training and Research (UNITAR), United Nations Research Institute for Social Development (UNRISD), United Nations Environmental Programme (UNEP) and Asian Productivity Organisation (APO) are some of the organisations that shall be encouraged to be located in Putrajaya.

These organisations are proposed to be located within Core Island or within the Diplomatic Enclave in Precinct 4, 5 and 15. In order to ensure the success of this initiative, several facilities like high quality accommodations, good transport linkages, international school, medical facilities, and high quality commercial facilities shall be provided in the nearby precincts.

Programmes

P1.3A	Identify suitable international organisations to enter into partnerships with the relevant local agencies.
P1.3B	Prepare Promotional/Marketing Action Plan to attract multi-national
	organisations.
P1.3C	Offer attractive incentives to entice relocation of multi-national organisations to Putrajaya.
P1.3D	Opening up Diplomatic Precinct / Enclave as one of the potential locations for international government and non-governmental organisations.

The programmes proposed to ensure smooth implementation of this initiative are:

P1.3A Identify Suitable International Organisations to Enter Into Partnerships with the Relevant Local Agencies

Among the international organisations that can be invited to Putrajaya include:

- United Nations Institute for Training and Research (UNITAR)
- United Nations Research Institute for Social Development (UNRISD)
- United Nations Environmental Programme (UNEP)
- Asian Productivity Organisation (APO)



P1.3B Prepare Promotional/Marketing Action Plan to Attract Multi-National Organisations

Promotional/Marketing Action Plan includes the branding of Putrajaya as a city for international organizations, the facilities that Putrajaya offers as host including the benefits and incentives. The Plan shall also include the support from relevant authorities in ensuring smooth relocation and setting up of new organisations offices and headquarters.

Participation of the Ministry of Foreign Affairs is highly encouraged.

P1.3C Offer Attractive Incentives to Entice Relocation of Multi-national Organisations to Putrajaya

As relocation of international organisations often involved movement and relocation of logistics and foreign staff, appropriate incentives shall be offered to encourage and expedite the exercises.

Targets

Putrajaya will provide 50,000sq. m. of office space by 2025 for International Governments and Non-Governmental Organisations and Bodies to be located in Putrajaya. The first 25,000sq. m. will be provided between now and 2025 and the balance will be provided by 2025.

P1.3D Opening up a Diplomatic Precinct/Enclave as one of the Potential Location for International Government and Non-Governmental Organisations

Opening up Diplomatic Precinct at Precinct 15 and/or Diplomatic Enclave at Precinct 4 may involve revision of land ownership status. Some parcels of land identified as Diplomatic Enclave have limited category of use only for embassy. This may need to be revised when the need arises in the future.

Exhibit 3.3 Diplomatic Precinct and Diplomatic Enclave PRECINC PRECINCT 11 PRECINCT **PRECINCT** PRECINC PRECINCT PRECINCT 9 **PRECINCT** PRECINCT 15 PRECINCT PRECINCT PRECINCT 2 16 PRECINCT PRECINCT PRECINCT 17 18 **PRECINCT** PRECINCT PRECINCT Legend Diplomatic Precinct PRECINCT 20 Diplomatic Enclave

POLICY 2:

BUILDING A PROGRESSIVE AND DIVERSE URBAN **ECONOMY**

Tourism, E-business and Green Economy will lead the transformation of Putrajaya into a progressive and diverse economy

The less dominant role played by commercial and services sectors will take a round turn in the immediate future. As Putrajaya enters a new era after successfully completing splendid infrastructure and impressive Federal Government offices, focus will be channelled to build a progressive and diverse economy. Future economy will be propelled by commercial and business sectors that will co-exist with strong government presence.

Three major commercial and services sectors have been identified to lead the transformation. Tourism. e-business and green economy will drive the economy and create a niche market for Putrajaya to stand as a major commercial hub within Greater KL/Klang Valley. These market leaders - tourism, green economy and e-business - are selected based on the strength of Putrajaya that has all the ingredients as a well-built city. Putrajaya is already a favourite tourist destination, a core centre within the Multimedia Super Corridor and a pioneer Green City.

A competitive business environment at par with other renowned capital cities in the world will be created to support the move by these newly selected market leaders. Competitive business environment includes the essential business infrastructures like Grade A offices, state-of-the-art information & communication technology, seamless connectivity to the international airport and other major cities within Greater KL/Klang Valley and quality lifestyle facilities. A competitive business environment is vital to attract more private sector participations especially the governmentcorporations and the multinational linked companies.

This big plan in building a progressive and diverse economy in Putrajaya will be achieved through four initiatives below.

2.1	Expand tourism into a well-defined cluster
2.2	Establish a niche MSC-status city
2.3	Develop green economy
2.4	Provide competitive business environment

Dynamic economic sector in the future will strengthen the Core Island as the city centre of Putrajaya. Bustling economy will also help to boost the activities at various levels of commercial centres within Putrajaya. See the hierarchy of commercial centres in Exhibit 3.7.



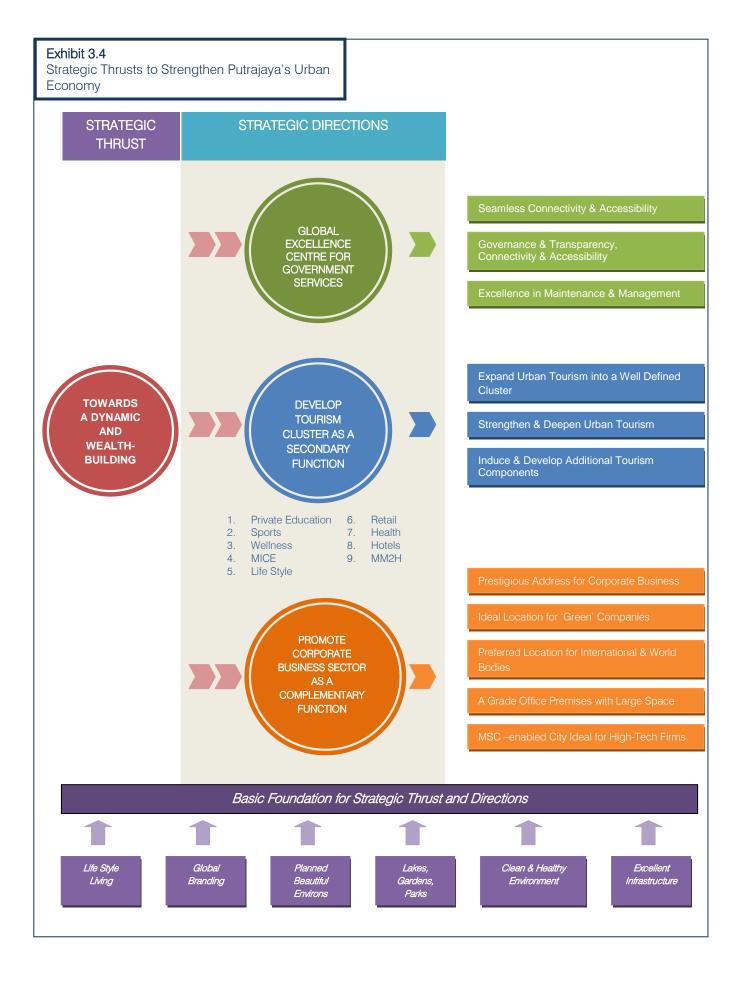
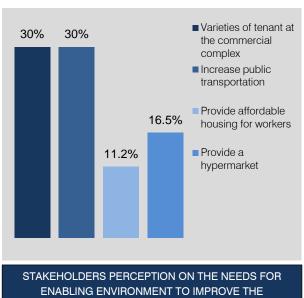
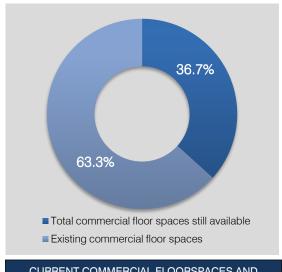


Exhibit: 3.5 Underdeveloped Commercial Sector in Putrajaya

The underdeveloped commercial sector stems from the dominance of government as the key economic activity in Putrajaya. The estimated number of active licensed commercial activities in Putrajaya is around 660, of which more than 90% are engaged in food business, retailing and personal services such as tailoring and beauty/health treatment. These activities are oriented towards meeting the needs of the local population. They are located mostly in the neighbourhood commercial centres although many could be found in the largest retail centre at the Alamanda in Precinct 1 with an approximate net floor area of 65,000 square metres (700,000 square feet) and 180 units of shop lots. A weak commercial sector also results from the absence of a main commercial hub in Putrajaya. Although the Master Plan (revised) makes provision for a major commercial centre, current developments have yet to reflect this activity.

In the case of Putrajaya, the issue of an underdeveloped commercial sector is further compounded by the small population size, resulting in the retail firms competing among themselves for a share of a small market. To survive, such firms would have to reach out to a regional market beyond Putrajaya but in doing this, it faces keen competition from Puchong and possibly Cyberjaya. To bring more people into Putrajaya, it would require excellent connectivity and good accessibility to attract clientele from neighbouring places like Seri Kembangan, Bangi, Serdang, and Cyberjaya.





COMMERCIAL SECTOR

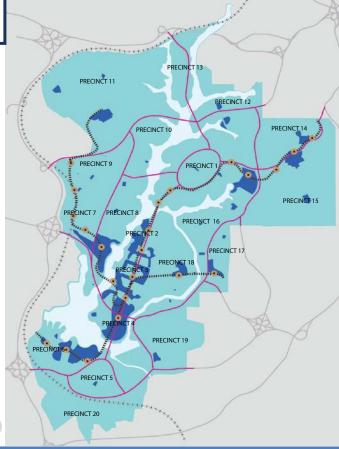
CURRENT COMMERCIAL FLOORSPACES AND COMMERCIAL FLOORSPACES AVAILABLE

TRANSFORMATION INTO A PROGRESSIVE AND DIVERSE ECONOMYLEAD BY: 30% 30% ■ Tourism Business ■ Green Business ■ E-Business 20% ■ Other Business Services 20%

Exhibit 3.6 Commercial Zones, 2025

Commercial zones compriseof 3.7% of total Putrajaya area. The distribution of commercial zones by precincts is as below:

Precincts	Area (ha)	Precincts	Area (ha)
1	19.39	11	10.04
2	18.80	12	5.86
3	13.89	13	-
4	34.79	14	2.82
5	23.46	15	10.67
6	2.75	16	2.29
7	6.13	17	6.96
8	24.72	18	5.46
9	2.78	19	3.55
10	0.35	20	-



Legend

Commercial Zone

LRT Lines

LRT Stations

Major Roads



Exhibit 3.7

Hierarchy of Commercial Centres

Function and Type of Activities

City Centre - Central Business District for Putrajaya

- Sundry retail outlet Shopping complex
- Retail in food and drink
- Retail in Household & Personal 4. Goods
- 5 Restaurants
- Business and financial
- Professional services Personal and household
- 8. services
- Entertainment
- Videos, CD's and cassettes
- Private education services
- Public Conventional Facilities
- 13. 14. Corporate Office Recreation Club
- 15. Hotel

Neighbourhood Centre -Commercial Activities within

- Neighbourhood Area Sundry retail outlet
- Supermarket
- Retail in food and drink
- Retail in Household & Personal 4 Goods
- Restaurants Retail in Bicycle and Repair 6. Services
- Personal Services
- Professional Services
- Videos, CD's and cassettes Private Education Services
- Business and financial

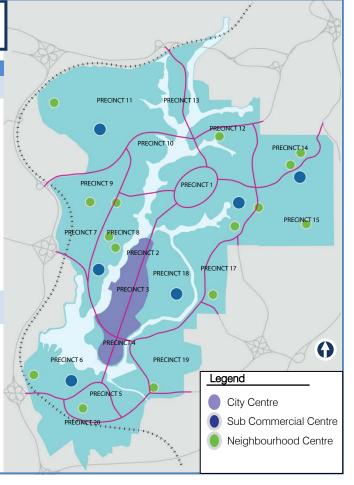
Sub Commercial Centre -

Secondary Commercial Centre

- Sundry retail outlet
- Shopping complex
- Retail in food and drink Retail in Household & Personal 4.
- Goods
- Restaurants
- Business and financial
- Professional services Personal and household services
- Retail in Trade and Motor
- Vehicles
- Wholesale Trade in Household and Personal Goods
- Videos, CD's and cassettes
- Private education services Entertainment
- 14. 15.
- Limited Commercial Retail in Bicycle and Repair Services
- 16.

Local Centre - Small Commercial Activities within Community Area

- Sundry retail outlet
- Supermarket Retail in food and drink
- Personal services
- Books and Stationary
- Professional Services



Initiative 2.1

Expand Tourism into a well-defined cluster

Seven niche clusters are selected to lead the growth of the tourism sector and generate economic benefits to the local economy

Putrajaya possesses a variety of iconic tourist attractions that provide strong foundation for the growth of the tourism business. Putrajaya International Convention Centre (PICC), the iconic government buildings along the boulevard, iconic bridges, the lakes and gardens had already attracted a large number of tourists and has great potential as they appeal to almost all tourist market segments from convention delegates to business travellers and holiday makers.

Moving forward, these attractions will be the impetus to encourage the setting up of more tourism-related business and expand the existing business dimension to more than 5-star hotels and shopping complex.

These attractions will be organised to form a welldefined cluster to allow focused promotional effort. Products that are unique to Putrajaya and able to generate higher multiplier effect will be selected as key clusters.

Meetings, Incentives, Conventions and Exhibitions (MICE), sports and recreation, natural and built environment, cultural and heritage, medical and

Programmes

P2.1A Promote tourist niche cluster- MICE. sports and recreation, built environment, cultural and heritage, medical and health, food and shopping

P2.1B Prepare Strategic Tourism Action Plan

clusters that are selected to lead the growth of tourism sector and generate the economic benefits to the local community. Example of how MICE can generate the economic benefits to the local community is shown in Exhibit 3.8.

Programmes that support this initiative can be cross referred to Policy 3 which deals specifically on tourism sector in Putrajaya. However, as an economic initiative, a broad programme has been proposed to encapsulate other initiatives and programmes in related policies.

P2.1A Promote tourist niche cluster

Seven niche clusters that include MICE, sports and recreation, natural environment, built environment, cultural and heritage, medical and health, food and shopping will be further developed.

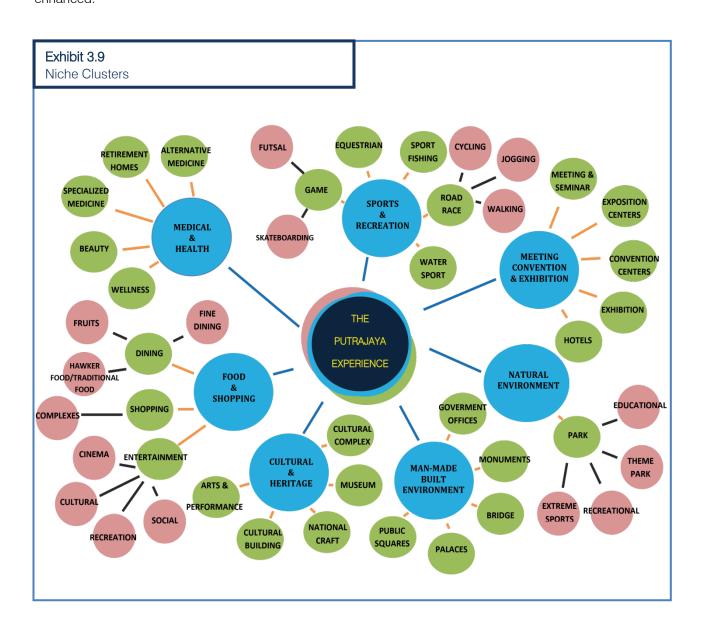
Additional tourist attractions under each cluster will be created. Promotional efforts and financial assistance will be focused on further developing these clusters.

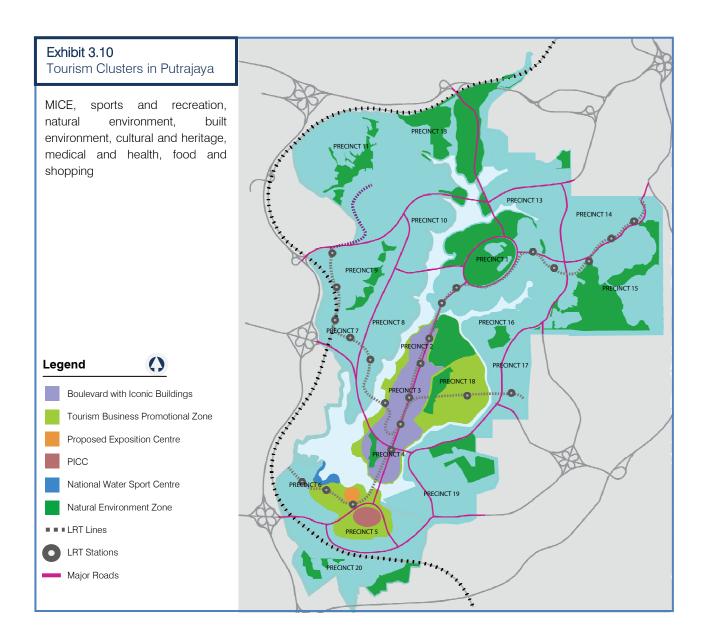


Prepare a Strategic Tourism Action Plan

Putrajaya Strategic Tourism Action Plan will serve as a blueprint to strengthen the tourism sector as a key economic sector. Strategic Tourism Action Plan will identify new products for further development and under-developed products for enhancement of every niche clusters. For example, under the sports tourism cluster, new sports products will be proposed such as X-Treme Sport, Putrajaya Triathlon, Sports Theme Park (Bungee Jumping, Surfing, Flying Fox, etc) while existing products such as water sport, horse show/show jumping and road race/cycling will be re-packaged and enhanced.

Strategic Tourism Action Plan will also propose new events and tour packages to address the short period of stay faced by Putrajaya. Marketing strategies and programmes will be an important part of this Plan as it will attempt to reach the international tourists and elevate Putrajaya as an international destination. Locally, marketing will also reach to wider and multi-level market including amateur, young, children and family.





Initiative 2.2

Establish a Niche MSC-status City

Focus will be given to e-government, e-administration and e-green solutions to create market capitalisation for Putrajaya as a MSC-status city

E-business is a fast growing services sector and exists in a broad economic dimension from entrepreneurial to corporate. It will be extensively promoted to propel Putrajaya into a progressive and diverse economy. Putrajaya with its strategic location within the MSC corridor and possess excellent ICT infrastructure is a natural candidate for a MSC-status city. In order to create its own market capitalisation and avoid direct competition with the neighbouring Cyberjaya, Putrajaya shall focus on e-government, e-administration and egreen solutions. Other considerations shall be given to e-city management and e-transport management. Exhibit 3.9 shows the possible contents of potential e-business clusters.

The establishment of MSC status city entails the provision of state-of-the-art infrastructure that complies with the Bills of Guarantee. Other steps in promoting the setting up of e-business in Putrajaya cyber city will include provision of affordable office spaces and homes to ICT entrepreneurs. Incubators (smalloffice cubicles), office suites and SOHO (small office home office)that are fully equipped with



Programmes

P2.2A	Provision compliance woof Cybercity			
P2.2B	Provide inc	ubators	and	SOHO
	development		entice	e-
	businesses/ei	nterprises		

broadband facilities are some of the infrastructure that are important to attract the ICT communities and businesses.

Programmes proposed under this initiative include:

P2.2A Provision of infrastructure in compliance with the Bills of Guarantee of Cybercity

The critical infrastructure performance standard that a city requires to qualify as a cyber city is shown in Exhibit 3.12.

Another vital aspects to qualify as a cyber city is a niche proposition that is unique to the city and not in competition with other established cyber cities. It is proposed that the niche proposition for Putrajaya will be in e-government, e-administration, and egreen solutions.

P2.2B Provide incubators and SOHO development to entice businesses/enterprises

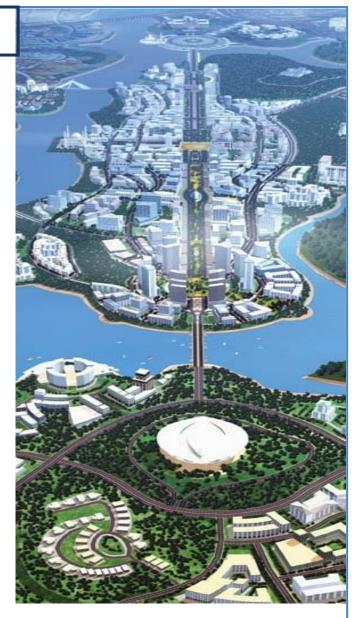
Incubators must have at least basic facilities such as internet access at a minimum band width of 128kbps, shared facilities, business advisory support and minimum floor area of 2,000 sq. ft.



Exhibit: 3.12

MSC Bills of Guarantee

Bills of Guarantee	Description
BoG 1	To provide a world-class physical and information infrastructure.
BoG 2	To allow unrestricted employment of local and foreign knowledge workers.
BoG 3	To ensure freedom of ownership by exempting companies with MSC Malaysia Status from local ownership requirements.
BoG 4	To give the freedom to source capital globally for MSC Malaysia infrastructure, and the right to borrow funds globally.
BoG 5	To provide competitive financial incentives, including Pioneer Status (100 percent tax exemption) for up to ten years or an Investment Tax Allowance for up to five years and no duties on the importation of multimedia equipment.
BoG 6	To become a regional leader in Intellectual Property Protection and Cyber laws.
BoG 7	To ensure no censorship of the Internet.
BoG 8	To provide globally competitive telecommunications tariffs.
BoG 9	To tender key MSC Malaysia infrastructure contracts to leading companies willing to use MSC Malaysia as their regional hub.
BoG 10	To provide a high-powered implementation agency to act as an effective one-stop super shop.



PARAMETER	STANDARDS
Infrastructure	Multiple network facilities and services providers environment At least 99.9% service availability Full coverage for all cellular operators
Utilities	Power redundancy and >99.95 reliability for electricity Uninterrupted water supply
Transportation Environment	At least two transportation modes Strict enforcement to ensure adherence to MSC Environmental Guidelines
Security & Safety	Ten minutes response from authorities
Customer Service Quality	One-stop-centre for Cybercity/Cyber centre management with client charter

8 Q	UALIFYING CRITERIA FOR A CYBER CITY
1	Strong drive by state government & MSC Cybercity / Cyber centre stakeholders
2	Broadband and Infrastructure readiness
3	Customer focused management with key performance indicators
4	Competitive environment to attract investment, nurture start-ups/ SMEs, and house knowledge workers
5	Talent pool availability
6	Proximity to universities and research centres
7	Adoption of ready for rollout flagship applications
8	Niche value propositions for local economy

Initiative 2.3

Develop Green Economy

Government-led green establishments shall lead the setting up of green businesses in Putrajaya

Putrajaya, the Garden City has become a pioneer Green City in a new move by the Federal Government to promote green technology and other green initiatives in the country. The move has given Putrajaya the opportunity to take a quantum leap in initiating and nurturing various green-related businesses. As green-related private business is still small, efforts to create green establishments shall be led by government initiated business such as innovation centre.

Private businesses practising green office operating system, supplies green products, advising green practice and green branding, green campaigners shall be encouraged to be located in Putrajaya. As new emerging business sector, the entrepreneurs, practitioners and campaigners involved in this business shall be given assistance and incentives.

Affordable incubators/office cubicles, offices suites shall be developed to nurture young entrepreneurs in green business. Discounted or subsidized office rental rates, subsidized operational costs such as electricity, telecommunication and water supply are some of the incentives to be considered by building owners and managers.

Smart partnership between government bodies and private business is also encouraged to stimulate the growth of green business in Putrajaya. Green businesses will be encouraged at the Core Island where some part of its commercial and mixed zone will be allocated to cater for the growth of greeninitiatives and business. Several programmes are planned to support this initiative that include:

P2.3A Provide incubators for green businesses

Incubator for green business by Perbadanan Putrajaya or other relevant agencies will provide an ideal environment to nurture entrepreneurs in business related to green initiatives. The operator

Programmes

P2.3A	Provide incubators for green
	businesses
P2.3B	Develop green businesses in partnership with private sectors,
	professional bodies, NGOs and higher learning institutions

provides not only business premises but strategic guidance, mentoring and assistance.

Benefits to entrepreneurs include leveraging on community network within the incubator, strategic collaboration and gaining added value in terms of knowledge, resources and market access.

P2.3B Develop green businesses in partnership with private sectors, professional bodies, NGOs and higher learning institutions

In line with green city initiatives, Perbadanan Putrajaya (Putrajaya Corporation) in partnership with private sectors, professional bodies, NGOs and higher learning institutions can initiate green business such as carbon accounting consultancy and innovation centre for green technology.

In addition, there are many green businesses that can be promoted in Putrajaya that include green companies, technology clean technology companies, green suppliers, green branding agents, green campaigners and many others.

Exhibit 3.13

Green Businesses and Green Companies that will be promoted in Putrajaya

Innovation centre green building

Initiative 2.4

Provide Competitive Business Environment

Business infrastructure, incentives, seamless connectivity, state-of-the-art ICT and affordable business premises are competitive elements business of environment that will be provided to set the foundation for progressive and diverse economy

A competitive business environment at par with other renowned capital cities in the world will be created to support the growth of niche businesses in Putrajaya and attract greater participation from private sector. Focus will be given to attract high net worth private sectors like government-link companies (GLCs) and multinational corporations (MNCs). However, Putrajaya shall also pave the way to nurture young entrepreneurs in tourism based business. e-businesses businesses.

Competitive business environment will be achieved the provision of quality business infrastructures like Grade A offices, state-of-the-art ICT, seamless connectivity to the international airport and other major cities within Greater KL/Klang Valley and quality lifestyle facilities.

Through InvestKL1, GLCs, **MNCs** entrepreneurs will be encouraged to re-locate in Putrajaya by providing business incentives, support and advisory services. InvestPutrajaya also will develop and provide incubators (office cubicles) and affordable office suites for innovators and entrepreneurs.

Seamless physical connectivity is another important element in competitive business environment that will attract private sectors including MNCs. Putrajaya has laid the entireinfrastructure and will intensify the implementation especially in delivering the rail

Programmes

P2.4A	Deliver quality essential infrastructure	
	to attract GLCs and MNCs	
P2.4B	Provide business incentives	
P2.4C	Improve transport linkages to	
	neighbouring areas especially to	
	Cyberjaya, Bangi, Kajang and	
	Puchong	
P2.4D	Provide incubators for emerging	
	businesses	

system that is ultimate in achieving seamless connectivity. Competitive business environment will be delivered through various planned programmes that include:

P2.4A Deliver quality essential infrastructure to attract GLCs and MNCs

There are a few essential infrastructures that need to be provided in order to be attractive to MNCs, regional headquarters as well as local GLCs. See Exhibit 3.14 for essential infrastructures that have to be provided in Putrajaya to attract MNCs.

Exhibit 3.14 Essential infrastructure for MNC		
	Level of Availability	Target
Grade A Office		
Reliable ICT		
Connectivity to Airport		
International School		
University/Colleges		
Medical Centre		
Quality Housing		
Recreation Facilities		
Entertainment		
High-end Commercial Services		
	0%	100%

InvestKL will be set up to help facilitate investment into Greater KL/Klang Valley This is part of Federal Government transformation programme for Greater Kuala Lumpur /Klang Valley under the National Key Economic Area (NKEA)

Provide business incentives and support

Business incentives and support will be provided to attract MNCs. The appropriate incentives must be further studied to meet the targeted needs and its effectiveness. Iskandar Malaysia for instance offers pioneer status to selected economic clusters. Several incentives and support that are usually offered by other foreign countries in attracting MNCs are as below:

Proposed Incentives & Support

Create tax incentive for green business, ebusiness in 3 niche areas; e-government, eadministration and e-green specifically designated areas within Putrajaya

Note: This have been implemented at Iskandar Malaysia for different business category

- 2. Advise and facilitate other existing tax incentives
- Advise and facilitate funding and financing 3.
- Exemption on FIC guidelines
- Subsidised workers housing

P2.4C Improve transport linkages to neighbouring areas especially to Cyberjaya, Bangi, Kajang and Puchong

Transport linkages to other neighbouring areas will increase cross boundary shared facilities especially in complementing Putrajaya in terms of wider choice of residential facilities, entertainment facilities and others.

P2.4D Provide incubators for emerging business

been This programme has deliberated in programmes P2.2B and P2.3A.





POLICY 3

STRENGTHENING TOURISM AS KEY ECONOMIC **FUNCTION**

International positioning, products diversification, facilities enhancement and infrastructure improvements will be the focus to strengthen tourism as a key economic function.

Tourism is a promising economic sector in Putrajaya, generating both local and international interests. Putrajaya's iconic government buildings, bridges, beautiful lakes and sculptured gardens form a panoramic built environment that has successfully attracted tourist arrivals. In addition, the Putrajaya International Convention Centre, 5star hotels and international and national level events organized in Putrajava in the recent years have elevated Putrajaya to another level of success.

Tourism sectors will be strengthened to become an important economic function. With the existing quality tourism products and the international exposure beina the Federal Government Administrative Centre, Putrajaya is poised to be promoted as an international tourist destination. A cluster-based strategy will be adopted to promote Putrajaya where seven niche clusters will be proposed to lead the promotion.

All efforts will be focussed on promoting these seven clusters. Within each cluster, products will expanded and diversified to widen the target market segment in terms of age group, income level and social status as well as targeted continents. The products will then be packaged and promoted locally and internationally and will be led by MICE and sports tourism. These two clusters have a wider market and have international participants and followers. Cross promotions will be promoted to create a critical mass while diversified events and activities will be organised to generate economic vibrancy and lead the tourism market movement.

Tourism as a key economic function will be strengthened through the following initiatives:

3.1	Position Putrajaya As An International Destination
3.2	Organise diverse tourism events and activities
3.3	Improve tourist movements
3.4	Increase supporting tourism facilities

Several other initiatives are also introduced that include increasing the supporting facilities like varieties of hotels, supporting retail outlets such as photo shops, food and beverages, souvenir shops and others.

Tourist movement between places of interest within Putrajaya will be improved to attract more individual tourists. Finally a Tourism Strategic Action Plan that will tie and integrate the proposals into an operative plan (See Initiative 2.1). With the proposed initiatives, tourism sector in Putrajaya is expected to generate 3.4 million tourist arrivals and 1.9 million hotel guests by 2025.

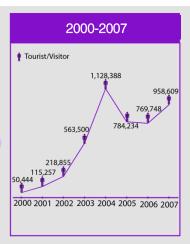


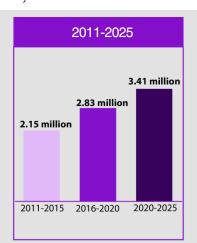
Putraiava Floria

Exhibit 3.15 Tourist Arrivals and Hotel Guests In Putrajaya

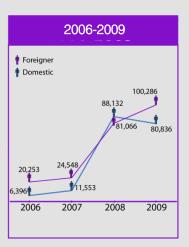
Tourist arrivals to Putrajaya have shown significant prospect and is expected to chart steady growth; contribute significantly to the economy.

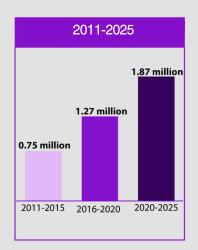
Tourist/visitor arrivals





Number of hotel guests











Initiative 3.1

Position Putrajaya as an International Destination

MICE and sports tourism will lead the move to achieve the positioning as an international destination

Wider market segment, increased length of stay and improved tourist receipts will be the direct benefits in positioning Putrajaya as an international tourist destination. A focus approach will be employed to achieve this target and this includes prioritising all efforts towards seven niche product clusters - MICE, sports & recreation, man-made built environment, natural environment, cultural and heritage, medical and health, and food and shopping.

More products will be identified and developed under each cluster especially to attract wider segment of international tourists. Underdeveloped clusters like MICE, sports, man-made built environment and natural environment will be intensified with creative products and innovative tour packages. Tour agencies are encouraged to participate through smart partnership with relevant agencies in Putrajaya. Offer of incentives to promote government-run tourist attractions will also be proposed. Widening of the choice attractions was an effort to increase the length of stay.

Programmes

P3.1A	Promote Meetings, Incentives, Conventions and Exhibitions (MICE)
P3.1B	Set up an international exposition centre
P3.1C	Establish Putrajaya as a national water sports centre
P3.1D	Develop cultural and heritage assets
P3.1E	Increase the length of stay among tourists through innovative tour packages
P3.1F	Encourage participation of tour agencies through smart partnership

In order to achieve a faster increase in international tourist arrivals, length of stay and tourist receipts, MICE and sports tourism will be given special priority as the two clusters will be able to generate fast result. Other clusters will act as supporting elements to complete the packaging of an international tourist destination.

Case Study

Putrajaya is already a host to waterski & wakeboard sports. A sport body promoting waterskiing and wakeboard is currently operating at the Maritime Centre, Precinct 6. It hosts 4 rounds of the Malaysian Championship Waterski& Wakeboard Putrajaya 2010 in March, May, July and November that attracts both local and foreign participations. There are also the Putrajaya sailing week in July and the Putrajaya International Dragon Boat Festival in October.



Several programmes are proposed to achieve the international positioning and they are:

P3.1A Promote Meetings, Incentives, Conventions and Exhibitions

MICE will be promoted by leveraging on PICC to host major national and international events. Marketing efforts to promote PICC will be intensified including efforts to meet international events planners, travel influencers and travel media. Intensive marketing is required to increase the number of organised events which will then increase the delegates' dollars.

P3.1B Create an international exposition centre

The proposed exposition centre will provide ample spaces for international level exhibition which will complement PICC as an international MICE destination. The exposition centre must be carefully planned in terms of size and capacity to suit its positioning and function. Its location must be as close as possible to PICC to cater for bigger events that include both convention and exhibition.

P3.1C Establish Putrajaya as a national water sports centre

Putrajaya is already hosting several national water sport events such as water ski and International Dragon Boat Festival. Efforts have already been initiated towards the setting up of F1 Motorised Powerboat Centre at Precinct 6.

P3.1D Develop cultural and heritage assets

Cultural and heritage of the nation and also unique to Putrajaya will be developed and promoted. These include promoting Batik Malaysia, traditional games, art (performing arts, fine arts, visual arts) & culture (handicraft, songket, silverware, etc.) A cultural and heritage complex can be developed near the promenade in Precincts 3, 4 or near the PICC and hotel and maritime centre in either Precinct 5 or Precinct 6.

P3.1E Increase the length of stay among tourists through innovative tour packages

Tour packages like "Green Trail" that combines visits to the parks and lakes shall be promoted. Hotel owners/operators will be encouraged to offer innovative tour packages.

P3.1F Encourage participation of tour agencies through smart partnership

Briefings to the prospective tour agencies will be conducted to explain future promotional efforts and Tourism Strategic Action Plan by Perbadanan Putrajaya. Incentives may be given to agencies with innovative packages and high number of organised tours. Government-run attractions will also look into offering the incentives to prospective tour agencies through smart partnership.



Exhibit 3.16 Niche Clusters

Niche Clusters		
Products	Existing	New/Potential
Sports & Recreation Meetings, Convention	 Water sport at Lake Club & Water sports Complex Horse Jumping at Equestrian Park Road race at Boulevard & surrounding Cycling at Boulevard and surrounding Sport Fishing at Putrajaya Lake Futsal at Sports Complex A & Exhibitions (MICE) 	 X-treme Sport at Challenge Park Sport Theme Park Hiking at Wetlands Traditional game competition at Sports Complex Triathlon at Putrajaya Lake & Roads/Parks
THE RECEIPTION OF THE PARTY OF	 Putrajaya International Convention Centre Shangri-La Hotel, Pullman Hotel, Marriott Hotel 	International Exposition Centre
Natural Environment	 Putrajaya Wetlands Botanical Garden Putra Perdana Park Taman Wawasan Challenge Park 	Theme Park
Man-made Built Envi	 Perdana Putra Complex (PM's Office) Seri Perdana Government Office Buildings Bridges Putra Mosque/Dataran Putra Istana Melawati 	Monuments
Cultural & Heritage	Government Office BuildingsPullman Hotel	Karyaneka Complex Batik Malaysia Outlet Cultural Complex (Traditional Game, Fashion, Arts & Music
Food & Shopping Medical & Health	 Alamanda Shopping Centre Selera Putra Dining & Cruise Putrajaya Lake Club 	Traders Centre (e.g. Central Market, York's Central Market, US) Heritage Shop (Songket, Batik, Pelikat, Tekad, Kain Ikat, Keris, Tepak Sireh, etc.) Food Square (e.g.Chulan Square, Heritage Row, etc)
	Putrajaya Hospital	 Specialist Medical Centre (Sports Injury, Physiotherapy, Acute Illness, etc) Specialist Wellness & Beauty Medical Centre Alternative Medicinal Medical Centre Retirement Homes

Initiative 3.2

Organise diverse tourism events and activities

Diverse tourism events will reach wider market from amateur professional, children to youth and senior citizen and from public to elite.

Another step towards further strengthening tourism sector involved organising diverse events and activities. It is the aim of Putrajaya to increase the number of events organised each year and to widen the benefits with cross promotions. In other words, during any international level sport event organised, there will be another event like food promotion, cultural show and trade to support and enhance the event. This approach will create more vibrant environment, widen market segment to not only international participants and tourists but also local spectators and visitors.

One of the ways to increase the number of organised events in Putrajaya is to reach wider target market from amateur to professional, children to youth and senior citizen and from public to elite groups. Exhibit 3.17 shows an example of sports tourism diversification. Events and activities will be planned during weekends and night to increase visitors and if events are regularly organised every week, Putrajaya will have 52 events organised every year. And with an estimated 3-day event planned every week, there will be 156 days allocated for events every year in the future. See Exhibit 3.18.

Programmes

P3.2A	Host regional or national sports events in Putrajaya
P3.2B	Extend visiting hours for all tourist attraction areas during festive season and weekends
P3.2C	Organise more recreation and entertainment activities
P3.2D	Develop traders' centre
P3.2E	Develop Putrajaya into a major Malaysian food & fruits attraction

Diverse tourism events and activities will be achieved through various programmes as follows:

P3.2A Host regional or national sports events in Putrajaya

The sports events in Putrajaya shall be expanded and diversified to cover a wider range of events from minor sports tournaments to adult and elite tournaments(See Exhibit 3.17).

P3.2B Extend visiting hours for all tourist attraction areas during festive seasons and weekends

All tourist attraction areas especially parks are encouraged to extend their visiting hours to allow night activities. Night activities like camping and night at the parks shall be organised by park operators and shall kick-start during weekends, school holidays and festive seasons.



P3.2C Organise more recreation and entertainment activities

Recreational and entertainment activities such as fishing competition, Hot Air Balloon and open air music festivals shall be organised regularly to attract domestic tourists during weekends and this include night events.

P3.2D Develop traders centre

Traders centre is to encourage micro business and informal traders to participate in the local economy of Putrajaya as well as offer an alternative tourist attraction in Putrajaya. Trader centre can be developed within the commercial or mixed used zones in the Core Island.

P3.2E Develop Putrajaya into a major Malaysian food & fruits attraction

A food & fruits centre is proposed to be developed as another new tourist attraction. The centre shall be in the form of concept food outlets or cultural bazaar. It is more appropriate for this centre to be located along the water promenade in the Core Island or at the Civic Precinct (Precinct 5 or Precinct 6).











Initiative 3.3

Improve Tourist Movements

Tourist movements will be improved with the provision of shuttle bus services, bicycle for rent facilities as well as creating interesting walking experience along tourist trails within tourism belt

Accessibility to the various tourist attractions will be improved to ease the movement of tourists especially individually generated trips. Several steps will be taken to implement this initiative that will increase number of visiting to tourist attractions.

Shuttle buses and trams will be encouraged to ply between tourist attractions and hotels and this involved those located at Precinct 1, 2,3,4,5,6, 13.15,16,18,19 and 20. Within each tourist belt that has cluster of attractions, tourist movement will be enhanced with comfortable, safe, exciting and scenic pedestrian walkways. Bicycles and bicycle racks facilities will also be provided at appropriate tourist attractions to encourage riding through scenic path and to promote an environment-friendly mode of transport.

Programmes that have been planned to improve tourists' movement in Putrajaya include:

P3.3A Provide shuttle bus services from hotels to major tourists attractions

Hotel operators and/or owners as well as park operators are encouraged to provide these services. Perbadanan Putrajaya will take the lead in encouraging hotel operators and park operators to contribute as part of their corporate social responsibilities.

P3.3B Accentuate walking experience along tourist trails

Provision of functional and interesting symbols and signages at appropriate intervals not only for guidance but accentuate the walking experience along trails of interests. This will support the scenic view along the boulevard and water promenade. Provision of kiosks at strategic routes will also be encouraged.

Programmes

P3.3A	Provide shuttle bus services from hotels to major tourists attractions
P3.3B	Accentuate walking experience along tourist trails
P3.3C	Provide bicycles for rent and ride stations throughout the city centre

P3.3C Provide bicycles for rent and ride stations throughout the city centre

Bicycles for rent and ride stations facilities will allow individual tourists to move between clusters of parks and tourist attractions at leisure without restricted to tour bus or public bus schedules. Bicycles for rent and ride stations shall be provided at strategic location within tourist belt throughout Putrajaya.



Exhibit 3.19 Tourist Movement Infrastructure PRECINCT 12 PRECINCT 10 PRECINCT 14 PRECINCT PRECINCT PRECINCT 15 PRECINCT 16 PRECINCT Legend PRECINCT 18 Civic/ Government Precinct Government/ Commercial Precinct in Core Island PRECINCT 19 Major Parks Shuttle Bus Services Rail Service Pedestrian Walkways and cycling lane Boulevard



Putrajaya Sentral



Initiative 3.4

Increase Supporting Tourism **Facilities**

Hotel accommodations and tourist information centres are two key supporting facilities that will be enhanced in the future.

In the future, tourists will have a wider choice of hotel accommodations ranging from budget hotels, business hotels and service suites. The provision of various types of hotel accommodations is in line with the aim of Putrajaya to be an international tourist destination focusing on various niche markets. Hotel accommodations in the future will cater for the various market segments from events delegates to the sports participants, holiday makers and medical/retirement tourists and visitors.

In assisting tourists to reach wider destination and attractions within Putrajaya, the number of tourist information centres will be increased. They will be provided at strategic locations regularly visited by tourists and at various transport stations. The centres will disseminate information on location of tourist attractions, basic profile of attractions, visiting time, availability of public transport, services schedule and schedule of events organised at various attractions.

As tourism products grow in the future, more facilities are required to support the growth. Clusters of kiosks and outlets to accommodate souvenir shops, craft bazaar, photography shops and others will be provided. Karyaneka outlets, Batik Malaysia outlets and other Malaysian craft outlets will be encouraged to establish their branches in Putrajaya.



Programmes

P3.4A	Encourage variety of tourist
	accommodations
P3.4B	Provide more tourist information and
	service centres at strategic locations
P3.4C	Promote Putrajaya Boulevard &
	Promenade as a main tourist hub

Complementary to the retail outlets, food complex comprising fine dining outlets and theme restaurants such as those located at Chulan Square and Heritage Row in Kuala Lumpur will be encouraged to be located nearby. The cluster of retail outlets, bazaar and food complex will be encouraged to operate along the boulevard and lake promenade including those located in Precinct 5 and 6.

Specific programmes to increase tourist supporting facilities are:

P3.4A Encourage variety tourist of accommodations

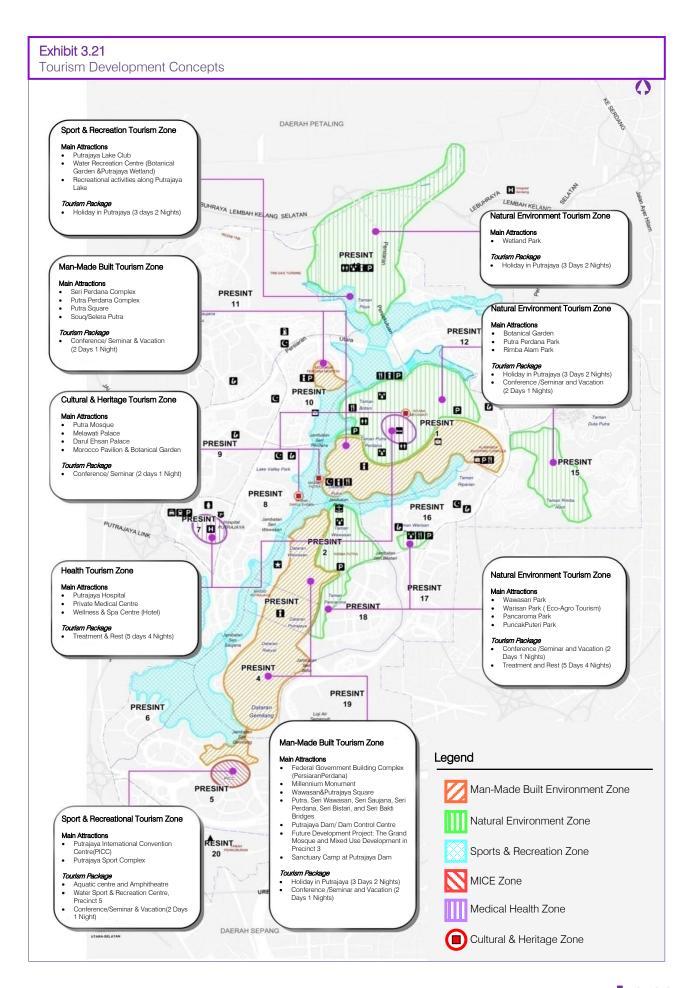
Variety of tourist accommodations will be provided especially in the Core Island and by the lakeside to attract different tourist segment to Putrajaya. Serviced suites, 4-star business hotel and budget hotels are encouraged to be developed in the future (See Exhibit 3.20).

P3.4B Provide more tourist information and service centres at strategic locations

The centres will disseminate information on location of tourist attractions, basic profile of attractions, visiting time, public transport services schedule and schedule of events organised at various attractions.

P3.4C Promote Putrajaya Boulevard & Promenade as a main tourist hub

Supporting facilities like retail outlets and kiosks are encouraged to be developed along the boulevard and promenade. Clusters of souvenir and handicraft outlets, photograph shops, food kiosks, and cultural bazaar are some examples of outlets and kiosks that can be located along the boulevard and promenade and create another tourist hub.



POLICY 4:

ENHANCING COMMUNITY LIVING ENVIRONMENT

The community exemplary environment in Putrajaya will be enhanced in the future to meet the needs of diverse population

Today Putrajaya has set a benchmark in implementing exemplary community environment. Quality houses ingrained with liveable community principles are sufficiently built to meet the needs of its population with priority given to low income group and government employees.

Complementing housing facilities, Putrajaya also has adequate, high quality and fully-equipped community and recreational facilities. Several new community facilities concepts were introduced such as integrated schools with fully equipped sports facilities, community centres with integrated facilities and beautiful parks rich with fauna and flora.

Putrajaya's living environment is thus unique with local identity and function. In residential precincts, friendly and safe environment have been provided throughout the neighbourhoods. Barrier-free housing concept was introduced to foster neighbourly and sustainable values. Kindergarten and recreational areas are located within safe distance and designed with safety in mind.

Quality community living environment created in Putrajaya will be enhanced in the future. The most important move will be to expedite the delivery of private housing in Putrajaya that will help to bring in diverse population consisting of Bumiputera, non-Bumiputera and international community to promote a reasonable balance in the ethnic structure.

Quality community living environment will be enhanced through the following initiatives:

- Provide diverse type of housing units to meet the needs of future population
- 4.2 Upgrade shared community facilities to address increase in population and structural change
- 4.3 Enhance content and convenience at recreational areas
- Adopt and Implement Safe City 4.4 Practices
- Promote Community Development 4.5 through Engagement Community-based Activities

The needs of various ethnic group including Bumiputera, non-Bumiputera and international community, income level and age group will be considered in providing housing and community facilities. Putrajaya will ensure that the form and content of community facilities and living environment will be re-modelled to meet the increase in population and its ethnic structure in the future. Safe practices will be adopted in all facilities provisions as part of the effort in delivering quality community living environment.



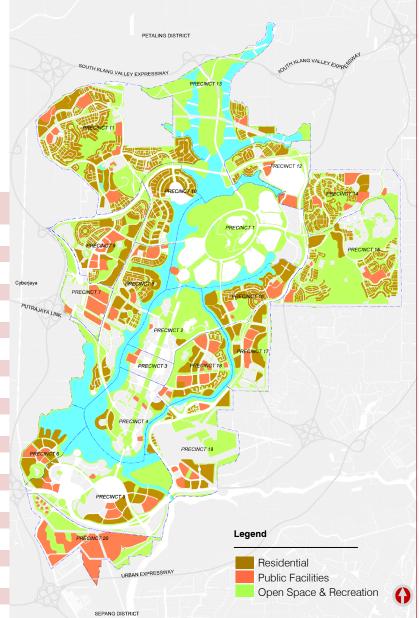
Exhibit 3.22 Residential and Supporting Community Facilities, 2025

In year 2025, Putrajaya shall allow for:

- 39% of area for open spaces and recreational use
- 7% of area for community facilities
- 14% of area for residential use

Residential Zones Putrajaya, 2025

Residentiai Zones Putrajaya, 202		
Precinct	Area for residential	
	(hectare)	
Precinct 1	0.00	
Precinct 2	2.06	
Precinct 3	0.00	
Precinct 4	12.58	
Precinct 5	44.10	
Precinct 6	25.15	
Precinct 7	0.00	
Precinct 8	62.05	
Precinct 9	59.95	
Precinct 10	69.30	
Precinct 11	149.64	
Precinct 12	18.28	
Precinct 13	13.43	
Precinct 14	42.60	
Precinct 15	60.92	
Precinct 16	50.97	
Precinct 17	34.01	
Precinct 18	35.69	
Precinct 19	30.75	
Precinct 20	0.00	





Initiative 4.1

Provide diverse type of housing units to meet the needs of future population

Diverse housing types, affordable housing, selective high density housing zone and meeting universal design standard in housing provision will be new solutions to meet the needs of future population

Putrajaya is targeted to accommodate 350,000 persons in population by 2025 surpassing the planned target of 320,000 population. As all 711 hectares of housing areas have been planned, it is a challenge to accommodate the additional future housing needs estimated to be around 13,125 units by 2025.

New approaches will be introduced in Putrajaya to accommodate these additional requirements. These include higher density housing zones in suitable locations such as those located close to commercial centre or neighbourhood centre and near transport terminals.

In fulfilling the needs of diverse population and the change in population structure where a higher non-Bumiputera is expected in the future, Putrajaya will introduce new types of housing. Studio units, townhouses, duplexes, SOHOs (small office home offices) will be encouraged to be developed to cater for the younger generation and single occupants. In ensuring balance housing provision, affordable housing will be provided for middle and low income groups. This includes rental homes for the low income group.

Retirement homes, serviced apartments and holiday homes will also be introduced at a later stage to cater for the change in the economic structure of the city. These type of housing units together with studio units, townhouses and duplexes will attract foreign talents that are expected to be working in Greater KL with the newly introduced initiative under the Greater KL Economic Transformation Programme.

Programmes

P4.1A	Encourage diverse types of housing units
P4.1B	Provide affordable housing for low and middle income groups
P4.1C	Provision of housing according to universal design standards (MS 1184 & 1331) for the elderly and disabled community
P4.1D	Review detailed urban design guidelines
P4.1E	Allow higher density residential units at suitable locations

Liveable community concept adopted by Putrajaya will continue to be implemented and this includes fulfilling the needs of low-income group and disabled community. Provision of housing shall comply with the universal design standards (MS Standard 1184& 1331) especially to meet the needs of elderly and disabled community.

Implementation of sufficient housing within the ambit of liveable community shall be supported by through the participation of two key agencies in Putrajaya namely Perbadanan Putrajaya and Putrajaya Holdings Berhad. Existing Detailed Urban Design guidelines shall be reviewed to encourage innovative design solutions to meet the changing needs of Putrajaya's community in the future.

Five programmes are proposed to achieve the initiative and they are:

P4.1A Encourage diverse types of housing units

Type of houses that are able to draw in diverse population including non-Bumiputera, professionals and foreign talents will been couraged. This include studio units, SOHOs, townhouses, duplexes, condominiums and serviced apartments. The participation of multiple private developers are encouraged to deliver this programme.

P4.1B Provide affordable housing for low and middle income groups

Affordable housing with two-tier price levels for low and medium income groups will be provided to ensure sufficient supply of this type of housing to the targeted group. Affordable housing shall also include houses for rental targeted for the low income group.

Suitable land shall be identified including government quarters land. Government-linked companies such as Syarikat Perumahan Negara and PETRONAS are will be encouraged to participate in delivering affordable housing to the targeted group.

P4.1C Provision of housing according to universal design standards for elderly and disabled community

Universal design standards blend aesthetics with high accessibility, barrier-free movement and adaptive solutions that are usable for all communities including disabled and the elderly. Some examples of universal design that take into consideration of the disabled and elderly groups are ground level entrance without stairs, surface that are firm with slip resistant's, wide interior doors, lever handle at door instead of door knob, sufficient turning space at alcove and corners and many others.

Policy Requirement for Housing for the disabled

- 1. 1.2% of new affordable housing and government apartments will be designed and built to fulfill the needs of disabled community.
- These disabled friendly units shall be located at ground floor of apartment buildings.
- They shall be fitted out internally with materials and fittings that are friendly for the disabled.
- MS 1184: Code of Practice for Access for Disabled to Public Buildings and MS1331: Code of Practice for Disabled People Outside Building will be enforced in the interim in absence Putrajaya's own Universal Design Guide.
- Perbadanan Putrajaya with the assistance of relevant disabled community representatives will formulate aUniversal Design Guide for Putrajaya.

P4.1D Review Detailed Urban Design Guidelines

Detailed Urban Design guidelines currently adopted by Perbadanan Putrajaya shall be reviewed to encourage innovative solutions in house design to meet the changing needs of the community.

P4.1E Allow higher density residential units at suitable locations

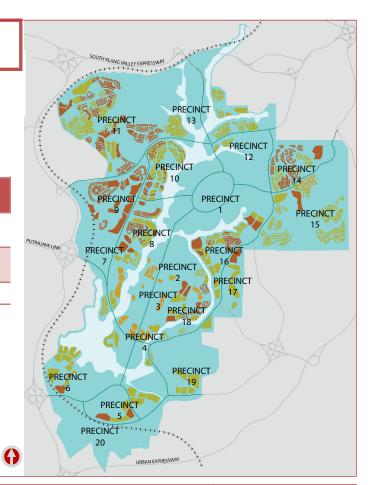
High density housing zones shall be encouraged at suitable locations such as those located close to commercial centre or neighbourhood centre and near transport terminals. Vacant land parcels zoned for apartments and government quarters will also be encouraged to be zones for high density housing (See also Initiative 7.2).





Exhibit 3.23 Putrajaya Housing Profile

	Government	Public	Total
HOUSING			
Existing (2008)	18,597	4,260	22857
Future (to be built)	16,400	25,867	42,267
Total	34,997	30,127	65,124



Legend

Existing Future

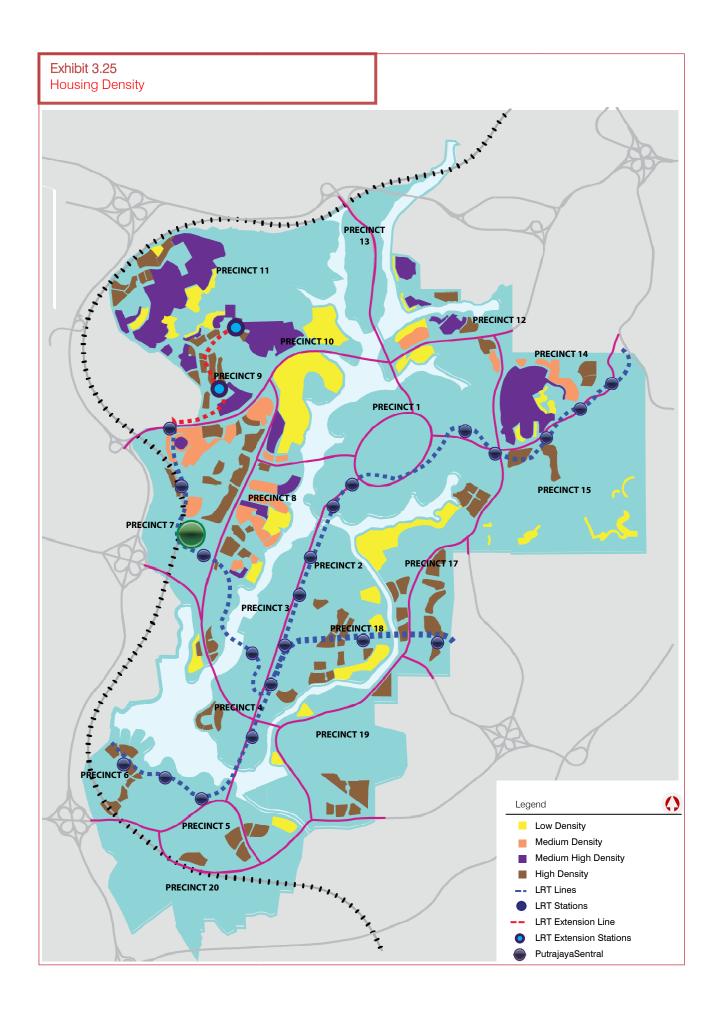
Mixed Housing

Exhibit 3.24 Projected Housing Needs

Year	2007	2010	2015	2020	2023	2025
POPULATION						
Population projection	49,452	70,700	152,500	281,500	320,000	350,000
HOUSING						
Residence unit need	11,129	15,911	34,320	63,351	65,127	79,023
Total units of residence according to development planning of implementation by developer	14,051	27,489	37,121	62,513	65,124	65,124
Excess/(Shortage) residential units compared to needs	2,922	11,578	2,801	(838)	-	(13,125)

Note: *

The development is expected to be completed in 2022. Estimated population at that time was 316.000 with 73.815 of households.



Initiative 4.2

Upgrade community shared facilities to address increase in population and its structural change

Modification of community facilities including introduction of new form of community services will be adopted to accommodate a wide community stratum from young, old and disabled

Community facilities in Putrajaya are well provided with ample planned zones and fully equipped quality facilities. The facilities are also easily accessible by the community. A total of 344 hectares of land have been allocated for community facilities ranging from educational, health, security & safety, religious and other facilities.

As future population is expected to increase to 350,000 by 2025, there will be an additional need for community facilities an addition to what is originally planned. In addition, the expected change in community structure will require modification in the provision of community facilities to correspond to the change in the future needs of the community especially by younger generations.

New form of service-oriented facilities will be introduced that includes post office, library or reading corner, laundry, residents' club, association office and others. These facilities can be incorporated within the existing community centres or commercial complex at each neighbourhood.

The needs of the disabled and elderly communities will not be neglected and all community facilities in the future will continue to adopt universal design principles and standards. Equally important is community facilities that are built within safe environment and sensitive to surrounding areas, well equipped, quality construction and highly accessible.



Programmes

3	
P4.2A	Increase the content of community centres
P4.2B	Build community facilities that comply with universal design guidelines
P4.2C	Encourage smart partnership between public and private sectors to provide and manage community facilities

Several programmes are proposed to upgrade the future community facilities and they are:

P4.2A Increase the content of community centres

New community centres will integrate facilities like post office, garden / green centre, library or reading corner, laundry, residents' club or association office and others. Some of these new contents can also be provided within shopping complex and existing community centres (see case study).

P4.2B Build community facilities complying to universal design guidelines

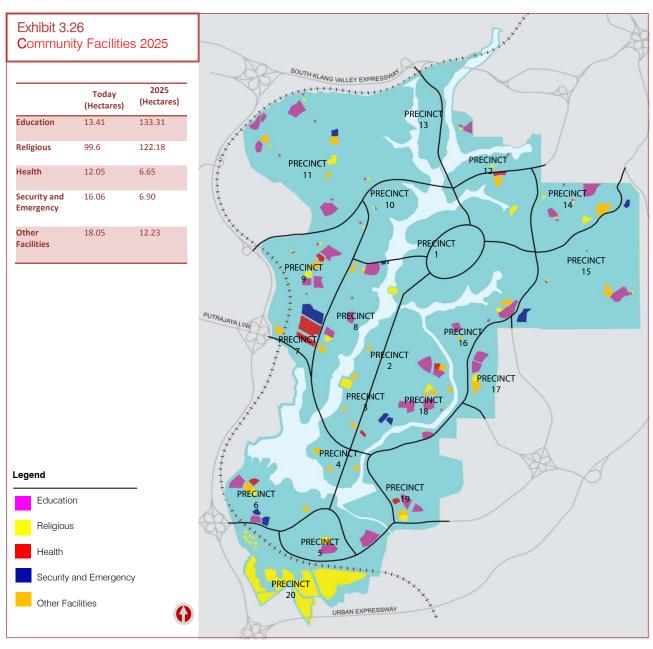
Community facilities shall adopt universal design standard that gives due consideration to the disabled and elderly community. Barrier-free and high accessibility shall be given priority in the design. Current Malaysian Standard for disabled friendly environment i.e. MS1184 and MS1331 shall continue to be enforced. Access Audit for all community facilities will progressively be perform.

Perbadanan Putrajaya will work together with relevant organisations representing the disabled community in undertaking this Access Audit. The Access Audit will be used to establish how well existing and future community facilities in Putrajaya performs in relation to access and ease of use by a wide range of potential users, including people with physical mobility and sensory impairment. Corrective measures will then be implemented.

P4.2C Encourage smart partnership between public and private sectors to provide and manage community facilities

Community centres can be built by private developers and they should be allowed to accommodate some commercial floor spaces within the complex to reduce the cost of development. Other private sectors including corporations and government-linked companies will be encouraged to sponsor the maintenance of the facilities as part of their community services responsibility.





Case Study of Integrated Community Facilities

What others are doing...SINGAPORE

Shopping mall libraries are community libraries located within shopping malls in Singapore.

This "shopping mall" concept is to bring the library closer to the people and encourage lifelong learning among Singaporeans.

Facilities within buildings, e.g. commercial/shopping centre



Sengkang Community Library, located on the fourth floor of Compass Point Shopping Centre

Yishun Public Library at North point Shopping Centre

What others are doing...DUBLIN, IRELAND

The Ilac Centre was opened in 1981, and was one Facilities within buildings, e.g. commercial/shopping centre of the first shopping centre in Dublin city centre.

The Centre is home to a wide range of shops. The first floor of the Centre is occupied by Dublin's Central Library.

The Central Library provides a range of services including language learning facilities, and a Music and Business Library. There is also a small chapel located in the shopping centre.



What others are doing...MANCHESTER, UK

In addition to its 32 apartments, The Green Building houses a 120-place pre-school nursery, a surgery room and 1870sq.ft. of commercial space set over three floors.

The 11-story building stands out in the cityscape with its distinctive architecture, wind turbines and solar panels on the roof. A number of environment technology solutions help to reduce carbon emissions by 60% compared to those of an average residential property

Facilities within green residential building





kids unlimited Macintosh is purpose built nursery and is situated within the 'Green Building' which boasts an environmentally friendly concept nursery in the heart of Macintosh Village, Manchester

Initiative 4.3

Enhance content and convenience at recreational areas

Recreational facilities will be enhanced through improvement of facility content as well as its accessibility to ensure convenience to users.

Putrajaya has livened up to its Garden City image with large provision of recreational facilities from playgrounds that serve the neighbourhood to the regional-based metropolitan parks. A total of 1,930 hectares have been zoned for recreational facilities.

Recreational areas in Putrajaya are largely passive and educational. Equestrian Park and Challenge Park are sports related parks while Dataran Putra is a ceremonial park. Apart from parks, recreational facilities in Putrajaya include water bodies for water sport, sports facilities like football fields, sport complexes with indoor and outdoor courts for futsall, badminton, squash, volleyball, swimming and many others.

Programmes

P4.3A	Provide supporting services and shared facilities at existing parks.
P4.3B	Provide facilities to cater for the different needs of different community
P4.3C	Ensure good accessibility and transit services to recreational areas.

As future population increase become diverse with a large concentration of younger age group, the type and content of future recreational facilities in Putrajaya will be intensified and improved to respond to these changes. More active recreational facilities will be provided to satisfy young population with healthy lifestyle. Notwithstanding that, provision of recreational facilities for all age group is also important in order to uphold liveable community principles in Putrajaya.

Exhibit 3.27 Community Facilities 2025

As a Garden City, Putrajaya has been planned and will continue to provide a comprehensive network of park and recreational facilities of the different hierarchy and categories. These are:

		Area (hectare)		Area (hectare)
Metropolitan Park		667.22	Local Park	116.74
Taman Botani Taman Putra Perdana Taman Wawasan Taman Puncak Puteri Taman Rimba Desa Taman Saujana Hijau	Taman Wetland Taman Rimba Alam Taman Warisan Pertanian Taman Pancarona Taman Lindungan Taman Selatan		Taman Lembah Tasik Taman Rimba Alam Taman Baiduri Taman Larai	
Urban Park		166.81	Neighbourhood Park	21.69
Dataran Putra Dataran Wawasan	Taman Cabaran Taman Equestrian		Park within residential Neighbourhood	
Dataran Rakyat	Taman Sri Ampangan		Playground	5.30
Dataran Gemilang	Taman Empangan Utama		Green Network	267.22
Taman Rakyat Taman Inang Taman Gemilang	Taman Danau Suria		Buffer Zone	112.64

Exhibit 3.28 shows the location of these park categories and they are linked by green network and buffer zone to form a continuous and comprehensive network of parks, open spaces and green area of Putrajaya (see also Exhibit 3.29).

The programmes that have been proposed to achieve this initiative include:

P4.3A Provide supporting services and shared facilities at existing parks

Recreational and supporting facilities at existing park have been and will continuously be upgraded to provide enhanced facilities. These will be determined according to functions, suitability and the needs of users for each of the different park categories. Some examples of these facilities are comfortable seating areas for accompanying parents at children's playground and bicycles for rent at appropriate parks.

Shared facilities include sports facilities and other recreational needs. Some of the bigger parks will be re-assessed to identify their carrying capacity to accommodate additional facilities.

P4.3B Provide facilities to cater for the needs of different communities

The needs of various communities including disabled, elderly, children, youth and expatriate shall be taken into consideration in providing new recreational facilities. Open courts for badminton, volleyball, basketball and sepaktakraw shall be provided to satisfy the needs of the youth. These courts also can be used for Tai-chi and aerobic exercise among the elderly and women folks.

As parks and open spaces belongs to community, individuals and community groups should therefore be encouraged to take an active role in decision making of the park's future functions and facilities. Open space/park managers should promote these participation through consultations, especially when changes to park use and facilities are proposed.

Community's continuous support and involvement in planting should also be sought after.

P4.3C Ensure good accessibility and transit services to recreational areas

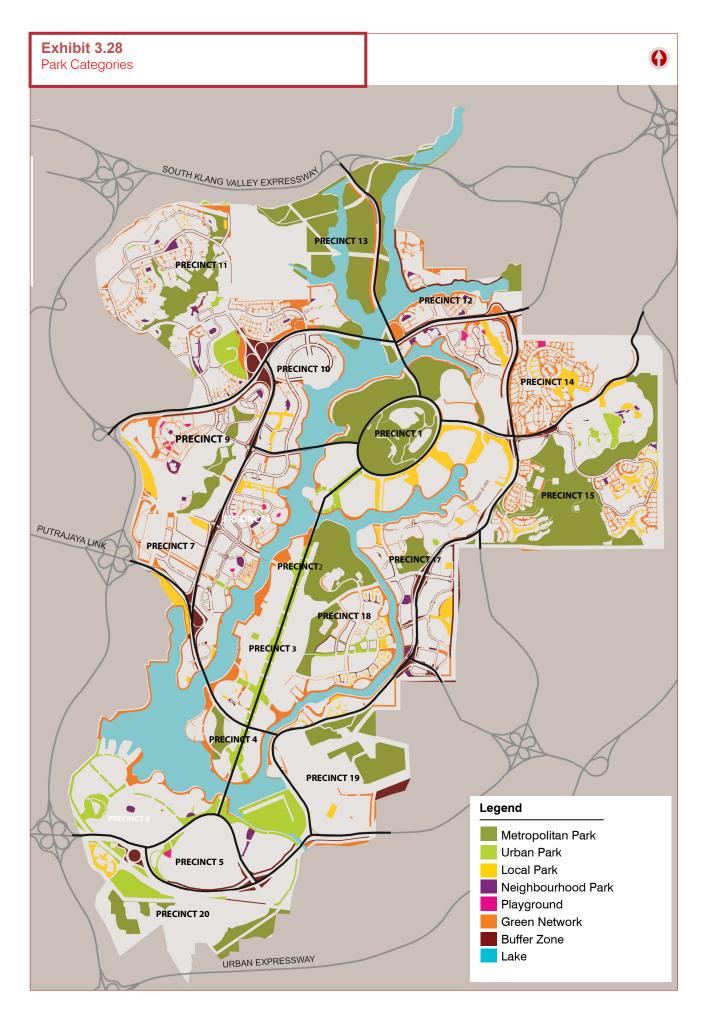
Bus services shall be extended to service all public parks and recreational areas.

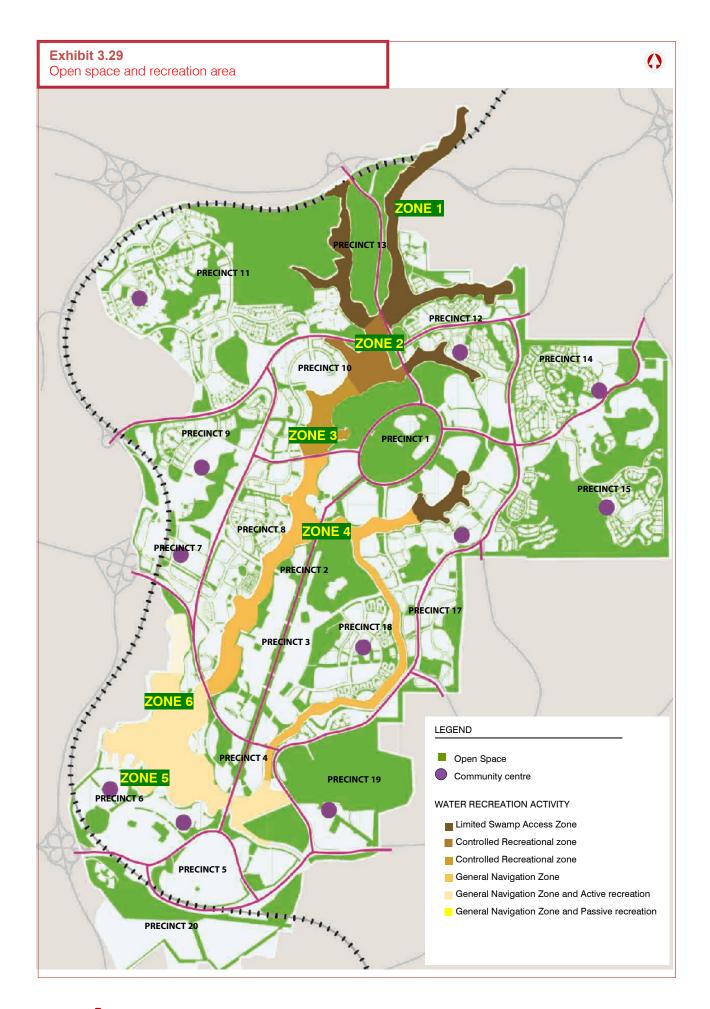












Initiative 4.4

Adopt and Implement Safe City **Practices**

Safe city practices will continue to be implemented to ensure safety and security of all ages and community groups as well as to inculcate social integration and promotes natural public surveillance.

Safe neighbourhood is one of the principles of liveable community that will be upheld in Putrajaya. With safe city practice, Putrajaya will provide highest priority to safety and security to the community environment living through environmental design. Safe city practice will also promote social integration as the design promotes natural public surveillance where neighbours and community are best safety watchers.

In order to uphold safe neighbourhood concept through Crime Prevention Through Environmental Design (CPTED), Putrajaya will introduce some new measures. Community programmes will be organised to increase awareness and encourage public surveillance apart from increasing the sense of belonging among the communities.

Putrajaya as a forward looking city, shall also ensure that the city is well prepared to face any emergencies like in a natural disaster. community centres will thus be equipped with necessary facilities to function as a disaster or risk centre.

The implementation of this initiative will be achieved through several programmes:

P4.4A Implement all measures identified in Putrajaya Safe City programme

Some of the measures in the existing programme include continuous programme for safety in the environment and organise continuous community programmes and awareness.

Programmes

P4.4A	Implement all measures identified in Putrajaya Safe City programme	
P4.4B	Prepare Crime Prevention Through Environmental Design (CPTED) Guidebook	
P4.4C	Enhance community centres as disaster / risk centres	

P4.4B Prepare Crime Prevention Through Environmental Design (CPTED) Guide Book

The Guide Book is to guide designers in designing new neighbourhoods, parks and recreation and urban environment in Putrajaya. See also the following Exhibit on CPTED.

P4.4C Enhance community centres as disaster/risk centres

Community centres shall be designed disaster/risk centres in the future taking into consideration that these centres will act as temporary shelters providing basic needs in case of emergency. Spaces for operation room and logistic room also have to be designed for. Local communities are encouraged to manage the centres in partnership with Perbadanan Putrajaya especially to educate the community and to ensure the preparedness towards disaster including health epidemic.

Crime Prevention Through Environmental Design (CPTED)

CPTED is the notion that the proper design and effective use of the built environment can lead to a reduction in the incidence and fear of crime, and an improvement in the quality of life.

Some design elements propagated in CPTED include casual surveillance opportunities and sightlines, visibility, lightings, way finding, predictable routes and others.

Initiative 4.5

Promote Community Development through Engagement in Communitybased Activities

Community living will be enriched with community development where healthy, well educated, skilled, innovative and creative people will be encouraged to engage and be engaged actively.

Putrajaya shall continue to cultivate a strong sense of community spirit amongst its population. This shall be through implementation of more community-based activities designed for various segments of its population. Existing and future population shall be encouraged to be actively involved in those activities.

Whilst Putrajaya shall seek to foster active community participation in various community based programmes, further participation by community of various segments will be promoted towards building a caring society particularly towards green lifestyle and towards an active community participation in decision making.

The implementation of this initiative will be achieved through several programmes:

P4.5A Encourage community involvement in green practices

Several green practices have been planned at both city and community level as steps towards achieving Green City status. The communities are encouraged to actively participate in these efforts and provide solid commitment in employing green practices promoted such as efficient use of water and electricity, rain water harvesting, waste recycling, and retrofitting of residential buildings for efficient utilisation of energy (refer programmes under Policy 5 for detailed explanation). Activities that relates to sustainable mode of travelling such as walking, cycling and public transportation also require participation from the community.

Programmes

P4.5A	Encourage community involvement in green practices
P4.5B	Nurture public participation in making decision at community level

Apart from reducing air pollution and motor vehicle accidents, this will create healthy community and contribute to human and social development by increasing the social networking through car sharing, car pooling and in the use of public transport (refer programmes under Policy 6 for detailed explanation).

The community is also encouraged to coordinate and organise their own programmes at community level as their contribution towards Green City status. Local communities such as Resident Associations can help in organising public campaigns to increase awareness in using environmental friendly transport, participating in reducing carbon footprint including efficient use of energy and water, use of renewable energy, retrofitting of buildings and recycling and re-use activities. Perbadanan Putrajaya will help to inculcate these green practices through awareness programmes.

P4.5B Nurture public participation in decision making at community level

In line with Local Agenda 21 (LA21), the community shall be encouraged to participate in the decision making process for planning and implementation stages at the community level. This will, in the long term, lead towards an independent community that is responsible in the growth of their city. Several programmes are planned under Policy 8 which promotes effective governance and partnership in city management and implementation (refer programmes under Initiative 8.1, 8.2 and 8.3). All the related initiatives generate programmes that encourage, promote and educate community in stakeholder's empowerment, responsive

management and smart partnership in implementing some of the programmes at community level.

The knowledge and community development in Putrajaya can be enhanced through exposure and sharing of experience with other communities in other cities such as Petaling Jaya, Sepang and others. Programmes and activities particularly those under the umbrella of LA21 emphasises the involvement and co-operations of the private sector, NGOs and Local Authorities. An example of such programmes which can be emulated are the LA21 programmes implemented by Majlis Bandaraya Petaling Jaya (MBPJ) which had successfully nurtured public participation in decision making at community level.

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 characteristics, ensuring clean water bodies, reducing noise, air and water pollution and creating a liveable environment for its community.

By 2025, Putrajaya the Garden City, will be transformed into a Green City with improvements in sustainability practices where environmental sustainability will be achieved by reducing carbon footprint through preservation of green areas, green and healthy living, usage of alternative energy, reduction of waste, alternative transport mode and other green initiatives.

Reduction of carbon footprint in Putrajaya commensurate with Government's commitment in reducing 40% carbon footprint throughout the nation by 2020 and Putrajaya alongside Cyberjaya have been identified as pioneer Green Cities.

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

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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

Having a head start in sustainable environment, moving Putrajaya into a pioneer Green City will require only improvement plans to its natural and built environment. The existing large and lush green areas, water bodies and urban bio-diversity will be preserved and enhanced. The effort will help to mitigate urban island heat and ensure a cooler city temperature. R&D activities in urban biodiversity and artificial wetland as well as educational and awareness programmes will be promoted as part of uplifting green activities and living in Putrajaya. This is part of capacity building effort that will lead to the establishment of green community committed to reduction of carbon footprint.

Other key measures in moving Putrajaya into a Green City will be to adopt sustainable building practices and encourage the application of green technology in city planning and management. Reduction of usage of energy, changing to renewable source for energy, water and waste will be the aim in adopting sustainable building practices and, in city planning and management. The Green City initiatives laid in this policy will form a road map towards establishing and reaching the targets of carbon footprint reduction.



GARDEN CITY PRACTICES

- More than 50% green areas & water bodies
- Low density development
- Green linkages
- Panoramic built environment
- Liveable community
- Safe city
- Environmental-friendly transport system
- · High quality water
- High quality infrastructure (storm water drainage, district air cooling system, Bio retention basins, porous pavement and vegetated swale)
- Low pollution



GREEN CITY PRACTICES

- Preservation of green areas & water bodies
- Green Building
- Green linkages
- Green community
- Reduction of water & energy consumption
- Reduction of GHG emission
- Usage of alternative energy & water sources
- Green transport system
- Recycling
- Composting
- Separation of solid waste at source

WHAT PUTRAJAYA IS ALREADY DOING AS A GREEN CITY



Close to 40% of Putrajaya is dedicated as Green Space



Neighbourhood Recycling Centre



More than 900 Species of Fauna



Plant-a-tree programme, targeting at Community, NGOs and private sectors



Community garden



Reuse of lake water for irrigation



Kerbside recycling



Recycling of grey water from sewerage treatment plant for irrigation

Initiative 5.1

Enhance ecology, water body and bio-diversity

Conserving the green lung, enhancing green connectivity, R&D on artificial lake, wetlands and urban biodiversity as well as mitigating urban heat island through effective measures will be the roll-out plans in transforming Putrajayainto a Green City.

Putrajaya Green City will continue its effort in creating a garden-like and conducive urban environment for its community. As initial roll-out in Green City initiatives, Putrajaya will conserve its green lung comprising wetland, parks, green linkages and water bodies. Green connectivity within Putrajaya will be enhanced especially between parks through roads, bicycle lanes and pedestrian walkways.

One of the programme in enhancing the green areas and water bodies is to establish a National Research and Development Centre for Urban Biodiversity, Lake and Wetland. The national research centre will become the referral centre for wetland as well as techniques in controlling water quality through a series of retention dams and lakes. The centre will also conduct research on measures and new techniques in ensuring the survival of wetland plants and animal species in the artificial wetland environment.

Putrajaya will ensure that the flora and fauna existed in all its parks will not diminish due to human activities and over development. Putrajaya will also encourage more green spaces near and within the buildings in Core Island, promote home gardens as well as parks enhancement.

Conserving green lung, urban greening and enhancing urban biodiversity are steps towards micro-climate and improving reduce temperature in the city area. Other measures include reduction of artificial heat emission and application of high-reflectance paint to roof and wall surface as well as pavement.

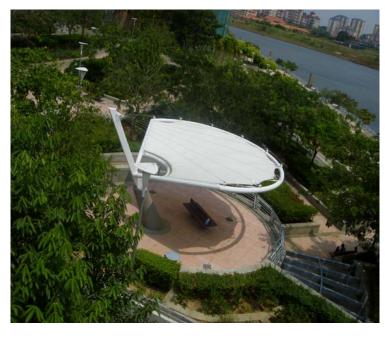
Programmes

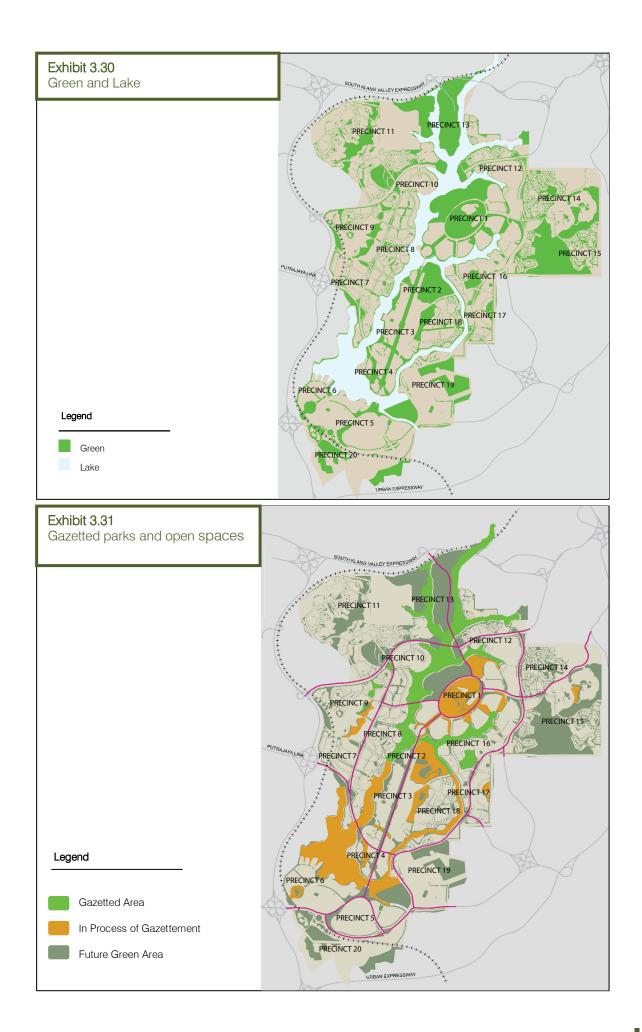
P5.1A	Conserve green lung of Putrajaya
P5.1B	Enhance green connectivity
P5.1C	Improve micro climate and reduce day temperature
P5.1D	Establish R & D centre in urban biodiversity, lake, wetlands and green related practices

Four programmes are proposed to enhance the ecology, water body and bio-diversity in Putrajaya and they are:

P5.1A Conserve green lung of Putrajaya

Existing wetland, parks and water bodies which covers 36% of Putrajaya will be conserved as green lung. Future parks and recreational areas that make the remaining 39% of parks and recreational uses will also be gazetted as green lung. All parks and open spaces will be progressively gazetteover time in order to secure its provision as public spaces in the future(see Exhibit 3.31).





P5.1B Enhance green connectivity

Green connectivity within Putrajaya and between Putrajaya and its immediate neighbouring areas will be enhanced. Within Putrajaya, the connectivity between parks will be enhanced through extensive green buffer that create corridors along existing roads, bicycle lanes and pedestrian walkways.

Similar approach will be extended to areas between Putrajaya and neighbouring Cyberjaya, Bangi and Puchong. This will be in line with NKEA initiatives on Greater KL which aims to achieve greener Greater KL/Klang Valley through adoption of green focussed development policy and employing creative landscaping methods such as densed foliage planting.

Green connectivity will encourage human activities, urban bio-diversity as well help reducing day temperature and improve micro-climate of the city.

P5.1C Improve micro climate and reduce day temperature

Urban greening, rooftop and vertical gardens, reduction of artificial heat emission and application of high-reflectant paint to roof, wall and pavement, and creation of water features, etc are some of the approaches to be implemented to reduce microclimate and reduce day temperature.















Establish R & D centre in biodiversity, lake, wetlands and green related practices

R&D in urban bio-diversity will promote and enhance bio-diversity and improveurban ecosystem. The Centre shall lead the promotion of urban bio-diversity through research and inventory of local flora and fauna, their habitats, the need for green linkages and best management practices. See Initiative 1.2 for R&D in lake and wetland management.









Urban Biodiversity Bringing nature into the city landscape (plants and animal within built environment)

Area to be connected Examples of areas needed to be connected

Initiative 5.2

Application of green technology practices in city planning and management

The application of green technology in infrastructure provision will be the tools to enhance city planning and management in reducing the consumption of resource, renewable promote and alternative resources and managing solid waste in accordance to green city practices

Putrajaya will enhance its city planning and management through the application of green technology especially in the provision of infrastructure provision. The application of green technology will involve reducing water and energy consumption, providing alternative water and energy sources such as water recycling, rain water harvesting, energy saving equipment and others. In terms of solid waste management, usage of sludge as fertiliser and development of material recovery facilities will be explored.

The application of green technology practices in infrastructure provision will lead to the reduction of carbon footprint. The target set for Putrajaya Green City is also in line with the target of Federal Government in reducing 40% of the carbon footprint throughout the nation.

In ensuring the success of the implementation, Putrajaya will enter into a smart partnership with all services providers in using green technology in the provision of infrastructure. This exercise is an extension of the existing services agreements between Putrajaya and the services providers.

Green technology practices in infrastructure provision will be implemented through five proposed programmes:

Programmes

P5.2A	Encourage efficient use of water and alternative water source
P5.2B	Encourage efficient use of energy
P5.2C	Encourage use of renewable energy sources
P5.2D	Impose the use of chilled water from centralised district cooling system for air conditioning of all government, and commercial buildings in Precinct 1, 2, 3, 4 and 5
P5.2E	Encourage usage of sludge as fertiliser
P5.2F	Develop material recovery facilities for solid waste

P5.2A Encourage efficient use of water and alternative water source

All buildings including residential buildings in Putrajaya are encouraged to use water saving devices such as toilet tank controller, low flow shower head, controlling shower timer and others as part of the measures to use water efficiently.

Recycled water, rainwater and other alternative water sources such as lake water, grey water, and ground water will be used to complement potable water supply such as flushing toilet and drain as well as watering home garden and parks.



Installation of rainwater tank (source: http://www.ddtechniche.com/)

P5.2B Encourage efficient use of energy

Several practices in reducing and saving energy consumption are encouraged that include the following:

- Energy efficient building design
- Energy saving equipment
- Allow for co-generation of electricity

In ensuring successful implementation, personnel involved in energy use will be provided with awareness and capacity building. This exercise can be extended to include the community. New buildings, especially government and commercial buildings will need to be designed as low energy buildings and continuous monitoring on building performance will need to be undertaken.

P5.2C Encourage use of renewable energy sources

Solar energy is one of the renewable energy that is encouraged to be used to supply electricity at both residential and commercial buildings. The potential of wind energy can also be explored as an alternative source.

Putrajaya will initiate bio-gas production from garden waste collected from parks and recreational areas and from the proposed material recovery facility.

As part of the programme, Putrajaya will intensify efforts to extend the usage of NGV to private vehicles and the potential usage of hydrogen as an alternative fuel for vehicles (See Initiative 6.4).

P5.2D Impose the use of chilled water from centralised district cooling system for air conditioning of all government and commercial buildings in Precinct 1, 2, 3, 4 and 5

The usage of chilled water for air-conditioning at office buildings supplied from Gas District Cooling Plant is another green technology practice that contributes towards reducing carbon footprint in the city.

Putrajaya had jump start this green technology practice many years ahead with the provision of a Gas District Cooling Plant to supply chilled water

all government, for air-conditioning in and commercial buildings in Precincts 1, 2, 3, 4 and

The Draft Structure Plan shall impose the usage of chilled water for air-conditioning in all government, and commercial buildings in Precincts 1, 2, 3, 4 and 5 to ensure the existing facility is fully utilised and simultaneously increase the application of green technology practices in city management.

P5.2E Encourage usage of sludge as fertiliser

Sludge which is a by-product from waste water treatment plant is a bio-solid that will be encouraged to be used as fertiliser for lawn and parks. The sludge must be processed at the treatment plant before it could function as fertiliser. Putrajaya will work with the relevant agencies towards implementing this programme.

P5.2F Develop material recovery facilities for solid

Material recovery facilities for solid waste will be developed as an alternative to landfill. The facilities include mini incinerator with co-generation and plant. A combination with composting encouraged. This will also be combined with composting at city-scale level. Suitable site for these facilities will be identified.

Target 2015

Water

- Increase usage of recycle water (including from drain) by 1%
- Implement mechanism to use lake water for watering
- Identify potential source of ground water

Energy

- Determine EE target level
- Production of solar energy

Solid Waste

- 25% of solid waste will be disposed outside Putrajaya
- Provide mini incinerator with co-generation and sorting plant

Target 2020

Water

- Reduce water consumption to 180 litre/day/person
- Increase usage of recycle water (including from drain) by 2%
- Increase rainwater harvesting
- Use sludge as fertiliser

Solid waste

- Reduce solid waste to 0.5kg per capita
- Full separation at source for domestic waste
- Target rate of recycling of solid waste at 30% of total solid waste

Initiative 5.3

Adopting Sustainable Building **Practices**

All buildings will be encouraged to adopt sustainable building practices that promote energy savina. usage alternative energy and water resources which will help to sustain building life cycle and performance.

Green city practices not only covers conservation of urban areen and environmental-friendly extended to include infrastructure but also sustainable buildings practices. Application of sustainable building practices help to sustain the life cycle of the building apart from enhancing its performance.

New buildings will be encouraged to adopt green building practices and design such as usage of natural ventilation and lighting, usage of low energy electrical equipments, reduction of consumption through mechanism that controls water flow in bathrooms and toilets, using rain water for toilet flush and landscaping, vertical landscaping on buildings and many others. New buildings will be encouraged to have either a local or an international Green Building certification.

Existing buildings including residential properties also will be encouraged to be upgraded and retro fitted especially in energy saving, usage of renewable energy and rainwater harvesting. In order to encourage sustainable building practices among new and old buildings, Putrajaya will look into providing appropriate incentives such as bonus in development intensity as well as tax exemption, etc.



Low Energy Office (LEO), Putrajaya

Programmes planned to adopt sustainable building practices include the following:

P5.3A Enforce green building certification for new buildings

New buildings will be enforced to incorporate sustainable building design and practices and to obtain green building certification. Basic design elements include rainwater harvesting, solar energy, energy efficient fittings, natural lightings and ventilation.

Programmes

P5.3A	Enforce green building certification for new buildings
P5.3B	Encourage retrofitting of existing buildings
P5.3C	Provide incentives to support implementation of green buildings



The Energy Commission Building, Putrajaya

P5.3B Encourage retrofitting of existing buildings

Existing buildings are encouraged to be retrofitted with energy saving devices and other basic design elements of green buildings like solar energy, rainwater harvesting and improving natural ventilation and lightings. The efforts of retrofitting existing buildings will help to reduce building's Carbon Footprint.

P5.3C Provide incentives to support implementation of green buildings

The possibility of providing incentives to building owners with retrofitted and develop green building Tax exemption and bonus in will be studied. development intensity are some incentives that can be given to support the implementation of green buildings in Putrajaya.

The benefits of a retrofit

- Lower operating costs
- Higher return on investment and higher rental income
- Lower tenant and vacancy rates
- Higher overall capital value of the building
- Lower environmental footprint and greenhouse gas emissions
- Improved indoor environment quality and employee productivity
- Future-proofing against tenant demands and government regulations
- Improving corporate image
- Making the building more attractive to investors

Case Study

Incentives for Rainwater Harvesting Practice

Many cities in Australia have successfully implemented incentive measures to attract interest and encourage the practice of rainwater harvesting, this is through provision of rebate for purchase and installation of rainwater tank and other devices related to water recycling.

Brisbane City Council	\$500 rebate for a tank that is equal to or more than 3,000 litres
	• \$750 rebate for a tank that is equal to or more than 5,000 litres
City of Toowoomba	\$500 for a tank of at least 5,000 litres and connected to at least one toilet cistern or alternatively, to the washing machine and to garden tap
Pine Rivers	 \$500 rebate given for pumps, plumbing materials and installation costs \$100 rebate for replacement from a single flush toilet to a dual flush toilet suite; a maximum of 2 toilets only is eligible for rebate
Sydney	 up to \$800 rebates for installation of rainwater tank, eligibility and amount of rebate is determined on the fulfilment of required conditions, size of tank, and whether rainwater is connected to toilet or washing machine
Certain States in Australia	\$2,500 rebate given to school for installation of rainwater tank.

Initiative 5.4

Establish model green community committed to reduction of carbon footprint

The future community of Putrajaya will be encouraged to adopt green lifestyle and participate towards reduction of carbon footprint and become a model green living community.

Green living community is one of the key components in a Green City. Green living communities are the practitioner of green lifestyle and user of green technology, green infrastructure and green building practices.

They will be the one, together with the authority in Putrajaya, committed towards reducing carbon footprint in the city through their daily activities whether at home, work or play. Putrajaya will continue to establish a responsive community that has sense of belonging towards their environment. The future community in Putrajaya will be encouraged to adopt green lifestyle and participate towards sustaining their environment and become a model green living community.

In establishing a model green living community committed to reduce carbon footprint, Putrajaya will inculcate green culture through educational and awareness programmes. Part of the programme will be to explain Putraiava's status as a Green City and its future plans towards reducing the carbon footprint in the city. This includes reduction of waste, energy and water consumption, reuse, recycle and renewable resources. In implementing the awareness and educational programme on green living and practices, Putrajaya will seek cooperation from international and organisations.

After educational and awareness programme were rolled-out, Putrajaya will encourage residents and green associations to execute communities' action in implementing the reduction of carbon footprint activities.

Programmes

P5.4A	Inculcate understanding of the communities on their role in reducing carbon footprint
P5.4B	Execute communities action in implementing carbon reduction measures
P5.4C	Establish the use of plant species that benefit the environment and their contribution towards carbon sequestration



In order to establish green community committed to reduction of carbon footprint, three programmes are proposed as below:

P5.4A Inculcate understanding of the communities on their role in reducing carbon footprint

Educational and awareness programmes will be conducted to provide the understanding of reduction of carbon footprint initiatives and inculcate green culture. Communities should at least understand the basic elements of carbon footprint reduction initiatives such as composting, home garden and separation at source.

P5.4B Execute communities action in implementing carbon reduction measures

Resident association, green non-governmental organisations will be encouraged to execute the programmes towards carbon footprint reduction such as recycling, composting etc. Existing community centres and the proposed recycle and composting centres shall become the centre of residents' activities.

Communities will also be encouraged to improve mode of communication among them on green living through publications, social media and others like creating Putrajaya Green Website, with smart partnership with PerbadananPutrajaya.

P5.4C Establish the use of plant species that environment benefit the and their contribution towards carbon sequestration

Bamboo, lalang and dracenea are some plant species that can be planted in appropriate areas like vacant land plot and open spaces as these contribute towards carbon sequestration.





POLICY 6:

Implementing Integrated Transportation System

Increase share of public transport, enhance connectivity and road safety, and usage of environmental-friendly vehicles, are steps towards achieving integrated transport system

Putrajaya has always been planned as a city with an integrated transportation system as embedded in its master plan. It is the aim of Putrajaya master plan to achieve70% usage of public transport and to be a pollution free city.

High quality infrastructure has been laid to achieve this target. This include extensive road system and connectivity, monorail infrastructure corridor, bridges, network of pedestrian and cycling lane and supporting facilities like park and ride, and Putrajaya Sentral – the integrated transport hub that is linked to Express Rail Link, express buses and other intercity buses. Environmental-friendly public transport facilities comprising buses and taxis are also provided as one of the initiatives towards becoming a green city.

Despite good infrastructure and supporting facilities, usage of public transport is still below the target level as preference is still towards using private vehicles resulting in traffic congestions especially in the Core Island. The absence of monorail may contribute to this situation but full implementation of the system is not within Putrajaya's jurisdiction.

To achieve an integrated transportation system, Putrajaya 2025 has the following initiatives:

6.1	Pursue shift from private vehicles to public transport
6.2	Increase the connectivity within and between Putrajaya and external areas
6.3	Implement the use of environment- friendly vehicles
6.4	Increase road safety level
6.5	Encourage pedestrian and cycling

In achieving an integrated transport system, Putrajaya will continue its effort to have a shift in public transport usage to 70%, progressively. Simultaneously. Putraiava will continue to improve connectivity, enhance road safety level and promote the use of environment-friendly vehicles including bicycle. The success in implementing an integrated transport system depends very much on serious commitment from various parties; within Perbadanan Putrajaya and external agencies and stakeholders.



Initiative 6.1

Pursue Shift from Private Vehicles To Public Transport

Public transport is the only solution that can fulfil the aim to be a free pollution city with no traffic congestions. Thus, it is important that the target to maximise the use of public transport to 70:30 is realised.

Putrajaya public transportation strategy will ensure maximum usage of public transportation up to 70% through progressive shift from private vehicles to public transport in order to be a City that is free from pollution, free from traffic congestion and efficient in transportation system. As a Green City, efforts will be increased to ensure that the public transport strategy will be successfully delivered.

The preference for private vehicles as the transportation mode shall be changed in the future. Measures that will be taken to influence this change include providing incentives such as subsidised bus fare for government servants working in Putrajaya, usage of smart card for bus passengers, improvement in bus services in terms of comfort, reliability and timeliness.

As deterrence measures to reduce private vehicles entering Putrajaya especially into the Core Island, Putrajaya will introduce controlled and paid parking at all buildings, and impose development charges on development with additional car parks. Car pooling will also be encouraged to reduce private vehicles.

Putrajaya will increase its effort in pursuing the implementation of much awaited rapid transit system that will provide efficient and reliable services to the Putrajaya community. Alternative mode of transport such as water taxi also shall be introduced in the future.

Whilst there will be many actions needed for the successful implementation of these initiatives, 12 programmes shall be the key actions to be implemented to increase the usage of public transport and reduce the private vehicle usage. The programmes are as below:

Programmes

P6.1A	Provide appropriate incentives for public transport users
P6.1B	Improve bus services
P6.1C	Implement rail services as the backbone of the public transport system
P6.1D	Phase the modal split target (public transportation: private transportation)
P6.1E	Create community awareness on the use of public transport
P6.1F	Implement the usage of smart card for public transport fare
P6.1G	Introduce water transportation as another mode of transportation
P6.1H	Phasing the implementation of Park & Ride
P6.1I	Impose paid and controlled parking at Core Island to reduce congestion
P6.1J	Provide information on integrated buses and rails services at public places
P6.1K	Encourage car pooling through public campaign
P6.1L	Impose development charges for plots with request for provision of additional car park

P6.1A Provide appropriate incentives for public transport users

Immediate measure in providing incentives include providing subsidised bus fare for government servants working in Putrajaya and encouraging bus companies to provide discounts for group passes, season tickets and smart card users. In some countries, tax exemptions are given to employers who provide allowances for public transport passes.

P6.1B Improve bus services

Bus services will be improved in terms of the followina:

- Improve bus services frequency within, to and from Putrajaya to surrounding areas. For example, bus frequency to Cyberjaya can be improved to every 15 minutes instead of every 30 minutes at least during peak hours in the afternoon and evening.
- Implement bus lanes at strategic routes(e.g. at ii. Persiaran Sultan Sallahuddin) and provide priority lanes to buses at junctions.
- Implement dedicated bus services from park iii. & ride to specific destinations.
- Implement shuttle bus/tram services at iv. Persiaran Perdana. Persiaran Sultan Sallahuddin and other appropriate routes.

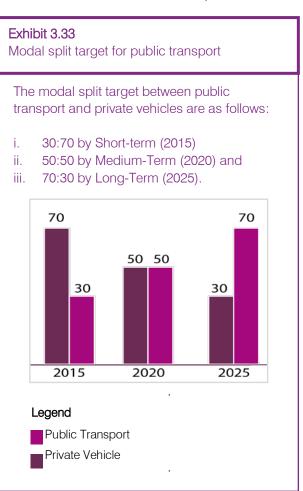
P6.1C Implement rail services as the backbone of the public transport system

Rail services will be implemented once the population and employment reached 80% of the targeted numbers in order to ensure sufficient ridership that could sustain the rail services. This will finally complete the integrated transport system with rail as the backbone. However, continuous pursuance on the importance of monorail system in Putrajaya is important to ensure that the plan is integrated in the grand plan of integrated rail system within Greater KL/Klang Valley.



P6.1D Phase the modal split target (Public transportation: Private transportation)

The modal split target of 70:30 will only be realised once all public transport systems including rail service are in place. However, efforts towards it have been introduced through several initiatives and programmes in this Draft Structure Plan to achieve a progressive target based on three phases - short-term, medium term and long-term. Exhibit 3.34 below shows the three phases.



P6.1E Create community awareness on the use of public transport

In order to successfully increase the usage of public transport, educational campaign will be conducted to create awareness on the benefits of using public transport among local community including government and private employees.

Implement the usage of smart card for public transport

One of the key measures that will help to shift the usage of private vehicles to public transport is convenience. With smart cards, payments for the Park & Ride facilities have been planned throughout Putrajaya. Various public transport operators such as buses, rails and water taxi can be integrated resulting inconvenience to the general public. The passes can be purchased from operating bus companies and discounts for the use of smart card are encouraged.

P6.1G Introduce water transportation as another mode of transportation

Water taxi will be introduced as an alternative mode of transport especially to service areas within the Core Island, selected residential precincts and various parks that are accessible by the lake which strategically straddles at the core of the City.

P6.1H Phase the implementation of Park & Ride

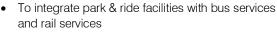
Park & Ride facilities have been planned throughout Putrajaya. The facilities will be integrated with bus and rail services and in anticipating the progressive increase in usage of public transport and reduction of private vehicles, park and ride facilities will be implemented accordingly. The proposed Park & Ride implementation phasing is as follows:

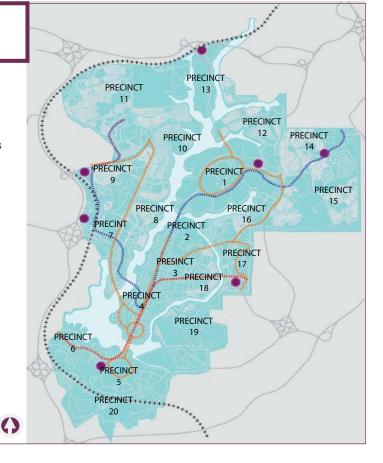
- Short-term: Precincts 7(Phase 1), 12 and 14;
- Medium-term: Precincts 5,7 (Phase 2) 9, 13;
- iii. Long-term: Precinct 17.

See Exhibit 3.34 for the location of Park and Ride.



Exhibit3.34 Park and Ride Area and Transport Corridors • To operate park & ride facilities that have been completed; To continue the development of planned site for park & ride facilities;





Legend

- LRT line 1
- LRT line 2
- LRT extension line
- BRT routes
- Park and Ride area



P6.11 Impose paid and controlled parking at the Core Island to reduce congestion

Car park facilities in all office and commercial buildings including government buildings and public areas within the Core Island will be commercially operated. Appropriate charge rates will be imposed to discourage private vehicles entering the Core Island. A study has to be conducted to identify appropriate parking charges to be implemented.

Measures to control the use of parking facilities at every building will also be implemented and these include to discourage reserved parking for staff and employees living within Putrajaya and neighbouring areas with public transport linkages.

Provide information on integrated bus and rail services at public places

Information on type of public transport available, destinations and routing, schedules, fare charges and others will be made available at all public places like shopping complex, government buildings especially those that deal with the public. This can be both in print and digital mode including on website.

P6.1K Encourage car pooling through public campaigns

Car pooling among employees will be encouraged through public campaigns which can be coorganised by Perbadanan Putrajaya and respective employers.

P6.1L Impose development charges for plots with request for provision of additional car park

Development charges will be imposed on development with additional car park provision. Due consideration however, will be given to commercial complexes.

Initiative 6.2

Increase the connectivity within Putrajaya and from Putrajaya to external areas

Improvement will be made in the future to achieve seamless connectivity within and between Putrajaya and surrounding areas, not only by road but also by transit.

Putrajaya has excellent connectivity accessibility as it is connected to several major highways such as Lebuh Raya Damansara-Puchong (LDP), Lebuh Raya Lingkaran Tengah (NSCEL), Lebuh Raya Putrajaya (MEX) and Lebuh Raya Utara-Selatan.

Improvement will be made in the future especially to achieve seamless connectivity within and between Putrajaya and surrounding areas not only by roads but also by transit. Seamless connectivity by the long awaited rapid transit system within Putrajaya and rail services from the surrounding areas such as Puchong, Bangi and Kajang into Putrajaya will ensure public transportation will be the main mode of transport to travel to/from Putrajaya in the future. Seamless transport connectivity with neighbouring areas will help to expedite development progress, increase the critical mass of ridership and finally, the viability of a rapid transit system.

Other programmes that will enhance the connectivity within Putrajaya include improvement of road signage directing users to their destinations and provision of new bridge linking Precinct 4 to Precinct 19 in order to provide an alternative dispersal point.

Improvement in connectivity will be implemented through three programmes as below:

Programmes

P6.2A Extend and integrate rail services to high density residential areas/job centres within and outside Putrajaya.

P6.2B Improve signage to guide road users

P6.2C Provide a bridge that link from Precinct 4 to Precinct 19 to provide additional dispersal point

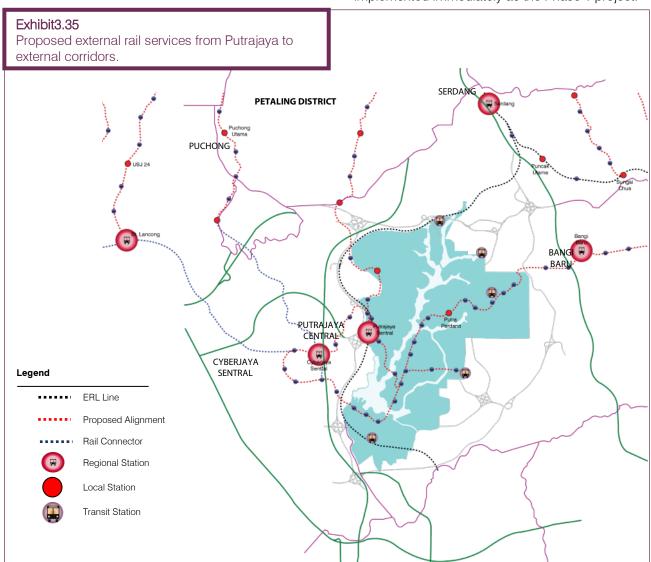




P6.2A Extend and integrate rail services tohigh density residential areas/job centres within Putrajaya and outside Putrajaya

Rail infrastructure development within Putrajaya is ready to serve the planned monorail services and this includes the monorail station at Putrajaya Sentral, above the Express Rail Link Station, a monorail bridge between Precinct 7 and Precinct 3 and the underground monorail tunnel under the boulevard.

Thus, it would require minimal additional fund in order to implement a monorail system within Putrajaya. Putrajaya will continuously pursue to gain support from the respective agencies to implement monorail system as the backbone of Putrajaya transportations system. The plan shall include the extension to neighbouring areas like Cyberjaya, Kajang, Puchong and Serdang. Rail connectivity to Cyberjaya will be advantageous if implemented immediately as the Phase 1 project.



Improve signage to guide road users

Road signage will be improved to increase the level of road safety. Appropriate location of high visibility, accurate information, clarity and readability are some factors that will be looked at in order to improve signage. In addition, the number of road signage will be increased, when necessary. In some countries like Italy, road signage management system has been implemented to provide a systematic provision of road signage as measure to ensure road safety.

P6.2C Provide a bridge link from Precinct 4 to Precinct 19 to provide additional dispersal point

An estimated amount of 51,380 vehicles per hour will be entering the Core Island boundaries by the year 2020 if no high capacity transportation system is provided. Based on the scenario above, a bridge is proposed to connect Precinct 19 to Precinct 4 in order to increase the existing road capacity entering the Putrajaya central area. See proposal in Exhibit 3.36.

Exhibit3.36

Location of bridge proposal between Precinct 19 to Precinct 4.

The location of the bridge is based on these factors:

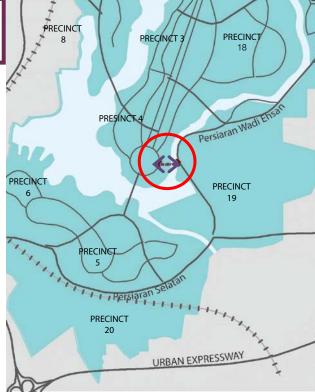
- 1. This proposal will link Jalan Wadi Hana and Jalan Sentosa. It will provide good traffic solution as Jalan Sentosa is also linked to Persiaran Perdana and alternative road to Precinct 4.
- 2. The proposed bridge allows the provision of 3lane dual-carriageway.
- 3. Maintain the secondary distributor road hierarchy between Jalan Sentosa and Lebuh Wadi Hana.

Legend



Proposed Bridge







Initiative 6.3

Implement the Use of Environmentfriendly Vehicles

The use of environmental-friendly vehicles which currently involved only public transportation will be expanded to include private and commercial vehicles.

Usage of environmental-friendly vehicles is in line with the Green City initiatives to reduce the city carbon footprint. Putrajaya will continue its effort in encouraging the use of environmental-friendly vehicles which only involved public transportation, currently. The existing bus and taxi services in Putrajaya are already using Natural Gas as fuel. The implementation of environmental-friendly vehicles use will be expanded in the future to include rail services, private and commercial vehicles owned by individuals and companies in Putrajaya. Putrajaya will also encourage bicycle for rental services as part of the initiative. See also Initiative 6.6.



implementation environment-friendly The of vehicles usage in Putrajaya will be carried out through three programmes:

The usage of other alternative energy apart from

Programmes

P6.3A	Impose the usage of friendly buses and taxis	
P6.3B	Encourage the use of friendly vehicles for comprivate purposes	
P6.3C	Provide supporting environment-friendly strategic locations	facilities for vehicles at

NGV will also be encouraged. This includes hybrid vehicles using hydrogen, bio-diesel and electricity. Facilities in the form of NGV station, battery charging stations, specialised workshop for hybrid cars and accessories workshop will be provided for the convenience of users.

Putrajaya will ensure the success implementation of this initiative through stringent regulatory supported by public campaign.

P6.3A Impose the usage of environment- friendly buses and taxis

The usage of environmental-friendly vehicles will be imposed on buses and taxis. Regular monitoring and stringent regulatory by the respective authority will ensure successful implementation. In the long can be imposed on penalty nonenvironmental-friendly vehicles within plying Putrajaya.

Case Study

Solar Powered Bus, Adelaide

Adelaide's City council's electric solar bus is the first in the world to be recharged using 100% solar energy called Tindo, the Kaurna Aboriginal name for sun, the bus is charged by a photovoltaic system installed at the Adelaide Central Bus Station. It's the largest gridconnected solar photovoltaic system in South Australia and charges the buses' eleven batteries that power the fully electric zero-emission engine. The bus has a range of 200 km between charges, more than enough to accommodate services within the city. It carries up to 42 passengers, a number that includes 25 seated passengers, 2 seats for disabled passengers, and 15 standing persons.

Curitiba Green Line (Linha Verde) Buses, Curitiba, Brazil

The Green BRT line in Curitiba is the first in Latin America 100% biofuel articulated buses using soy-based biodiesel. This will allow a reduction of the emission of pollutants in at least 50%. The emission of carbon dioxide will be 30% less and the emission of smoke will drop by 70%. Since 2007, it is obligatory in Brazil that the mixture of 4% of biodiesel is diesel. The stations use rainwater and solar screens for climate control.





P6.3B Encourage the use of environment-friendly vehicles for commercial and private purposes

Public campaign that includes dissemination of information on carbon emission by car, green vehicle characteristics and maintenance requirements, cost and benefits of green vehicles, ranking among car brand are some steps in creating interests among vehicle owners to convert to environment-friendly vehicle.

P6.3C Provide supporting facilities for environment-friendly vehicles at strategic locations

Facilities in the form of NGV re-fill stations, battery charging stations, specialised workshops for hybrid cars, accessory workshops will be provided for user's convenience.





Initiative 6.4

Increase road safety for all users

Steps will be taken to improve road safety level in order to reduce the number of road accidents and ensure public safety

Road accident is another major problem faced by Putrajaya. Statistics have indicated an increasing trend in the number of accidents occurred within Putrajaya. Some of these accidents have resulted in deaths and 75% of vehicles involved are passenger cars followed by motorcycles at 8%. Most accidents were caused by the ignorant attitudes of the drivers failing to abide to the speed limit.

Putrajaya will take steps to improve road safety level in order to reduce the number of road accidents and ensure public safety. This will involve educational campaigns to increase awareness, improve safety at some parts of the road that is vulnerable to accidents. Putrajaya will also take a comprehensive measure in conducting Road Safety Audit for all roads to ensure that the present road design complies with the safety guidelines.

Details of the safety programmes are as below.

P6.4A Conduct road safety audit for all roads in Putrajaya

All roads and intersections including those in the planning stage will be audited to examine its safety performance. Factors that will be looked into include design features, factors that contribute to accidents and the needs by various road users including pedestrians and cyclists.

P6.4B Develop road safety guideline for pedestrians, cyclists and other road users in Putrajaya

Safety guidelines especially for pedestrians and cyclists will provide best practices to safeguard the pedestrians and cyclists from road accidents. The guidelines will cover the several factors like safer route for walking and cycling, best practice to share the roads with other users, safety rules and many others.

Programmes

P6.4A	Conduct road safety audit for all roads in Putrajaya
P6.4B	Develop road safety guidelines for pedestrian and cyclist and other road users in Putrajaya
P6.4C	Implement traffic calming measures at strategic location especially in the vicinity of schools and residential area
P6.4D	Enhance road safety campaign programmes
P6.4E	Enforce stricter traffic regulations

Providing guidelines will help to increase safety awareness and enhance interests in walking and cycling.

P6.4C Implement traffic calming measures at strategic location especially in vicinity of schools and residential area

Traffic calming measures will reduce the speed of vehicles for pedestrian safety apart from reducing noise pollution. Traffic calming will be provided at high risks areas like schools, residential areas, junctions, transit stations and public buildings.

Identification of high risk areas can be integrated into the Road Safety Audit.





P6.4D Enhance road safety campaign programmes

Road safety campaign will be enhanced to include not only the school children but also office workers and residents. The content and message of the campaign will also be improved to build public confidence on road safety level and create greater interest for walking and cycling to work and for recreation.

P6.4E Strict enforcement of traffic regulations by authorities

Stricter enforcement of traffic regulations is a preventive measure by the authorities concerned towards reducing road accidents and ensuring the safety of public at large. Strict enforcement, including on the speed limit, will be implemented at high risks areas and accident prone areas.

Priority lane for pedestrians and cyclists designed with safety characteristics is one of traffic calming measures.

Initiative 6.5

Encourage walking and cycling

Linking pedestrian walkways to public transport facilities will increase public convenience and encourage walking and cycling to work and leisure

Putrajaya has been planned with good pedestrian connectivity where extensive dedicated walkways have been provided along the local major roads. The walkways, in general have been design to allow sharing between pedestrians and cyclists.

Putrajaya will continuously encourage walking and cycling and will take a conscious effort in expanding the interest in cycling to work. Several steps have been proposed to increase safety among pedestrian and cyclists. Safe routing, seamless connectivity, covered, shaded and comfortable pathways will be among the improved measures to be undertaken in the future.

It is also important to seamlessly integrate pedestrian walkway with all public transportation facilities, including park-and-ride, to ensure convenience and help to strengthen and support an integrated public transport system in Putrajaya.

Programmes to encourage walking and cycling are as below.

Programmes

P6.6A	Provide a seamless, comfortable and safe pedestrian environment
P6.6B	Provide dedicated routes
P6.6C	Encourage bicycle for rent services





P6.5A Provide a seamless, comfortable and safe pedestrian environment

Pedestrian walkways will be improved further especially in terms of its connectivity not only from point to point but at junctions, between buildings including at different levels and grade. Seamless connectivity requires detailing in design and priority should be given to enhance safety.

Covered and shaded walkways will be provided to comfortable walking and experiences. Facilities like planting shade trees, provision of benches, legible signage will improve the experience.

P6.5B Provide dedicated routes

As a first step to provide dedicated routes, a safe routing must be identified and if necessary, some modification must be made to existing walkways to enhance safe routing. Routing must also take into consideration key points such as schools, public buildings that are visited daily by public, workplace, recreational areas and transit stations.

P6.5C Encourage bicycle for rent services

Bicycle for rent services is now a regular features in European cities that promote cycling to work as part of their green vehicle campaign. Bicycle for rent services also known as "bicycle share programme" that provide bicycles for rent to locals and tourists and are made available at key locations like transit stations, public buildings, parks and vibrant spots in the city centre. Some cities provide the bicycles for free and they are operated using card system which can be regulated with security system for monitoring and to prevent thefts.

POLICY 7:

EMPLOYING ADAPTABLE AND RESPONSIVE LAND USE MANAGEMENT

Aspirations for a green city and a sustainable economy necessitate a more adaptable and receptive approach to land management. Initiatives use accommodate multiple vet compatible usage of land, integration of land use with public transport nodes and addressing street level activities will be undertaken as measures to support new targets.

Putrajaya has developed almost 65% or 3,184.71 hectares of its land area. The remaining undeveloped areas are largely commercial areas and mixed use zones in the Core Island, government uses, land dedicated to private housing and some specific uses such as park and ride and diplomatic enclave. The remaining land not only have specific zone but have been allotted with specific plot ratio and design guidelines that set out framework and standards for physical development planning and design in line with the original intent and objectives of the Putrajaya master plan.

As future economy becomes more dynamic resulting in structural change in the population, Putrajaya will need to adopt responsive land use management where land use pattern, land use policies and guidelines may be revised and improved to support the change especially within the Core Island and some parts of peripheral areas.

Appropriate activities will be allowed on commercial and mixed use zones within the Core Island to drive economic vibrancy. In the peripheral areas, some government quarters will be allowed to be converted into mixed residential use and some residential zones will be allowed to have an increase in density. Putrajaya will also ensure seamless integration between public transportation nodes and the surrounding uses and activities.

Specific initiatives related to land use management are:

7.1	Implement measures that support
	Core Island as an economic centre

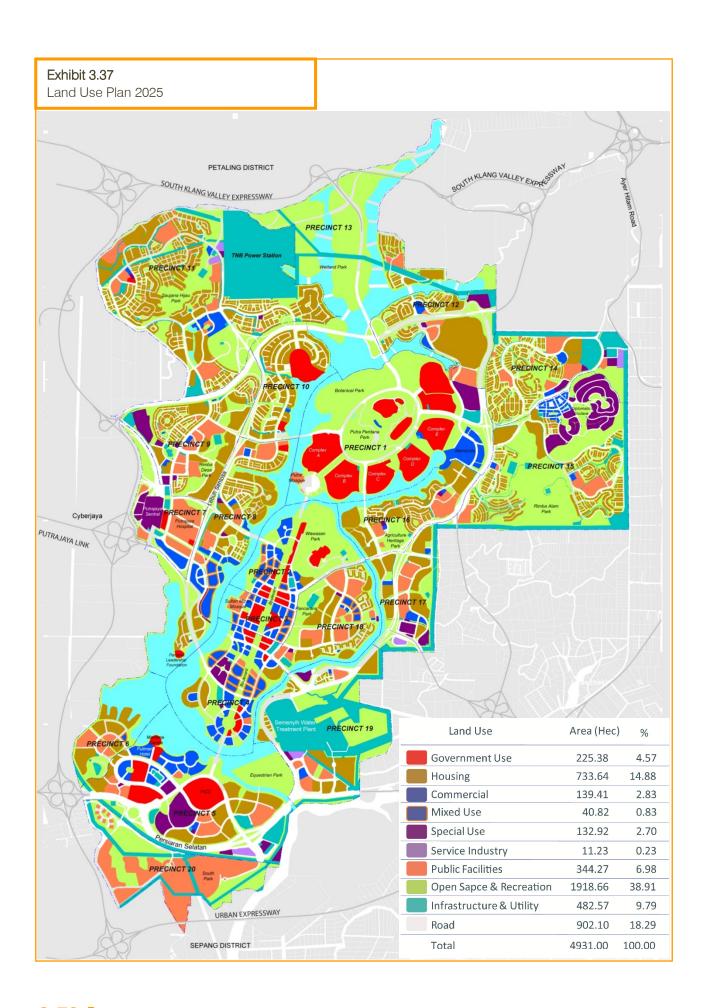
- 7.2 Implement measures to enhance peripheral areas as residential neighbourhood
- Ensure seamless integration of activities and connectivity between surroundings
- 7.4 Protect cultural identity, precincts character and sense of place through sustainable urban design practise

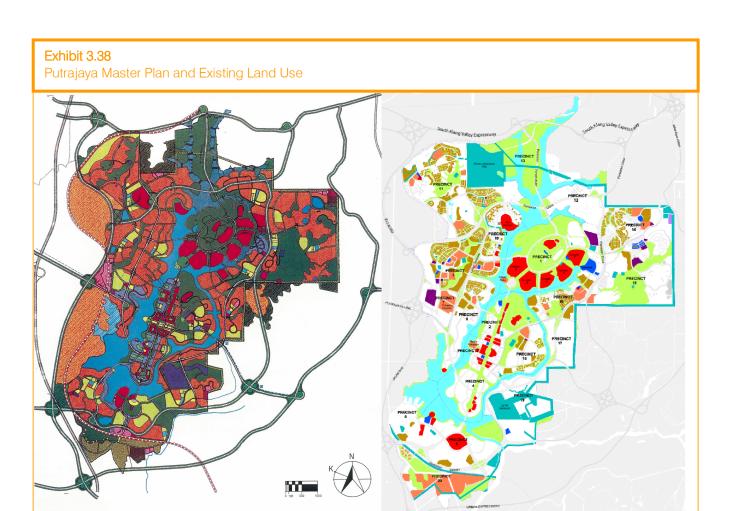
The concept of transit-oriented development will be encouraged in areas nearby transportation nodes.

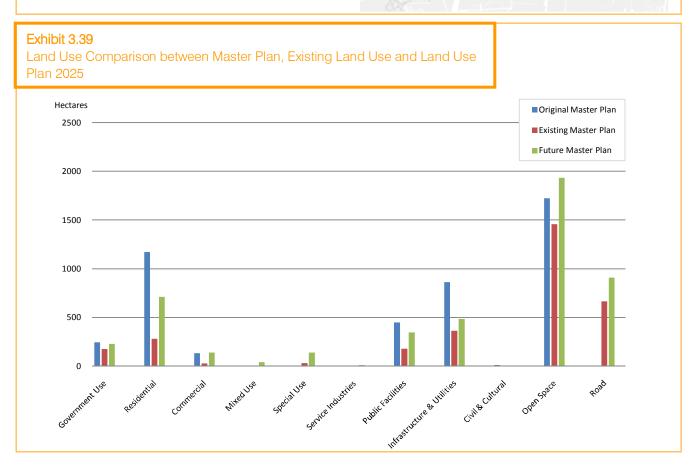
In terms of development, Putrajaya have been guided by a set of urban design guidelines. These guidelines will be further enhanced to address current concerns and future aspirations for a green city and sustainable Putrajaya.

By 2025, close to 39% of Putrajaya will be zone for open spaces and recreation; which includes the parks, wetland, and lake. This marks an increase of 208 hectares from the original master plan which signifies Putrajaya's commitment in implementing the original garden city concept.

In responding to the changing development scenario and further aspiration for sustainability, mixed use zone has been introduced making a significant change from the original plan. This mixed use zone located in the core island will become the catalyst for Core Island's vibrancy and diversity offering both work and living spaces within the central area of Putrajaya.







Initiative 7.1

Implement measures that support Core Island as an economic centre

The planning guidelines for commercial and mixed use zones within the Core Island will be reviewed to allow more commercial and non-commercial activities in order to expedite the economic and development growth

Putrajaya will ensure that land use planning and regulations act as a tool to facilitate the changes in the economic structure and to spur immediate economic activities. In response to the possible influx of knowledge-based economy such as educational services, information and communication technology, research and development services as well as international governmental organizations in the near future, land use regulations especially in the Core Island will be revised to allow these complementary uses within the commercial and mixed use zones.

As an immediate measure to trigger growth and economic vibrancy within the Core Island, Putrajaya will allow temporary usage of the land for short-term lease period. The uses will not be limited to private car park and night market only but will also include other commercial activities like short-term low rise restaurant, private sports arena and gymnasium, showrooms and others. However, strict planning regulations including design guidelines will be imposed to ensure high quality urban design and environment.

The land use planning of Putrajaya will support the growth of Core Island as an economic centre. As rail become the backbone of future city growth especially at the Core Island, bringing in region-wide passengers and generates vibrant activities, land uses around the stations, either at grade, elevated or underground will be planned to allow convenience to the train users, feasible for train operators and neighbouring development especially in ensuring the provision of seamless integration and connectivity between the station and the neighbouring land.

Programmes

_				
P7.1A	Review allowable activities in Core Island			
P7.1B	Impose street level retail activities			
P7.1C	Encourage temporary and regulated commercial development on vacant land			

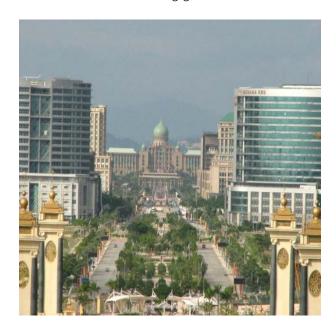
Programmes to improve land use structure within the Core Island include:

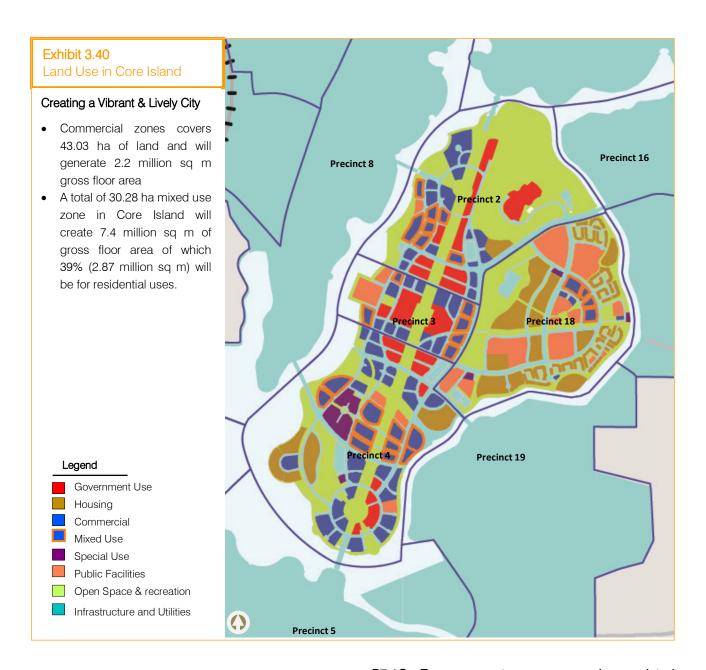
P7.1A Review allowable activities in Core Island

Land use activities within commercial and mixed use will be reviewed to allow educational services, research and development, public galleries, libraries in the commercial zone.

As Core Island is expected to generate a population of 16,000 people once mixed-use zones are fully developed, (see Exhibit 3.34) sufficient allocation must be made for social facilities and these should be allowed within the respective buildings, in other commercial buildings or transit stations, where applicable.

The revisions can be carried out in the Local Plan and in other related existing guidelines.





P7.1B Impose streets level retail activities

Street level retail activities will be imposed on new buildings along Persiaran Perdana, lake shore and other roads within Core Island. Existing buildings are encourage to retrofit to ensure activities at street level faced outward with proper corridor for walking.

Retail activities will help to create vibrancy not only within the building but also along the boulevard, promenade and intermediate public spaces.

P7.1C Encourage temporary and regulated commercial development on vacant land

As temporary measure to encourage commercial activities in the Core Island, vacant land designated for commercial and mixed use zone will be allowed to be leased out for commercial activities on a temporary basis for a specified short term period. For example, a minimum 2 years and renewable every 2 years to a maximum 10 years or until the land is ready for development.

Activities that can be allowed for temporary use include low rise restaurant, private sports arena and gymnasium, showrooms, spa, beauty and health outlets and others.

Initiative 7.2

Implement measures to enhance peripheral areas as residential neighbourhood and support population growth

The conversion of undeveloped government quarters plots into mixed residential and an increase in housing density for undeveloped apartment zones are two programmes proposed to support future population growth in the peripheral areas

The planned population of 320,000 is expected to grow higher to 350,000 by 2025. Putrajaya will ensure that the needs for additional housing can be fulfilled within a limited residential land. Thus, Putrajaya will allow mixed residential use on vacant government quarters plots and increase in density for some area in the future which will include undeveloped apartment plots.

Undeveloped plots reserved for government quarters will be allowed for a mixed residential development where other types of residential use such as public and private housing will be allowed to be developed as part of the development components within the government quarters.

Another proposed programme under this initiative is an increase in housing density in area designated for apartments. The proposed initiative is limited to those undeveloped plots only (without Development Order). In the future, the density in apartment zones is proposed to increase from 70 units/acre (173 units/hectare) to 90 units/acre (222 units/hectare).

Programmes proposed to enhance periphery areas in order to cater for the additional future population include the following:

Programmes

P7.2A	Allow undeveloped government quarters plot to be converted to mixed residential use.
P7.2B	Allow increase in density for apartment plots

P7.2A Allow undeveloped government quarters plot to be converted to mixed residential use

There are 42.65 hectares of undeveloped government quarters plots located in Precincts 6, 16, 17 and 19.

These plots will be allowed to be converted to mixed residential use in the future where private housing can be developed on these plots. Considerations can be given to limited commercial activities and social facilities to support the neighbourhood population. The needs for government quarters however must be considered within the same plot where the quantum can be determined through a detailed study.

P7.2B Allow increase in density for apartment plots

The density for undeveloped apartment plots (those without Development Order) will be increased from 70 units per acre to 90 units per acre subject to sufficient provisions of amenities and infrastructure. Density increase will also include government quarters plots.

The increase in density on these plots will generate an additional of about 2,600 housing units that will cater an additional size of 11,588.

Exhibit 3.41

Additional Residential Units

Undeveloped Government Quarters Plots

Location	Acreage (Ha)	Residential Units Based On 70 units/ac (173 units/ha)	Residential Units Based On 90 units/ac (222 units/ha)
Precinct 6	9.35	1,618	2,076
Precinct 16	8.21	1,420	1,823
Precinct 17	13.35	2,309	2,964
Precinct 19	11.74	2,031	2,606
Total	42.65	7,378	9,469



Additional 2,091 units Equivalent to 9,410 populations

Undeveloped Apartment Plots (Land owned by PejabatTanahPersekutuan)

Location	Acreage (Ha)	Residential Units Based On 70 units/ac (173 units/ha)	Residential Units Based On 90 units/ac (222 units/ha)
Precinct 5	4.82	834	1,070
Precinct 7	2.07	358	459
Precinct 8	1.17	202	260
Precinct 18	1.83	317	406
Total	9.89	1,711	2,195



Additional 484 units Equivalent to 2,178 populations



TOTAL Additional 2,575 units Equivalent to 11,588 populations



Initiative 7.3

Ensure seamless integration of activities and connectivity between public transport facilities and their surroundings

Seamless integration between neighbouring land use activities with public transport facilities will be achieved through pedestrian links and by bringing in diverse activities within public transport buildings

Land use integration at public transport facilities is a way to ensure convenience for the users. Seamless integration will be an ultimate convenience to most people not only to the old, disabled and children but the fast moving urban community. Putrajaya is committed to ensure seamless integration between public transport facilities with neighbouring uses. Pedestrian walkways, walkalators, escalators and lifts will be encouraged to be provided to achieve seamless integration between the respective buildings.

In ensuring greater convenience to the users, Putrajaya will encourage diversified activities within public transport stations and/or stops. Allowable activities include retail, hotel, offices and residential.

In cases where, the neighbouring developments are implemented earlier than the transport facilities, Putrajaya will ensure that allocation for future connectivity will be made by the neighbouring development to ensure seamless integration is not neglected.



Integrated commercial development with underground MRT and elevated LRT at Sengkang, Singapore

Programmes

P7.3A	Allow higher intensity mixed use development for existing commercial and residential zones.
P7.3B	Encourage transit supportive activities at transport terminals and park and ride facilities.
P7.3C	Encourage integration of rail station within commercial building plots.

Detail programmes in achieving seamless land use integration include the following:

P7.3A Allow higher intensity mixed use development for existing commercial and residential zones

Commercial and residential zones located within 250m radius of monorail stations will be allowed to be converted to a high intensity development to provide public convenience and increase the rail patronage and viability of the system.

The intensity varies depending on locality and will be determined at the Local Plan level.

P7.3B Encourage transit supportive activities at transport terminals and park and ride facilities

Transit supportive activities such as retail, hotel, offices and high density residential units will be encouraged at transport terminals and park and ride facilities. This is another effort to support the patronage.

Transit supportive activities will also include other public services and facilities such as banks, payment and collection centres, automated machine teller and other social facilities like library, community centre and others.

P7.3C Encourage integration of rail station within commercial building plots

Rail stations are encouraged to be integrated within the commercial building plots to achieve seamless integration, allow cross-subsidisation in public transport development and increase patronage.

In this case, private developers are encouraged to undertake station development within their plot. This will not only increase patronage to the station but also to their development. Experiences from many countries show the successful implementation of this form of smart partnership.

Case Study Lessons Learnt from Hong Kong on TOD

- Diversified land uses within the plot will help to capture the patronage and support the transit system.
- Neighbouring land with single ownership help to make seamless integration with the station effortless.
- Comprehensive pedestrian linkages can be achieved not only through covered and noncovered, air-conditioned and non-air-conditioned walkways and bridges but also through shopping complexes, offices corridors and foyers.
- Some rail stations are operated based on strategic needs and not on ridership and population demand.
- Hong Kong Planning Standards and Guidelines 2002 formulated a policy on "Internal Transport Facilities" where due considerations being given to maximise use of the station to support transit patronage.
- The rail company play an active and conscious effort in integrating community and development.

Initiative 7.4

Protect cultural identity, precincts character and sense of place through sustainable urban design practise

Sustainable urban design supports organic city growth and urban structure, create place making and improve sense of belonging while eliminating negative environmental impact through skilful and sensitive design.

Putrajaya has exemplary urban design elements embedded through its stringent guidelines that are aimed to create a unique and attractive Malaysian identity complemented by the Garden City concept, the importance of sustainable environment and liveable community is translated in Putrajaya development.

Putrajaya will continue to uphold quality and sustainable urban design elements and practices which are in line with Green City initiatives. Some necessary improvements will be implemented to strengthen the urban structure and function, the identity and image, and enhance the sense of belonging.

Three programmes will be implemented for this initiative:

Programmes

P7.4A	Strengthen identity at selected precincts to differentiate their city functions.			
P7.4B	Improve entry statements at all entry points.			
P7.4C	Improve place making at public spaces.			
P7.4C	Review and revise urban design guidelines to be consistent with the objectives of the Structure Plan.			

P7.4A Strengthen identity at selected precincts to differentiate their city functions

Identity of some precincts has to be strengthened to differentiate their functions. New development will need to contribute to community or precincts character by improving safety, diversity and choice, quality of built environment, accessibility and environment and environmental sustainability. High quality design will be pursued from both public and private buildings, urban spaces, parks and infrastructure corridors.

The residential precincts require identity enhancement as many of them are currently unidentifiable and have similar look and character. Enhancement in terms of entry statement and urban landscape may be considered.

Precincts in the Core Island have distinctive functions and identity which has to be carried through until they are fully developed.

P7.4B Improve entry statement at all entry points

Entry statement at all entry points will be improved in terms of its landmark prominence and legibility especially directional signage and lightings. Entry points to Putrajaya are important gateways that define the boundary and the city uniqueness.

Prominent landmarks with unique identity identifiable only at Putrajaya are one of the elements that need improvements. Each of them must have their own uniqueness and identity.

Readable and accurate directional signage is important at the entry points to lead and direct visiting traffics. Improved lightings will also enhance the legibility of an entry statement.

P7.4C Improve place making at public spaces

Place making is the multi-faceted approach to the planning, design and management of public spaces. Public spaces namely the squares and parks within the Core Island especially along Persiaran Perdana and also in neighbourhood areas will be further improved to ensure that they function as a meeting place for socializing, relaxing, reading, playing informal games, cultural performance and activities and many others. Public squares and

parks must be able to function more than their aesthetic values. Shaded trees, benches, wider walkways are some facilities that will be improved.

New areas such as sub-commercial centres and neighbourhood centres will develop urban spaces that contribute towards greater community interactions and sense of belonging.

P7.4D Review and revise urban design guidelines to be consistent with the objectives of Structure Plan

Urban design guidelines will be reviewed and updated to integrate and translate the objectives and aspirations of this draft structure plan towards sustainable Putrajaya in 2025.

The existing guidelines must also be updated to ensure that it drives Green City initiatives including green building elements that may be in conflict with the existing guidelines especially building retrofitting, installation of solar panels, rainwater harvesting equipment, vertical garden and others.

Revision of urban design guidelines will give attention to improve the loose identity at residential precincts and revised image (if necessary) at the Core Island with the emergence of modern contemporary private office buildings.

Revised guidelines will also consider other efforts in achieving environmental sustainability that includes reduction of micro-climate and day temperature.

PRINCIPLES FOR DEVELOPMENT OF URBAN DESIGN GUIDELINES

- 1. Design for community safety
- 2. Design for diversity and choice
- 3. Design for universal access and inclusiveness
- 4. Design for sustainability
- 5. Relate the built environment to community and culture
- 6. Provide quality built form

POLICY 8:

ADOPTING EFFECTIVE PARTNERSHIP AND GOOD GOVERNANCE

Achievement of the vision for Sustainable Putrajaya 2025 requires implementation and delivery system that is effective with strong partnership and support by all stakeholders within Putrajaya

Perbadanan Putrajaya, the local authority and administrator of Putrajaya has a mission to plan, develop and manage the Federal Government Administrative Centre efficiently and effectively in order to achieve Putrajaya's vision to be a well managed, lively and energetic Garden City. To date, it has delivered quality social facilities and infrastructure as well as providing urban services and maintenance to the City. It also has several statutory plans and guidelines to steer the City's development effectively and systematically.

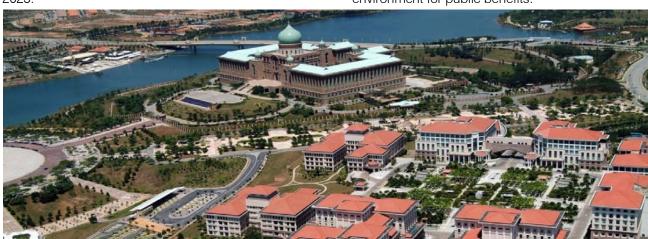
However, it is still likely to be an uphill task in the future in continuing to deliver a high standard city management including providing regular, prompt, quality and sufficient infrastructure and public services to uphold the national image and sovereignty as a Federal Government Administrative Centre.

As such, Perbadanan Putrajaya will continue to build strong partnership with all the stake holders to ensure the achievement of the new vision for 2025.

Effective partnership and good governance will be implemented through the following initiatives:

- 8.1 Adopt transparent, flexible and responsive management in city administration
- 8.2 Empower stakeholders in planning, decision making and city management
- 8.3 Encourage smart partnership in enforcement

Putrajaya will thus adopt transparent, flexible and responsive management in the city administration. The organisation structure will be strengthened with some new roles and functions to face new challenges. In line with Local Agenda 21, Putrajaya will empower stakeholders including the residents to participate in the planning, decision making and city management. This is especially important in moving Putrajaya towards a Green Cityfrom a Garden City concept. A successful Green City requires commitment from all parties from the authority to the stakeholders including residents through smart partnership. Enforcement will be enhanced to ensure well maintained and safe environment for public benefits.



Initiative 8.1

Adopt transparent, flexible and responsive management in city administration

Putrajaya will adopt transparent, flexible and responsive management to achieve efficiency and higher standard of services in the future

Adoption of good governance in Perbadanan Putrajaya has ensured progressive implementation of plans and programmes in Putrajaya. However, as Putrajaya grows into a bigger city with larger population base and a change in economic structure, the scope and level of services that it renders will have to be expanded and become more efficient. Transparent, flexible and responsive management are required to achieve higher standards in the provision of services.

Dissemination of information on services and feedback are among steps that need to be taken to ensure transparent and responsive management. Level of satisfaction among the city dwellers has to be increased especially in areas like maintenance services. Perbadanan Putrajaya also has to be flexible to cater to the future needs of the public and the stakeholders. Thus some restructuring may be requiredin response to the proposed change in the economic structure in the future.







Programmes

P8.1A	Form a high powered committee to evaluate and monitor implementation of Development Plans
P8.1B	Appoint independent bodies to assess the performance of services provided by Perbadanan Putrajaya and other agencies
P8.1C	Restructure roles and functions of some departments and/or divisions in Perbadanan Putrajaya
P8.1D	Set up investment development subsidiary company, under Perbadanan Putrajaya in partnership with Putrajaya Holdings
P8.1E	Enact a law to gazette existing public buildings to conserve building design and structure
P8.1F	Conduct Putrajaya population census in

Several programmes have been planned to implement transparent, flexible and responsive management and they are:

2015 and 2025

P8.1A Form a high powered committee to evaluate and monitor the implementation of Development Plans

This high powered committee will evaluate and monitor implementation of projects under the Putrajaya Structure Plan, Local Plans and others like projects under the Rancangan Malaysia.

The committee also monitors public assets audit and financial allocation for development projects.

P8.1B Appoint independent bodies to assess the performance of services provided by Perbadanan Putrajaya and other agencies

Independent bodies such as universities and research institutions will be appointed to assess the performance of Perbadanan Putrajaya in delivering services to the City.

This performance assessment is recommended to be conducted periodically in addition to annual key performance measure conducted under the Government Transformation Programme.

P8.1C Restructure roles and functions of some departments and/or divisions in Perbadanan Putrajaya

Some departments and divisions will be restructured to meet the demand of a dynamic economy and changing community lifestyle that require active local participation and efficient delivery system. The proposed departments and divisions are as follows:

- i. Economic Development Department
 - Tourism Development
 - Privatization & Outsourcing
 - **Urban Economy**
 - Marketing & Promotion
 - NKEA Programmes;
- ii. LA21 Programme Implementation Unit; and
- Green City Initiatives iii.

The restructuring exercise may involve, but not limited to redeployment of existing staff.

P8.1D Set up investment development subsidiary company, under Perbadanan Putrajaya in partnership with Putrajaya Holding

The partnership between Perbadanan Putrajaya and Putrajaya Holdings is very important to expedite development especially in the Core Island. Both organisations can work together in addressing the changing needs of private investors including the multi nationals and the government-link corporations. With the partnership, Perbadanan Putrajaya will not be directly involved in the investment but will be able to provide their views and active participation in development implementation. An Investment Department Company will be established under this partnership.

P8.1E Enact a law to gazette existing public buildings to conserve building design and structure

Public buildings including government offices, bridges and monuments have unique designs which are interpretative of Malaysian identity. This is only unique to Putrajaya has to be conserved for future generations. A new law will be enacted to gazette all public buildings in Putrajaya.

P8.1F Conduct Putrajaya population census in 2015 and 2025

Putrajaya Population Census 2015 and 2025 have to be conducted in response to changes in social setting of the City. The existing Population Census by the Statistics Department conducted every ten years is insufficient to monitor future population of Putrajaya which is expected to have a structural change with dynamic and progressive economy in the future.

The proposed functions of Economic Development **Division** are:

- Plan, coordinate and promote Putrajaya economic development programme, tourism, commercial and corporate businesses
- Plan and develop programmes to achieve internationalization of Putrajaya
- Examine services under Perbadanan Putrajaya that can be managed through outsourcing or privatization
- Provide advisory services to other departments under Perbadanan Putrajaya

The LA21 Programme Implementation Unit is to foster greater participation of the stakeholders of Putrajaya in city administration and development. Furthermore, it is to promote better relationship and healthy living in the City.

The Investment Development Company to be established would work towards facilitating more investments into Putraiava.

Initiative 8.2

Empower stakeholders in planning, decision making and city management

With higher rate of participation, the public will be able to understand and share the aspirations of Perbadanan Putrajaya, thus enhance the sense of belongingness among the people.

Activities in relation to Local Agenda 21 (LA21)are quite limited and have been focussing only in selected areas. The level of public participation in Putrajaya has to be improved through appropriate programmes in order to penetrate all levels of community and age groups. With higher rate of participation, the public will be able to understand and share the aspirations of Perbadanan Putrajaya, thus enhance sense of belongingness among the people. As a result, some of the administration and maintenance responsibility especially at the neighbourhood level can be shared and implemented by the community with financial support from Perbadanan Putrajaya, thus lessening the cost of administration and maintenance.

Higher rate of public participation will also help to expedite development programmes as all potential problems including public objections can be resolved at the planning stage and mutual agreement can be achieved even before project starts.

Empowerment of stakeholders in planning, decision making and city management will be implemented through several programmes.

Programmes

P8.2A	Establish	and	implement	LA21
	activities			

P8.2B Promote dialogue sessions between stakeholders and Perbadanan Putrajaya.

P8.2C Encourage public feedback physical planning and Green City roadmaps through public participation.

P8.2D Empower communities to manage and maintain community facilities at neighbourhood level.

P8.2A Establish and implement LA21 activities

With the formation of LA21 Programme Implementation Unit. more related LA21 programmes and activities will be established and implemented. This includes residents' active participation in planning, decision making and implementing the programmes such as green community towards reducing carbon footprint and place making projects.

In ensuring effective implementation, Perbadanan Putrajaya's staff will be specially trained to administer the City following the concept of LA21.



P8.2B Promote dialogue sessions between stakeholders and Perbadanan Putrajaya

Stakeholders including Putrajaya Holdings, the master developer, the private buildings owners, companies and residents of Putrajaya will be invited for regular dialogue sessions to improve city planning and management.

P8.2C Encourage public feedback on physical planning and Green City roadmap through public participation

Road shows on Putrajaya Structure Plan and Local Plans will be organised to raise the awareness on the Plans and obtain stakeholders active involvement.

Perbadanan Putrajaya will also establish an Implementation Committee for Structure Plan and the Local Plans involving the stakeholders as committee members.

Training will be provided to Perbadanan Putrajaya, the members Resident Associations, Neighbourhood Watch and Smart Community on effective public participation.

P8.2D Empower communities to manage and maintain community facilities neighbourhood level

In order to provide good services maintenance of community facilities and public assets, communities will be empowered to manage them at neighbourhood level.

Perbadanan Putrajaya will allocate a budget for Sponsorships this purpose. from stakeholders will be a value-added advantage.







Initiative 8.3

Encourage smart partnership in enforcement

Putrajaya stakeholders and community will be encouraged to contribute towards enforcing rules and regulations within the City to ensure a safe and better living environment for all to enjoy

Implementing plans will be incomplete enforcement of law is not given due attention. All related stakeholders must be made aware of their responsibilities in maintaining a safe and better living environment for all to enjoy. Continuous reliance on the enforcement agencies to implement enforcement has seen numerous stumbling blocks including shortage of required policing and enforcement personnel. A better way is to turn each member of the Putrajaya community to contribute towards enforcing rules and regulations concerning the City. One good example is to contribute actively to programmes such as Rakan Cop to effectively reduce crime in the City.

Four programmes will be implemented to encourage smart partnership in enforcing the law and they include:

P8.3A Enhance coordination between Perbadanan and other enforcement authorities

Greater cooperation between Perbadanan Putrajaya and enforcement authorities such as Police Departments, Road and Transport Department, Department of Environment and others will be improved. More joint programmes will be organised between these enforcement agencies, residents and stakeholders in Putrajaya.

Greater awareness of the role of individuals in Putrajaya will be created in order for them to coassist enforcement agencies. This programme can also be part of LA21 activities.

Programmes

P8.3A	Enhance coordination between Perbadanan and other enforcement authorities
P8.3B	Empower Perbadanan Putrajaya and other related agencies to effectively regulate and enforce law in the city
P8.3C	Continue to organise awareness programmes on law enforcement

P8.3B Empower Perbadanan Putrajaya and other related agencies to effectively regulate and enforce law in the City

Perbadanan Putrajaya will seek for greater empowerment to take up some regulatory and enforcement functions in order to provide clean and safe environment. One example is to obtain an auxiliary police status for Perbadanan Putrajaya's enforcement unit. In addition, each member of the Putrajaya community will be encouraged to contribute towards enforcing rules and regulations concerning the City. They can actively participate in programmes such as Rakan Cop which aim to effectively reduce crime in the City.

P8.3C Continue to organise awareness programmes on law enforcement

Awareness programmes will be organised continuously with the participation of stakeholders including Residents Associations, other enforcement authorities and non-governmental organisations.

Prior to organising new programmes, evaluations on earlier programmes and activities are required in order to ensure their effectiveness. The results then will be used to plan, refresh and reinforce the knowledge and attitude towards law obedience.

KEY DIAGRAM

The Key Diagram encapsulates spatial interpretation of all policies, initiatives and programmes of the Structure Plan: Sustainable Putrajaya 2025. Its reflects the 4 Big Moves that will spearhead and move Putrajaya from Garden to Green City by the year 2025

INTENSIFY COMMERCIAL AND MIXED USE ZONE

Initiative

1.1

- Setting up Centre of Excellence for public administration and international relation and mixed use within the same precinct
- Encourage educational and research institution by setting up city campus
 - Encourage mixed use development for a more compact and efficient city
- 2.2 Niche MSC-Status City
- Green economy and green business
- Provide competative business environment
- Area to increase supporting tourism facilities
- Area to adopt sustainable building practices
- 6.1 Area to impose high parking charger
- Implement measures that support core island as an economic centre through review allowable activities and encourage temporary and regulated commercial development on vacant island.

ENHANCE RESIDENTIAL PRECINCT

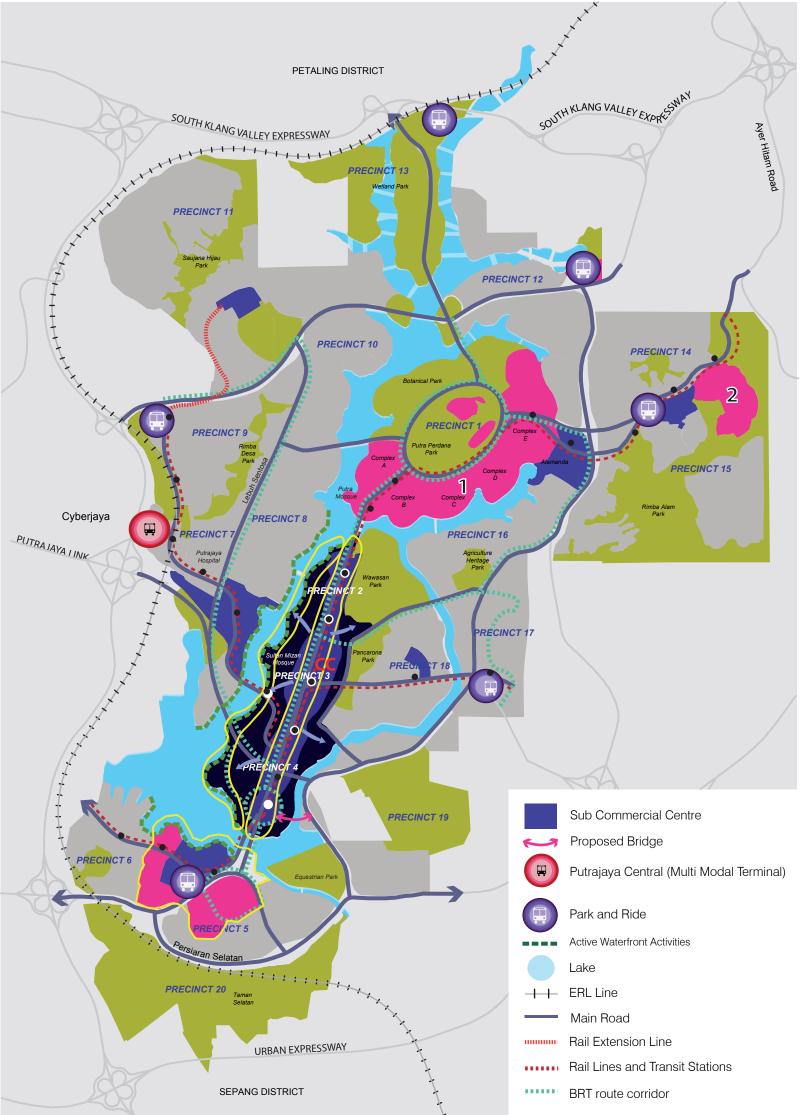
Initiative

- Area to provide diverse type of housing and affordable housing
- Area to upgrade community shared facilities
- 4.4 Adopting and implement Safe City Practises
- Area to establish model green community
 - Implement measures to enhance periphery areas as residential neighbourhood and support population growth by allowing under government quaters plot to be converted to mixed residential use and allow increase in density for apartment plots.

DESIGNATE TOURISM PROMOTIONAL AREA

Initiative 2.1

- Expand tourism into a well defined Tourism Cluster (7Niche)
- Position Putrajaya as an international destination by promoting MICE
- Prepare Strategic Tourism Action Plan
 - Area to organise diverse tourism events and activities by organization or nation event, develop traders centre and develop Putrajaya into a major Malaysian food and fruits attraction within the MSC Corridor.
- Improve tourist movement through providing shuttle bus services, position of sinage and interesting symbols and provide bicycle for rent.



ENHANCE GOVERNMENT PRECINCT

Initiative

8.1

8.2

8.3

- Special function, improve permeability between building and to the building, protocol area, iconic landmark that potray excellence in government administration and a special place of interest for tourism.
- Area to locate international bodies
 - Adopt transparent, flexible and responsive management in city administration.
 - Empower stakeholder in planning, decision making and city management.
 - Inculcate law abiding culture by enhancing coordination between Perbadanan and other enforcement authorities.

PRESERVE AND IMPROVE GREEN AREA

Initiative 1.2

4.3

- Setting up educational and research institutional by set up a National Centre for wetland and Lake Management Research, also to expand function Putrajaya botanical park as a centre for botany science and urban horticulture.
- Area to enhance content and convenience at recreational areas such as supporting services and shared facilities.
- Area to enhance ecology, water body and biodiversity.

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CONNECTIVITY ABD GREEN TECHNOLOGY

Initiative 5.2

6.1

6.2

- Application of green technology infrastructure and practices.
- Increase the usage of public transport like bus and rail services, improve public transportation facilities
- Increase connectivity within Putrajaya and Putrajaya to external areas.
- Implement the use of environmental friendly vehicles for commercial and private vehicles and provide battery charging stations at strategic location
- Increase road safety for all user by conduct road safety audit, develop road safety guidelines, implement traffic calning measures, enhance road safety campaign and strict enforcement of traffic regulations by authorities.
- Encourage walking and cycling through provide a seamles and safe pedestrian environment.
- Integration of activities and conectivity between public transport facilities and their surrounding by allowing higher intensity mixed used development, encourage transit supportive activities, integration of rail station within commercial building plots and provide public services facilities.

PUTRAJAYA STRUCTURE PLAN 2025 Sustainable Putrajaya 2025

KEY DIAGRAM



4.0

IMPLEMENTING SUSTAINABLE PUTRAJAYA 2025

The Draft Structure Plan has introduced eight (8) policies that generate 31 initiatives and 128 programmes. These policies, initiatives and programmes are formulated to resolve cross-border issues and require partipation of multiple stakeholders. Thus, it is important to draw the right implementation systems and approaches that are able to integrate the stakeholders commitments, ensure timeliness intervention and prevention, monitor and making readjustment to suit the needs at the time of implementation.

It is the aim of this Draft Structure Plan to identify the mechanisms, the time frame and the stakeholders involved in implementing the proposed policies and initiatives under this Draft Structure Plan. The Draft Structure Plan also aims to promote an action oriented implementation programme where quick win or high impact programmes that can bear quick positive result are implemented to trigger other mid-term and long-term programmes.





Implementation Methods and Stakeholder Participation

In ensuring that the Draft Structure Plan's programmes are effectively implemented, each programme will have proposed method of implementation and assigned stakeholders with partnership with relevant agencies, if necessary (see Exhibit 4.1).

A major part of the programmes involve Perbadanan Putrajaya as the custodian with a role to implement in partnership or joint effort with relevant agencies. In cases where other agencies are the custodian, it is important for Perbadanan Putrajaya to play a role as an active co-partner that helps to drive the programme and monitor the performance of the programme to its satisfaction.

When a programme involves another ministry or agency, it is imperative that Putrjaya conducts roadshows to promote ideas and plans envisioned under this Draft Structure Plan as the first step to get the ministry concerned to participate in the programme actively. The roadshow should also elaborate into the relationship between important players and the role each player plays in the programmes and initiatives. This will also help respective ministries draw up internal plans and set milestones and annual budgets (where required) to implement the programme. In fact, as the first step, Putrjaya should conduct roadshows to all the ministries with the support of KWP to ensure these plans are implemented effectively.



Exhibit 4.1
Stakeholders and Method of Implementation

Initia	Initiatives Custodian Other Partners Method				
POL	- Motriod				
Eleva 1.1	ating Putrajaya as an Excellent Federal (Establish Putrajaya as a "Centre of	Government Administrat	ive Centre		
	Excellence" for public administration and international relation.				
	Programme: P1.1A:Develop a Centre of Excellence for public administration and international relations.	INTAN/MAMPU	PPj	PPjroadshow, to promote & identify site, INTAN/MAMPU to implement	
	P1.1B: Establish an institute for advanced studies in public administration.	EPU, MOHE, PPj	Private sectors such as MIM	PPjroadshow, MOHE promote, private or MOHE implement	
	P1.1C: Establish a city gallery and a specialised library.	PPj	National Library	 City gallery: PPj implement Specialised library: PPj and National Library to implement 	
1.2	Encourage the setting up of educational and research institutions.				
	Programme: P1.2A: Establish Putrajaya University.	MOHE	Public/Private/International Universities	PPj roadshow, p& MOHE to implement	
	P1.2B: Set up a National Centre for Wetland and Lake Management.	PPj	Local and foreign universities	Expand existing Visitors Centre. Partnership with research universities	
	P1.2C: Expand the function of botanical park as a centre for botany science and urban horticulture.	PPj	Local and foreign universities	Smart partnership with universities	
1.3	Promote Putrajaya as a city for international organisations.				
	Programme: P1.3A Identify suitable international organisations to enter into partnership with relevant local agencies.	KWP& Ministry of Foreign Affairs Malaysia	PPJ & investment development subsidiary company	Invite OIC, ASEAN, UNITAR, UNRISD, UNEP, APO to set- up branch office at Diplomatic Enclave	

Structure Plan: PUTRAJAYA 2025 4-2

Initia	itives	Custodian	Other Partners	Method
	P1.3B Preparse Promotional/Marketing Action Plan to attract multinational organisations.	PPj	investment development subsidiary company, PJH	Joint-venture with PJH to plan and promote. Develop website for this intent, welcome interested parties.
	P1.3C Offer attractive incentives to entice relocation of multinational organisations to Putrajaya.	KWP/MIDA	PPj	PPj roadshow, to recommend, MIDA to create incentives.
	P1.3D Opening up Diplomatic Precinct/Enclave as one of the potential location for international government and non-governmental organisations.	PPj		Planning decision, PPj to identify site, review land title for enclave.
	ICY 2: ding A Progressive and Diverse Urban Ed	conomy		
2.1	Expand tourism into a well-defined cluster.	БОПОПТУ		
	Programme: P2.1A Promote tourist niche cluster – MICE, sports & recreation, built environment, cultural & heritage, medical & health, food & shopping.	PPj	Tourism Malaysia	PPj roadshow to pursue, coordinate with Tourism Malaysia
	P2.1B Prepare Strategic Tourism Action Plan.	PPj	All stakeholders in tourism at Putrajaya	Prepare comprehensive Plan with assistance from professional experts.
2.2	Establish a niche MSC-status city.			
	Programme: P2.2A Provision of infrastructure in compliance with the Bills of Guarantee of cybercity.	PPj	MDeC	Identification of site, application, infrastructure provision and promotion.
	P2.2B Provide incubators and SOHO development to entice E-businesses/enterprises.	PPj	MDeC	PPj to provide with partnership with PJH
2.3	Develop green economy.			
	Programme: P2.3A Provide incubators for green businesses.	PPj & PJH	KeTTHA	Roadshow and promotion by PPj, PJH to provide spaces, KETTHA to support
	P2.3B Develop green businesses in partnership with private sector, professional bodies, NGOs and institutions of higher learning	PPj & PJH	Private sector, NGO and universities	Public-private partnership

Initiatives		Custodian	Other Partners	Method
2.4	Provide competitive business environment. Programme:			
	P2.4A Deliver quality essential infrastructure to attract GLCs and MNCs.	PPj	PJH and all service providers	PPj roadshow, set standards and coordinate quality of services
	P2.4B Provide business incentives.	PPj	PJH and all service providers	PPj roadshow, set standards and coordinate quality of services
	P2.4C Improve transport linkages to neighbouring areas especially to Cyberjaya, Bangi, Kajang and Puchong.	PPj	Transport operators, related local authorities	PPj to identify operators and area for improvement & coordinate. Transport operators to provide service.
	P2.4D Provide incubators for emerging business.	PPj& PJH	KWP	PPj & KWP to promote, PJH to provide space
	ICY 3: ngthening Tourism as Key Economic Fur	nction		
3.1	Position Putrajaya As An International Destination.			
	Programme: P3.1A Promote Meetings, Incentives, Conventions and Exhibitions (MICE).	PPj	KWP, Tourism Malaysia, PJH, Prime Minister's Office	PPj to initiate, coordinate promotion headed by Tourism Malaysia, PJH to participate in promotion, use PICC.
	P3.1B Set up an international exposition centre.	PJH	PPj, Tourism Malaysia	PPj roadshow to highlight the needs, PJH to develop, managed by PJH,coordinated with Tourism Malaysia and PPj
	P3.1C Establish Putrajaya as a national water sports centre.	PPj	Tourism Malaysia, PJH, KBS	Coordinated promotion headed by Tourism Malaysia
	P3.1D Develop cultural and heritage assets.	PPj, PJH	Tourism Malaysia	PPj roadshow to recommend, development by both PPj and PJH. Tourism Malaysia to promote

Initia	utives	Custodian	Other Partners	Method
	P3.1E Increase the length of stay among tourists through innovative tour packages.	Putrajaya tour operators association	PPj, Tourism Malaysia, PJH, tour agents, hotels	Set-up Putrajaya tour operators association. Smart partnership between PPj, tour agents and hoteliers. Co- promotion with Tourism Malaysia
	P3.1F Encourage participation of tour agencies through smart partnership.	Putrajaya tour operators association	PPj, Tourism Malaysia, PJH, tour agents, hotels	PPj to brief on Action Plan & programmes, smart partnership with hoteliers to provide incentives. Co- promotion with Tourism Malaysia. Association may be set-up within PPj premises for a stipulated period of time.
3.2	Organise diverse tourism events and activities.			
	Programme: P3.2A: Host regional or national sports events in Putrajaya.	PPj	Tourism Malaysia, sports organisations, promoters, PJH, KBS	Smart partnership between PPj and sports organisations and promoters to organise. Tourism Malaysia to promote and PJH to assist in providing facilities
	P3.2B: Extend visiting hours for all tourist attraction areas during festive season and weekends.	PPj	Private sector	PPj and private sectors involved to implement, PPj to enforce
	P3.2C: Organise more recreation and entertainment activities.	PPj	Tourism Malaysia, event organisers	PPj and Tourism Malaysia to promote. PPj and event organisers to co-organise or organise independently
	P3.2D: Develop traders centres.	PJH	PPj	PPj to recommend and promote, PJH to develop
	P3.2E: Develop Putrajaya into a major Malaysian food & fruits attraction.	PPj	Tourism Malaysia, FAMA	PPj to initiate and develop. coordinate promotion with Tourism Malaysia

atives	Custodian	Other Partners	Method
Improve tourists movements Programme:			
P3.3A: Provide shuttle bus services from hotels to major tourists attractions.	PPj	Hoteliers, Private	PPj to promote, hoteliers and private sector to provide
P3.3B: Accentuate walking experience along tourist trails.	PPj	Private	PPj to implement pedestrianisation, and promote
P3.3C: Provide bicycles for rent and ride stations throughout the city centre (see also P6.5C).	PPj	Private	PPj to invite private participation and promote. May invite charitable NGOs to operate. PPj to build ride stations and provide financing in the interim period. Implement by phase.
Increase supporting tourism facilities Programme:			
P3.4A: Encourage variety of tourist accommodations.	PPj	PJH, Tourism Malaysia, hoteliers	PPj and PJH to identify and invite investors and hoteliers from various category. Tourism Malaysia help to promote.
P3.4B: Provide more tourist information and service centres at strategic locations	PPj	Putrajaya Tour Operators Association	PPj to provide through smart partnership wih private sectors. Each tour operator may man the center and promote their products as well.
P3.4C: Promote Putrajaya Boulevard & Promenade as a main tourist hub.	PPj	PJH, tour organisers	Centre can also be manned by retirees. PPj to provide through partnership with PJH. PPj and tour promoters to promote. Shuttle buses to operate (see also P3.3A)
	Programme: P3.3A: Provide shuttle bus services from hotels to major tourists attractions. P3.3B: Accentuate walking experience along tourist trails. P3.3C: Provide bicycles for rent and ride stations throughout the city centre (see also P6.5C). Increase supporting tourism facilities Programme: P3.4A: Encourage variety of tourist accommodations. P3.4B: Provide more tourist information and service centres at strategic locations P3.4C: Promote Putrajaya Boulevard & Promenade as a main tourist	Improve tourists movements Programme: P3.3A: Provide shuttle bus services from hotels to major tourists attractions. P3.3B: Accentuate walking experience along tourist trails. P3.3C: Provide bicycles for rent and ride stations throughout the city centre (see also P6.5C). Increase supporting tourism facilities Programme: P3.4A: Encourage variety of tourist accommodations. P3.4B: Provide more tourist information and service centres at strategic locations P3.4C: Promote Putrajaya Boulevard & PPj Promenade as a main tourist	Improve tourists movements Programme: P3.3A: Provide shuttle bus services from hotels to major tourists attractions. P3.3B: Accentuate walking experience along tourist trails. P3.3C: Provide bicycles for rent and ride stations throughout the city centre (see also P6.5C). P5.4A: Encourage variety of tourist accommodations. P6.4B: Provide more tourist information and service centres at strategic locations P7.4C: Promote Putrajaya Boulevard & PPj P7. PJH, tour organisers P7.4C: Promote Putrajaya Boulevard & PPj P7. PJH, tour organisers

Initia	tives	Custodian	Other Partners	Method
	ICY 4:			
Enh a	ancing Community Living Environment Provide diverse type of housing units to			
4.1	meet the needs of future population.			
	Programme:			
	P4.1A: Encourage diverse types of housing units.	PJH	PPj, Developers	PPj to provide briefing to developers, PJH and other developers to implement. PJH to facilitate through planning guidelines.
	P4.1B: Provide affordable housing for low and middle income groups.	PJH	KWP, PPj, Developers	PPj to provide guidelines, monitor and enforce, PJH and other developers to provide
	P4.1C: Provision of housing according to universal design standards (MS 1184 & 1331) for the elderly and disabled community.	PPj	PJH, Developers	PPj to provide guidelines, monitor and enforce, PJH and other developers to implement, internal coordination
	P4.1D: Review Detailed Urban Design guidelines.	PPj		PPj to review, internal coordination
		PPj		PPj to review relevant Local Plans and guidelines, support where possible
4.2	Upgrade community shared facilities to address increase in population and its structural change.			
	Programme:			
	P4.2A: Increase the content of community centres.	PPj	Relevant departments & agencies	Joint effort: PPj roadshow to promote the idea of shared facilities, coordinate the implementation by relevant departments & agencies
	P4.2B: Build community facilities that comply with universal design guidelines.	PPj	Relevant departments & agencies	Joint effort: PPj to review guidelines and enforce, internal coordination

Initia	atives	Custodian	Other Partners	Method
	P4.2C: Encourage smart partnership between public and private sectors to provide and manage community facilities (see also P8.2D).	PPj	Residents associations	Partnership: PPj to provide management module and encourage residents associations to manage, internal coordination. PPj to fund costs.
4.3	Enhance content and convenience at recreational areas. Programme: P4.3A: Provide supporting services and shared facilities at existing parks. P4.3B: Provide facilities to cater for the needs of different communities P4.3C: Ensure good accessibility and transit services to recreational areas.	PPj	Transit operators	Internal effort: PPj to develop design module and implement, internal coordination Partnership between PPj and transit operators: PPj to identify areas for improvement, transit operators to provide services
4.3	Programme: P4.4A: Implement all measures identified in Putrajaya Safe City programme. P4.4B: Propers Crime Provention	PPj	Residents Association	Internal effort and public participation: PPj to implement, educate and enforce
	P4.4B: Prepare Crime Prevention Through Environmental Design (CPTED) Guidebook. P4.4C: Prepare community centres as disaster/risk centres.	PPj	Residents Association	Internal effort: PPj to implement Internal effortand public participation: PPj to initiate, study and plan, educate public

Initia	itives	Custodian	Other Partners	Method
	ICY 5:			
5.1	ing Putrajaya Towards Green City Enhance ecology, water body and biodiversity.			
	Programme: P5.1A: Conserve green lung of Putrajaya.	PPj		Internal effort: PPj to establish a monitoring system
	P5.1B: Enhance green connectivity.	PPj	Neighbouring local authorities	Joint effort: PPj to identify area and promote joint effort in implementation
	P5.1C: Improve micro climate and reduce day temperature.	PPj	PJH, developers	Joint effort: PPj to provide guideline, promote, educate and enforce.
	P5.1D: Establish R & D centre in urban biodiversity, lake, wetlands and green related practices. (Refer also P1.2B)	PPj	Relevant institutions	Joint effort/partnership: PPj initiate implementation through joint effort and/or partnership with relevant institutions.
5.2	 Application of green technology, infrastructure and practices in city planning and management. Programme: P5.2A: Encourage efficient use of water and alternative water source. P5.2B: Encourage efficient use of energy. P5.2C: Encourage use of renewable energy sources. P5.2D: Impose the use of chilled water from centralised district cooling system for all conditioning of all government and commercial buildings in Precincts 1, 2, 3, 4 & 5. P5.2E: Encourage usage of sludge as fertiliser. P5.2F: Develop material recovery facilities for solid waste. 	PPj	Service provider, KeTTHA, private sector	Joint effort: PPj with service provider and KeTTHA to explore alternative sources using green technology and mechanism. Partnership of PPj with private sectors to explore in new technology in providing alternative sources.

Initia	tives	Custodian	Other Partners	Method
5.3	Adopting Sustainable Building Practices. Programme: P5.3A: Enforce green building certification for new buildings.	PPj	PJH, building owners, developers	Internal and joint effort: PPj to educate and enforce. PJH, building owners, developers to participate.
	P5.3B: Encourage retrofitting of existing buildings.P5.3C: Provide incentives to support implementation of green buildings.	PPj	KeTTHA, MIDA	Joint effort: PPj to jointly create incentives
5.4	Establish model green community committed to reduction of carbon footprint. Programme: P5.4A: Inculcate understanding of the communities on their role in reducing carbon footprint. P5.4B: Execute communities action in implementing carbon reduction measures. P5.4C: Establish the use of plant species that benefit the environment and their contribution towards carbon sequestration.	PPj	Residents Associations, NGOs	Joint effort: PPj, residents associations, NGOs to joint effort in organising campaign and conduct activities.
	ICY 6: ementing Integrated Transportation Sys Pursue shift from private vehicles to public transport. Programme: P6.1A: Provide appropriate incentives for public transport users.	tem PPj	KWP, MOT, private employers	Joint effort: PPj roadshow to promote ideas to Ministry and to introduce incentives. PPj to encourage employers to participate

Initiatives	Custodian	Other Partners	Method
P6.1B: Improve bus services.	PPj	Bus operators	Joint effort: PPj to recommend and operators to implement.
P6.1C: Implement rail services as the backbone of the public transport system.	MOT,	KWP, PPj, transit operators, SPNB	Joint effort: PPj roadshow to pursue MOT. PPj to have smart partnership with MOT and transit operators to expedite implementation.
P6.1D: Phasing the modal split target (Public transportation: Private transportation).	PPj	Public, resident associations	Internal effort: PPj to monitor and readjust implementation to meet the target
P6.1E: Create community awareness on the use of public transport.	PPj	Transit operators, SPNB	Internal effort: PPj to implement with public participation
P6.1F: Implement the usage of smart card for public transport fare.	PPj	Private operator	Joint effort: PPj to recommend and enforce. Operators to implement.
P6.1G: Introduce water transportation as another mode of transportation.	PPj	Transit operators	Partnership: PPj to implement in partnership with private operator
P6.1H: Phasing the implementation of Park &Ride.	PPj	PJH, building owners	Joint effort: PPj to work with transit operators
P6.1I Impose paid and controlled parking at the Core Island to reduce congestion.	PPj	Transit operators	Joint effort: PPj and PJH to jointly implement at their respective buildings, parking areas. Including all government staff car parks.
P6.1J Provide information on integrated buses and rails services at public places.	PPj	MOT	Joint effort: PPj and transit to implement jointly.
P6.1K: Encourage car pooling through public campaigns.	PPj		Internal effort: PPj to conduct public campaigns with support of MOT.
P6.1L: Impose development charges for plots with request for provision of additional car park bays.	PPj		Joint effort: PPj and PJH to jointly implement at their respective buildings, parking areas

Initia	atives	Custodian	Other Partners	Method
6.2	Increase the connectivity within and between Putrajaya and external areas. Programme: P6.2A: Extend and integrate rail services to high density residential areas/job centres within Putrajaya and outside Putrajaya.	PPj		Joint effort: PPj roadshow, to pursue with the support of the Ministries
	P6.2B: Improve signage to guide road users.	PPj	MOT, KWP, related local authorities	Internal effort
	P6.2C: Provide a bridge that links Precinct 4 to Precinct 19 to provide additional dispersal point.	PPj		Internal effort
6.3	Implement the Use of Environment-friendly Vehicles.			
	Programme: P6.3A: Impose the usage of environment-friendly buses and taxis.	PPj	KeTTHA, Transport operators	Joint efforts: PPj to educate & impose. Operators to participate
	P6.3B: Encourage the use of environment-friendly vehicles for commercial and private purposes.	PPj	KeTTHA, public	Joint effort: PPj to educate and impose.Public to participate
	P6.3C: Provide supporting facilities for the environment-friendly vehicles at strategic locations.	PPj	Private	Joint Effort/ Partnership: PPj to implement with participation from private sectors.
6.4	Increase road safety for all users.			
	Programme: P6.4A: Conduct road safety audit for all roads in Putrajaya.	PPj	MIROS	Partnership: PPj in partnership with MIROS to conduct road safety audit and develop guidelines.
	P6.4B: Develop road safety guideline for pedestrian and cyclist and			Internal effort
	other road users in Putrajaya P6.4C: Implement traffic calming measures at strategic locations especially in the vicinity of schools and residential area.	PPj	Road Safety Department	Joint effort: PPj and Road Safety Dept to organise campaign
	P6.4D: Enhance road safety campaign programmes.	PPj	PDRM	Joint effort: PPj to inform the needs to enforcement authorities

Initia	tives	Custodian	Other Partners	Method
	P6.4E Enforce stricter traffic regulations by authorities.	PPj		Internal effort: PPj to obtain auxillary enforcement status from RTD
6.5	Programme: P6.5A: Provide a seamless, comfortable and safe pedestrian environment.	PPj		Internal effort
	P6.5B: Provide dedicated routes.	PPj		Internal effort
	P6.5C: Encourage bicycle for rent services. (Refer also P3.3C)	PPj	Private	Partnership: PPj to promote. Provided by private sector or NGOs. PPj to provide in the interim.
	ICY 7: lloying Land Use Management That Is A	dentable And Despensi	N/O	
7.1	Implement measures that support the Core Island as an economic centre.	daptable And Responsi	ve	
	Programme: P7.1A: Review allowable activities in the Core Island	PPj		Internal effort: PPj to review Local Plan
	P7.1B: Impose street level retailactivities.	PPj	PJH, developers	Joint effort: PPj roadshow to educate, PJH and building occupiers to implement street level activities
	P7.1C Encourage temporary and regulated commercial development on vacant land.	PPj	PJH	Joint effort: PPj to allow and encourage PJH to implement
7.2	Implement measures to enhance peripheral areas as residential neighbourhood and support population growth.			
	Programme: P7.2A: Allow undeveloped government quarters plot to be converted to mixed residential use.	PPj		Internal effort: PPj to review Local Plan, requires internal
	P7.2B: Allow increase in density for apartment plots.	PPj		coordination.
7.3	Ensure seamless integration of activities and connectivity between public transport facilities and their surroundings. Programme: P7.3A: Allow higher intensity mixed	PPj		Internal effort: PPj
	use development for existing commercial and residential zones.	17		to review guidelines in Local Plan

Initia	tives	Custodian	Other Partners	Method
	P7.3B:Encourage transit supportive activities at transport terminals	PPj	PJH, developers, transit operators	Joint effort: PPj to provide guidelines and monitor. PJH, developers, transit operators to implement
	P7.3C: Encourage integration of rail station within commercial building plots	PPj	PJH, developers, transit operators	
7.4	Protect cultural identity, precincts character and sense of place through sustainable urban design practise			
	Programme: P7.4A: Strengthen identity at selected precincts to differentiate their city functions.	PPj		Internal effort: PPj to audit and improve identity
	P7.4B: Improve entry statements at all entry points.	PPj		Internal effort: PPj to audit and improve
	P7.4C: Improve place making at public spaces.	PPj	Public	Joint effort: PPj to organise activities and create awareness, public participation
	P7.4D: Review and revise urban design guidelines to be consistent with the objectives of the Structure Plan.	PPj		Internal effort: PPj to review Detailed Urban Design Guidelines
_	ICY 8:			
8.1	pting Effective Partnership and Good Go Adopt transparent, flexible and responsive management in the city administration.	overnance		
	Programme: P8.1A: Form a high powered committee to evaluate and monitor implementation of the Development Plans.	PPj	KWP	Internal effort: PPj with KWP's approval to implement
	P8.1B: Appoint independent bodies to assess the performance of services provided by Perbadanan Putrajaya and other agencies.	PPj	KWP, local universities	Internal effort: PPj with KWP's approval to implement
	P8.1C: Restructure roles and functions of some departments and/or divisions in Perbadanan Putrajaya.	PPj	MAMPU, KWP	Internal effort: PPj with MAMPU and KWP's approval to implement

Initia	tives	Custodian	Other Partners	Method
	P8.1D: Set up investment development subsidiary company, under Perbadanan Putrajaya in partnership with Putrajaya Holdings.	PPj	PJH	Partnership: PPj and PJH to form an investment development company
	P8.1E: Enact a by-law to gazette existing public buildings to conserve building design and structure.	PPj	KWP, AG's Office	Joint effort: PPj to recommend and AG office to prepare and enact.
	P8.1F: Conduct Putrajaya Population Census in 2015 and 2025.	PPj	Statistics Department	Internal effort: PPj to get advise from Statistic Dept and conduct the census.
8.2	Empower stakeholders in planning, decision making and city management.			
	Programme: P8.2A: Establish and implement LA21 activities. P8.2B: Promote dialogue sessions between stakeholders and Perbadanan Putrajaya.	PPj	Stakeholders, Residents Associations, Public	Joint effort: PPj to organise and initiate. Stakeholders,
	P8.2C: Encourage public feedback on physical planning and Green City roadmaps through public participation.			residents association and public to participate.
	P8.2D: Empower communities to manage and maintain community facilities at neighbourhood level. (Refer also P4.2C).	PPj	Residents Associations	Partnership: PPj to allocate funds, guidance. Residents to manage.
8.3	Encourage smart partnership in enforcement.			
	Programme: P8.3A: Enhance coordination between Perbadanan Putrajaya and other enforcement authorities.	PPj	PDRM, RTD, other enforcement authorities	Joint effort: PPj to coordinate
	P8.3B: Empower Perbadanan Putrajaya and other related agencies to effectively regulate and enforce law in the city.	PPj	Rakan Cop	Internal effort: PPj to obtain auxillary power. Joint effort with Rakan Cop to enforce.
	P8.3C: Continue to organise awareness programmes on law enforcement.	PPj	All enforcement authorities	Joint effort: PPj to carry out awareness programme jointly with enforcement authorities

EPU: Economic Planning Unit

FAMA : Federal Agricultural Marketing Authority

INTAN : Institut Tadbiran Awam Negara

KeTTHA: Kementarian Tenaga, Teknologi Hijau dan Air/

Ministry of Energy, Green Technology and Water

KBS: Kementerian Belia dan Sukan/

Ministry of Youth and Sports

KWP: Kementerian Wilayah Persekutuan dan Kesejahteraan Bandar/

Ministry of Federal Territory and Urban Well-Being

MAMPU: Modernisation and Manpower Planning UnitMIDA: Malaysian Industrial Decelopment AuthorityMIROS: Malaysian Institute of Road Safety Research

MOHE : Ministry of Higher Education/

Kementerian Pengajian Tinggi

MOT : Ministry of Transport/

Kementerian Pengangkutan

PDRM : Polis DiRaja Malaysia/Royal Malaysian Police

PJH : Putrajaya Holdings Berhad

PPj : Perbadanan Putrajaya/Putrajaya Corporation

RTD: Road Transport Department/Jabatan Pengangkutan Jalan

SPNB : Syarikat Prasarana Nasional Berhad or Syarikat Perumahan Negara Berhad?

4.1 Phasing

The implementation phasing of these programmes is divided into three major phases i.e. short term (2013-2015), medium term (2016-2020) and long-term (2021-2025). In addition, there are initiatives that are felt can be implemented immediately before 2013.

Most of the detailed planning, revision and other preparatory works are expected to be implemented during the short term period after the endorsement of the Draft Structure Plan. However, some of the quick high impact programmes will be conducted within the short-term period to jump start the Green City initiatives.

The medium term of the implementation period (2016 to 2020) will see almost all programmes take off the ground. It is also during this period that the initiatives and programmes under the said policies are allowed to be revisited for readjustment for better and effective implementation to achieve the targets of the Draft Structure Plan.

This period is followed by another five-year period, the long-term (2021-2025), whereimplementation

of the initiatives are expected to be completed and the deliverables are re-enhanced and sustained.

Exhibit 4.2 presents the phasing of the implementation of the policies, indicating that planning and awareness will take most of the short term period beginning 2013 until 2015. Enhancement and sustainance of the policies are earmarked from 2016 onwards. For ease of reference, cells are highlighted in green to show involvement of other agencies as key implementers.

For effectiveness of implementation that involves other ministries (and agencies), also as major implementers, it is necessary to involve KWP which supervises Perbadanan Putrajaya so as to facilities horizontal ministerial communication and getting the respective ministries to take ownership of the proposed programme.

One of the most important task that Perbadanan Putrajaya will need to undertake is to have roadshows to top-management of respective ministries which have been earmarked to implement certain policies. The intention will be to introduce, justify and obtain support and

participation to implement the said programmes.

Roadshows will also be important to get the support and understanding of various stakeholders in Putrajaya such as residents, NGOs, employers, business communities, and developers.

Exhibit 4.2 Implementation Phasing

	IMM	EDIATE	SH	ORT TERM	MEDIUM TERM	LONG TERM
POLICIES	201	1-2102	2	013-2015	2016-2020	2021-2025
Initiative 1.1 Establish Putrajaya as a "Centre of Excellence "for public administration and international relations		Planning and Promoting		Implementing	Operating and Assessing	
Programme: P1.1A: Develop a Centre of Excellence for public administration and international relations		Prep. roads publi	how,	Coordinate with KWP, EPU, INTAN, MAMPU, UM	Agency to acquire land, building, getting partners	Operate, reassess
P1.1B: Establish an institute for advanced studies in public administration		Preparent Prepar	how,	Coordinate with EPU, INTAN, MAMPU, UM	Acquire land or Occupy commercial building, getting partners	Operate, reassess
P1.1C: Establish a city gallery and a specialized library			Prep	are, publicise	Implement, Operate	Monitor, reassess
Initiative 1.2: Encourage the setting up of educational and research institutions		Plannin Promo		Coordinating	Implementing	Monitoring, assessing
Programme:						
P1.2A: Establish Putrajaya University		Plan, roa	adshow	Coordinate with MOHE	MOHE to acquire land, building, getting partners	Operate, reassess
P1.2B: Set up a National Centre for Wetland and Lake Management		Preparent Prepar	how,	Coordinate, set up committee	Get partners, research universities, implement	Operate, reassess
P1.2C: Expand function of botanical park as a centre for botany science and urban horticulture	Pre	repare Coordinate, get partners		Implement, monito	or, assess	
Initiative 1.3: Promote Putrajaya as the city for international organisations		Plar	nning and	Promoting	Coordinating and implementing	Monitoring, assessing
Programme: P1.3A Identify suitable international organization in partnership with relevant local agencies		Plan Pror		Coordinate	Implemer monitor, ass	
P1.3B Prepare Promotional/Marketing Action Plan			Plan	and Promote	Coordinate, implement. Utilise Investment	Monitor, assess

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	IMMEDIATE		SHORT TERM		MEDIUM TERM		LONG TERM
POLICIES	2011-2102		2013-2015		2016-2020		2021-2025
to attract multi-national organizations						ment Company	
P1.3C Offer attractive incentives to entice relocation of multinational organizations to Putrajaya			Plan aı	nd Promote	Utilise	ate, implement. e Investment ment Company	Monitor, assess
P1.3D Opening up Diplomatic Precinct / Enclave as one of the potential location for international government and non-government organizations		Prepare		and Promote		ate, implement	Monitor, assess
Initiative 2.1: Expand Tourism into a well-defined cluster		Prepa coordir			Implemen	ting	Monitoring, assessing
Programme:							
P2.1A Promote tourist niche cluster – MICE, sports and recreation, built environment, cultural and heritage, medical and health, food and shopping		Prepare, roadshow, plan, coordinate with Tourism Malaysia and other tourism operators			Implement, monitor, assess		
P2.1B Prepare Strategic Tourism Action Plan		Prepare, appoint consultant		Implement plan		Monitor, assess	
Initiative 2.2: Establish a niche MSC-status city		Preparing, coordinating		Implementing		Monitoring, assessing	
Programme:							
P2.2A Provision of infrastructure in compliance to the Bills of Guarantee of cybercity		Prepare, identify coordinate with N			Implement, monitor, assess		
P2.2B Provide incubators and SOHO development to entice e-businesses / enterprises		Prepare, publicise		Get partners, research institutions, business/enterprises, promote, coordinate		Implement	Operate, reassess
Initiative2.3: Develop Green Economy		Preparing, coordinating			Implementing	Monitoring, assessing	
Programme							
P2.3A Provide incubators for green business		Prepa public		Get partners, Coordin	•	Implement	Operate, reassess

	IMME	DIATE	Sł	HORT TI	ERM	MED	IUM TERM	LONG TERM
POLICIES	2011	-2102	:	2013-20	15	20	16-2020	2021-2025
P2.3B Develop green businesses in partnership with private sectors, professional bodies, NGOs, higher learning institutions			repare, Get partners, re ublicise institution business/enter NGOs, pron coordina		ons, erprises, omote,		Operate, reassess	
Initiative 2.4: Provide competitive business environment				Preparin coordinati		lmp	lementing	Monitoring, assessing
Programme:								
P2.4A Deliver quality essential infrastructure to attract GLCs and MNCs				Plan, dshow		rdinate, lement	Monito	or, assess
P2.4B Provide business incentives				epare, dshow	Coord	inate	Implement	Monitor, assess
P2.4C Improve transport linkages to neighbouring areas especially to Cyberjaya, Bangi, Kajang and Puchong			Prepare, plan, invite stakeholders, discuss		Coordinate, implement		Monitor, assess	
P2.4D Provide incubators for emerging business		Prepar publicis		Get pa pron coord	note,	ln	nplement	Operate, assess
Initiative 3.1: Position Putrajaya as an International Destination		Prepa	aring, c	coordinatir	ng	lmp	lementing	Monitoring, assessing
Programme								
P3.1A Promote Meeting, Convention and Exhibition (MICE)		Prepar roadsho		Ider partr pron coord	ners,	ln	nplement	Operate, reassess
P3.1B Set up an international exposition centre		Prepare, plan		Coord with Tou Mala	PJH, rism	Implement		Assess
P3.1C Establish Putrajaya as a national water sports centre	Prepare,	publicise		Get partne note, cool with KB	rdinate	Implement		Operate, reassess
P3.1D Develop cultural and heritage assets		Prepare,	plan	Coordinate with PJH, Tourism		Implement		Monitor, assess

	IMME	DIATE	SH	ORT TERM	М	EDIUM TERM	LONG TERM
POLICIES	2011	-2102	2	013-2015		2016-2020	2021-2025
				Malaysia			
P3.1E Increase the length of stay among tourists through innovative tour packages		Prepare, plan, set up Tour Operators Association		Coordinate		Implement	Monitor, assess
P3.1FEncourage tour agencies participation through smart partnership		Prepare, plan, set up Tour Operators Association		Coordinate	Monitor, assess		Improvise
Initiative 3.2: Organise diverse tourism events and activities		Prepa	aring, co	ordinating		Implementing	Monitoring, assessing
Programme:							
P3.2A: Host regional or national sports events in Putrajaya		Plan Coordinate		Coordinate	Implement annually		
P3.2B: Extend visiting hours for all tourist attraction areas during festive season and weekends	Plan	Coordin ate, revise	n Implement		Monitor, assess,		improvise
P3.2C: Organise more recreation and entertainment activities		Plan	Plan Coordinate		In	nplement annually, m	nonitor, assess
P3.2D: Develop traders centres		Plan	1	Coordinate	Implement, monitor, assess		
P3.2E: Develop Putrajaya into a major Malaysian food & fruits attraction		Plan	l	Coordinate	Implement, moni		or, assess
Initiative 3.3: Improve Tourist Movement		Prepa	aring, co	ordinating	Implementing		Monitoring, assessing
Programme:							
P3.3A: Provide shuttle bus services from hotels to major tourists attractions		Plan	Со	ordinate, Implem	ent	Monitor, asse	ess, improvise
P3.3B: Accentuate walking experience along tourist trails		Prepare,	plan	Coordinate, or	ganise	Implemen	it, monitor
P3.3C: Provide bicycle for rent and ride stations throughout the city		Plan, publicise Coordinate, orç		ganise	Implement, mo	nitor, improvise	
centre							14.
Initiative 3.4: Increase supporting tourism facilities		Prepa	aring, co	oordinating	Implementing		Monitoring, assessing
Programme							

	IMME	DIATE	SHO	ORT TERM	MEDIUM TERM	LONG TERM
POLICIES	2011	-2102	20)13-2015	2016-2020	2021-2025
P3.4A: Encourage variety of tourist accommodations		Plan		oordinate	Implement	Monitor, assess
P3.4B: Provide more tourist information and service centres at strategic locations		Prepare, plan	Coordi	nate, organise	Implement, monitor	
P3.4C: Promote Putrajaya Boulevard & Promenade as a main tourist hub		Prepare, plan	,		Implement, monitor	Assess, improvise
Initiative 4.1: Provide diverse type of housing units to meet the needs of future population				reparing, ordinating	Implementing	Monitoring, assessing
Programme						
P4.1A: Encourage diverse types of housing units				dy, prepare, pordinate	Implement	Monitor, assess
P4.1B: Provide affordable housing for low and middle income groups				dy, prepare, pordinate	Implement	Monitor, assess
P4.1C: Provision of housing according to universal design standards (MS 1184 & 1331) for elderly and disabled community		Study,	prepare,	coordinate	Implement	Monitor, assess
P4.1D: Review Detailed urban design guidelines		Study	y, review	, prepare	Coordinate, implement	Monitor, assess, improvise
P4.1E: Allow higher density residential at suitable locations		Review,	approve	applications	Monitor, assess	improvise
Initiative 4.2: Upgrade community shared facilities to address increase in population and its structural change		Prepa	aring, coordinating		Implementing	Monitoring, assessing
Programme						
P4.2A: Increase the content of community centres		Prepa roadsh publici	ow,		Implement	Monitor, reassess
P4.2B: Build community facilities complying to universal design guidelines		Prepal roadsh publici	OW,		Implement	Monitor, reassess

	IMME	DIATE	SHO	ORT TERM	MEDIUM TERM	LONG TERM	
POLICIES	2011	-2102	20	013-2015	2016-2020	2021-2025	
P4.2C: Encourage smart partnership between public and private to provide and manage community facilities		Prepare, Coordinate roadshow, publicise		Coordinate	Implement	Monitor, reassess	
Initiative 4.3: Enhance facilities and improve convenience at recreational areas			g gap, ordina	preparing, ting	Implementing	Monitoring, assessing	
Programme							
P4.3A: Provide supporting services and shared facilities for existing parks		Prepare, publicise		Coordinate	Train, implement	Monitor, reassess	
P4.3B: Provide facilities to cater for the different needs of community		Prepare, publicise		Coordinate	Train, implement	Monitor, reassess	
P4.3C: Ensure good accessibility and transit services to recreational areas		Prepare, publicise		Coordinate	Train, implement	Monitor, reassess	
Initiative 4.4: Adopt and Implement Safe City Practices		Revie	ew, pre	eparing	Implementi monitoring, ass		
Programme:							
P4.4A: Implement all measures identified in Putrajaya Safe City programme		prepare Teri		coordinate, eference and ap	Implement, monit	or, assess	
P4.4B: Prepare Crime Prevention Through Environmental Design (CPTED) Guidebook			m of R toad M	eference and ap	Implement, monit	or, assess	
P4.4C: Enhance community centres as disaster / risk centres		Prepa	are, pu	blicise	Coordinate,	train	
Initiative 5.1: Enhance ecology, water body and bio-diversity		Reviewing preparing				nitoring, assessing	
Programme							
P5.1A: Conserve green lung of Putrajaya		Revie	ew, tak	ke inventory	Implement		
P5.1B: Enhance green connectivity		Plan		Coordinate	Implement	Monitor, assess	
P5.1C: Improve micro climate and reduce day temperature		Plan		Coordinate	Implement	Monitor, assess	

POLICIFO	IMME	EDIATE	SH	ORT TE	RM	١	MEDIUM TERM	LONG TERM
POLICIES	2011	-2102	2	013-201	5		2016-2020	2021-2025
P5.1D: Establish R & D centre in urban biodiversity, lake, wetlands and green related practices		Prepa roadsh public	OW,	set	Coordinate, Ge set up committee		et partners, research universities	Operate, reassess
Initiative 5.2: Application of green technology in city planning and management		Reviewing, preparing, promoting awareness		Promoting awareness, coordinating			Implementing, enforcing	Monitoring, assessing
Programme								
P5.2A: Encourage efficient use of water and alternative water source		Review,	plan		dinate w eTTHA	vith	Implement, enforce	Monitor, assess
P5.2B: Encourage efficient use of energy		Review,	plan		dinate w eTTHA	vith	Implement, enforce	Monitor, assess
P5.2C: Encourage use of renewable energy sources		Review,	plan		dinate w eTTHA	vith	Implement, enforce	Monitor, assess
P5.2D: Encourage usage of sludge as fertiliser		Review,	plan	Coordinate		<u> </u>	Implement, enforce	Monitor, assess
P5.2E: Develop material recovery facilities for solid waste		Review,	plan	Coordinate		<u>}</u>	Implement, enforce	Monitor, assess
Initiative 5.3: Adopting Sustainable Building Practices		Review prepari promot awaren	ing, ting	Promoting awareness, implementing		ı	Implementing, mon	itoring, assessing
Programme								
P5.3A: Enforce green building certification for new buildings		Review,	plan	Coord	inate	lr	mplement, enforce	Monitor, assess
P5.3B: Encourage retrofitting of existing building			Review	ı, plan	Coordi	nate	Implement, enforce	Monitor, assess
P5.3C: Provide incentives to support implementation of green buildings		Review, plan		Coordinate with KeTTHA and MIDA		Implement, enforce		Monitor, assess
Initiative 5.4: Establish model green community committed to reduction of carbon footprint		Reviewing, preparing, promoting awareness		Promoting awareness, coordinating			Implemeting, monit	oring, assessing
Programme								
P5.4A: Inculcate understanding of the communities on their role in reducing Carbon Footprint		Prepa roadsh		Coord	Coordinate Ir		plement campaigns, training	Reassess, improvise

	IMME	DIATE	SH	ORT TERM	MED	IUM TERM	LONG TERM
POLICIES	2011	-2102	2	013-2015	20	16-2020	2021-2025
		publicise					
P5.4B: Execute communities action in implementing carbon reduction measures		Prepare, roadshow, publicise		Coordinate		ent campaigns, training	Reassess, improvise
P5.4C: Establish the use of plant species that benefit the environment and their contribution towards carbon sequestration		Plan		Coordinate	In	nplement	Monitor, assess
		Reviewi	_	Promoting		nplementing, moni	toring, assessing
Initiative 6.1: Pursue Shift From Private Vehicles To Public Transport		preparing, promoting awareness		awareness coordinatin(
Programme							
P6.1A: Provide appropriate incentives for public transport users		Prepare, roadshow		Coordinate promote awareness implement		Monitor and	d assess
P6.1B: Improve bus services		Prepare	plan	Coordinate with bus operators		olement, monitor,	assess, improvise
P6.1C: Implement rail services as the main public transportation system		Prepare proadsh		Coordinate w MOT and transport operators	ith	Implement	Monitor, assess, improvise
P6.1D: Phasing the modal split target (Public transportation: Private transportation)		Prepare p action		Coordinate	In	nplement	Monitor, assess, improvise
P6.1E: Create community awareness on the use of public transport		Prepar roadsho publici	OW,	Coordinate	Implem	ent campaigns	Reassess, improvise
P6.1F: Implement the usage of smart card for public transport fare		Prepare plan, roadshow		and trans	dinate with MOT Imp nd transport erators, SPNB		Monitor, assess, improvise
P6.1G: Introduce water transportation as another mode of transportation		Р		repare plan of ac coordinate	tion,	Implement	Monitor, assess, improvise
P6.1H: Phasing the implementation of Park &Ride		Pı		repare plan of ac coordinate	tion,	Implement	Monitor, assess, improvise
P6.11 Impose paid and controlled parking at Core Island to reduce congestion		Prepare, roadsh		Coordinate, create awareness		Implement	Monitor, assess, improvise

DOLIOITO	IMME	DIATE	SH	ORT TERM	MEI	DIUM TERM	LONG TERM
POLICIES	2011	-2102	2	013-2015	2	016-2020	2021-2025
P6.1J Provide information on integrated buses and rails services at public places		Prepare	re plan Coordinate transport ope			Implement	Monitor, assess improvise
P6.1K Encourage car pooling through public campaign			Prepare, plan, Coordinate roadshow awarer			Implement	Monitor, assess improvise
P6.1L Impose development charges for plots with request for additional car park provision		Prepare, plan, Coordinate, roadshow awarene			Implement	Monitor, assess improvise	
Initiative 6.2: Increase the connectivity within Putrajaya and Putrajaya to external areas		prepari promot	Reviewing, Promoting awar preparing, coordinatin promoting awareness				ng, monitoring, g, improvising
Programme:							
P6.2A: To extend and integrate rail services to high density residential areas/job centres within and outside Putrajaya		Revie Prepare, roadsh	plan,	olan, awareness		Implement construction	Monitor, assess, improvise
P6.2B: Improve signage to guide road users		prepare f action	Coord	inate	Implement	Monitor, a	ssess, improvise
P6.2C: Provide a bridge that link from Precinct 4 to Precinct 19 to provide additional dispersal point		Prepare,	plan	Coordina		Implement construction	Monitor, assess improvise
Initiative 6.3: Implement the Use of Environment- friendly Vehicles		Review prepari promot awaren	ng, ing	Promoting	awareness		ng, monitoring, sessing
Programme							
P6.3A: Impose the usage of environment-friendly buses and taxis		Prepare publici	•		e with public operators	Implement	Monitor, assess improvise
P6.3B: Encourage the use of environment-friendly vehicles for commercial and private vehicles					e with public operators	Implement	Monitor, assess improvise
P6.3C: Provide supporting facilities for environment-friendly vehicles at strategic locations		Prepare plan, publicise		Coordinate with public transport operators		Implement	Monitor, assess improvise
Initiative 6.4: Increase road safety level		Preparing, promoting awareness		Promoting awareness, coordinating		Implementing, monitoring assessing	
Programme							
P6.4A: Conduct road safety audit		Prepare T	OR for	Coordinate	with MIROS	Implement imp	rovement outcome

	IMME	DIATE	SH	ORT TEF	RM	MED	IUM TE	ERM	LONG TERM
POLICIES	2011	-2102	20	013-201	5	20	16-202	20	2021-2025
for all roads in Putrajaya		Road S Auc		to C	onduct A	udit	it of audi		, improvise
P6.4B: To develop road safety guideline for pedestrian and cyclist and other road users in Putrajaya		Prepare plan, publicise		Coordinate with pub transport operators a internal departmen		ors and	s and		Monitor, assess, improvise
P6.4C: Implement traffic calming measures at strategic location especially in vicinity of schools and residential area		Prepare plan		Coordinate with interr departments			P		Monitor, assess, improvise
P6.4D: Enhance road safety campaign programmes		Review, plan, pu			nate with holders	Impl	ement	Mo	onitor, assess, improvise
P6.4E Strict enforcement of traffic regulations by authorities		c, prepare Coordinate with enforcement Imp authorities			plement Mor		Monitor, assess, improvise		
Initiative 6.5: Encourage Walking and cycling		Reviev prepai promo awarei	ring, oting		ting awar plementi		Monito	oring, asso	essing, improvising
Programme									
P6.5A: Provide a seamless, comfortable and safe pedestrian environment		Review, public	•		dinate, ca pation, or		Impl	lement, m	onitor, improvise
P6.5B: Provide dedicated routes		Plan, pu	blicise		dinate, ca pation, or		Imp	lement, m	onitor, improvise
P6.5C: Encourage bicycle for rent services		Plan, publicise			dinate, ca pation, or		Imp	lement, m	onitor, improvise
Initiative 7.1: Implement measures that support Core Island as an economic centre		Review, preparing			dinating, licising	lm	nplemen	ting, moni	itoring, assessing
Programme									
P7.1A: Review allowable activities in Core Island		Review	, study, pi	repare		nate,pub cise	Imp	olement, n	nonitor, improvise

	IMME	DIATE	SHO	RT TERM	M	IEDIUM TERI	M	LONG TERM
POLICIES	2011	-2102	201	3-2015		2016-2020		2021-2025
P7.1B: Impose street level retail activities			tudy, roads prepare		pordinate, Implement, publicise			nonitor, improvise
P7.1C Encourage temporary and regulated commercial development on vacant land		Review, study, prepare				rdinate with H, publicise	Imp	plement, monitor, improvise
Initiative 7.2: Implement measures to enhance periphery areas as residential neighbourhood		Revie prepar		Coordinatir organisin	_	Implementing	g, moni	toring, assessing
Programme								
P7.2A: Allow undeveloped government quarters plot to be converted to mixed residential use		Review, Prepare, plan		Coordinate Imp		Implement construction		Monitor, assess, improvise
P7.2B: Allow increase in density for apartment plots		Review, Prepare, plan		Coordinate	Coordinate			Monitor, assess, improvise
Initiative 7.3: Ensure seamless integration of activities and connectivity between public transportation facilities and their surrounding		Reviewing, preparing, publicising		Coordinating with operators, organising		Implementir	ng, mo	nitoring, assessing
Programme								
P7.3A: Allow higher intensity mixed use development for existing commercial and residential zones		Review g prepare		Coordinate		Impleme	nt	Monitor, assess, improvise
P7.3B: Encourage transit supportive activities at transport terminals and Park and Ride facilities		Prepare	e, plan	Coordinate PJH, development and tran operate	elopers sport	opers port		Monitor, assess, improvise
P7.3C: Encourage integration of rail station within commercial building plots		Prepare, plan		Coordinat PJH, deve and tran operat	lopers sport		nt	Monitor, assess, improvise
Initiative 7.4: Protect cultural identity, precints character and sense of place through sustainable urban design practise		Revie prepa		Coordina organis publicis	ing,	Implementir	ng, mo	nitoring, assessing

	IMME	DIATE	SH	ORT TERM	MED	IUM TERM	LONG TERM
POLICIES	2011	-2102	2	013-2015	20	16-2020	2021-2025
Programme							
P7.4A: Strengthen identity at selected precincts to differentiate their city functions		Prepare, plan		Coordinate, develop entry statements	lm	plement	Monitor, assess, improvise
P7.4B: Improve entry statements at all entry points		prepare		Coordinate, develop mprovements	Implement		Monitor, assess
P7.4C: Improve place making at public spaces		prepare		Coordinate, develop mprovements	lm	plement	Monitor, assess
P7.4D: Review urban design guidelines to adopt Green City initiatives		Review, prepare		Coordinate	lm	plement	Monitor, assess
Initiative 8.1: Adopt transparent, flexible and responsive management in city administration		Reviewing, planning, preparing		Coordinating organising, publicising internally	,	plementing, mon	itoring, assessing
Programme							
P8.1A: Form a high powered committee to evaluate and monitor implementation of development plans		Review, se high-leve committe prepare	el e,	Coordinate trouble shoo implementation funding	ot	onitor and improv	vise continuously
P8.1B: Appoint independent bodies to assess the performance of services provided by Perbadanan Putrajaya and other agencies		Review, prepare TOR, appoint consultants		Study results, coordinate, troubl noot implementati	le p ion req	onduct study periodically. Implement uired change panagement	Monitor and improvise continuously
P8.1C: Restructure roles and functions of some departments and/or divisions in Perbadanan Putrajaya		Internal review, prepare restructure plan		Implement		Assess	
P8.1D: Set up investment development subsidiary company, under Perbadanan Putrajaya in partnership with Putrajaya Holdings		Review, prepare TOR, study similar set-ups, determine functions		Coordinate w KWP, PJH implement	,	riew results and performance	Monitor and improvise continuously
P8.1E: Enact a by-law to gazette existing public buildings to conserve building design and structure		Review, roadshow, prepare draft bill, publicise		Coordinate with KWP, PJH, AG's office	Enact and enforce law		and improvise tinuously

	IMME	DIATE	SH	ORT TERM	MEDIL	JM TERM	LONG TERM
POLICIES	2011	-2102	2	013-2015	2016	6-2020	2021-2025
P8.1F: Conduct Putrajaya Population Census in 2015 and 2025		Prepare, roadshow, communicate with DOS		Coordinate implement cen in 2015, 202	sus Rev	view results	Coordinate, implement census in 2015, 2025
Initiative 8.2: Empower stakeholders in planning, decision making and city management		Reviewing, planning, preparing		Coordinating organising, promoting awareness publicising		ementing, moni improv	oring, assessing, ising
Programme							
P8.2A: Establish and implement LA21 activities		Review, prepare, determine scope and role		Coordinate w stakeholders residents, NG publicise, tra	results		Monitor and improvise continuously
P8.2B: Promote dialogue sessions between stakeholders and Perbadanan Putrajaya		Review, prepare, determine stakeholder	'S	Coordinate with stakeholders, residents, NGOs publicise, condu- lialogues periodic	ct	ew results of dialogues	Monitor and improvise continuously
P8.2C: Encourage public feedback on physical planning and Green City roadmaps through public participation		Review, prepare, organise		Coordinate, condi dialogues or pub feedback session	lic c	ew results of dialogues	Monitor and improvise continuously
P8.2D: Empower communities to manage and maintain community facilities at neighbourhood level		Prepare roadsho publicis	W,	Coordinate	Impl	lement	Monitor, reassess
Initiative 8.3: Encourage smart partnership in enforcement		Reviewing, planning, preparing		Coordinating organising	g, Impl	ementing, moni	toring, assessing
Programme							
P8.3A: Enhance coordination between Perbadanan and other enforcement authorities		Prepare, roadshow, publicise		Coordinate, discussion	Implement, improvement		Monitor, reassess
P8.3B: Empower Perbadanan Putrajaya and other related		Prepare	9,	Coordinate,	Implement,	improvement	Monitor,

POLICIES	IMMEDIATE		SH	HORT TERM	MEDIUM TERM	LONG TERM
POLICIES	2011-2102		2	2013-2015	2016-2020	2021-2025
agencies to effectively regulate and enforce law in the city		roadshow, discus publicise		discussion		reassess
P8.3D: To continuously carry out awareness programme		Review, prepare, publicise		Coordinate with stakeholders, residents, NGOs publicise, condudialogues, briefing trainings, periodica	s, ct gs,	Monitor and improvise continuously

Note: Cells highlighted in green indicates involvement of other parties as major implementer.

4.2 Key Roles of Perbadanan Putrajaya (Putrajaya Corporation) in the Implementation of the Structure Plan

As it can be witnessed in Exhibit 4.1, Perbadanan Putrajaya (PPj)has been identified to play a pivotal role in the implementation of various initiatives and programmes of this Draft Structure Plan. This would depend very much on the following:

- 1. the ability and the capacity of the workforce under PPj. It is thus imperative that PPjprovides the required training for its workforce to ensure successful provision of the services expected by the city in the future.
- 2. strict adherence to the policies stated under this Draft Structure Plan. Future planning, development as well as to a certain extent management and the administration of the city must be guided by, but not limited to, the policies of this Draft Structure Plan. These policies should also be subject to reviews over time as provided by the Town and Country Planning Act 1976 (Act 172).
- 3. the need for high level coordination between PPj and various institutions operating at Putrajaya. This constitutes mainly top management of ministries and agencies under the ministries concerned. In order to have a successful involvement and commitment of the various ministries which are related directly and indirectly to the initiatives and programs listed, it is critical that roadshows are held by PPj being the main custodian of the Draft Structure Plan, city administrator as well as the planning authority for Putrajaya. This initiative will increase the awareness of those concerned and enable the agencies concerned to take part actively in the implementation of the policies successfully and take the view that the successful implementation does not rest solely with PPj.

For example, PPineeds to get the cooperation of Ministry of Malaysia and Tourism Malaysia to initiate and introduce more tourism activities and



forupgradingof existing tourism activities at Putrajaya.

PPj will need to administer and manage the tourism sites while Ministry of Tourism (Putrajaya) will be required to promote and market Putrajaya attractions and organise major activities aimed at drawing large number of tourists to Putrajaya. Tourism Malaysia, together with Ministry of Tourism (Putrajaya) will promote Putrajaya through the web and foreign missions.

To coordinate their joint activities, it is imperative that a Task Force for Tourism Development is formed, and headed jointly by the Minister of Tourism and the Minister of Federal Territory and Urban Wellbeing (KWP).

- 4. a need for changes in the organisational structure to address the challenges of the future. Among these are:
 - (a) Economic Planning and Development Division (EPPD), to be introduced under the Corporate Services Department. The proposed functions of the EPPD are:
 - i. Plan and coordinate economic development programs at Putrajaya
 - ii. Plan and coordinate development projects under PPi
 - iii. Plan, coordinate and promote economic development programs, tourism, commercial and corporate business at Putrajaya
 - iv. Plan and develop programs to internationalise Putrajaya
 - v. Examine and review services of PPjthat can be outsourced or privatised

vi. Provide advise in economic matters to other departments at PPj.

This proposal may not incur additional costs as the manpower required could be sourced internally. EPPD will need to have strong ability to influence and vet through development proposals and will be a division that would protect the interest of all and promote economic initiatives of the city.

In the long run, EPPD can be turned into a department on its own. The EPPD is proposed to consists of:

- Tourism Development Unit i.
- Privatisation & Outsourcing Unit ii.
- iii. Economic Planning Unit

In addition, Investment Development Company should be set up as a subsidiary under PPjbut monitored by this division according to Section 29 of Act 536, with the participation of PJH.The achievement of the Key Performance Indicators of the EPPD is to be presented to the Board of PPjannually.

(b) Local Agenda 21 (LA21) Programme Implementation Unit is to be introduced under the Strategic Planning Unit under the Corporate Services Department. This unit will strategise and enhance the implementation of public participation programs that are bottom-up in nature. This unit would also function as a mechanism to obtain public feedback, inculcate the sense of belonging, reduce cost of service through participation of the public and increase the healthy interaction between the stakeholders and the administrators. The unit will be able to mobilise and activate the three forms of establishments - Resident Associations, Rukun Tetangga and Komuniti Bistari. Currently, only Resident Associations comes under the purview of PPi.

A major component of the initiative is to promote sense of belongingness among the stakeholders with slogan а Putrajaya".LA21 is also to ensure that the residents take charge of some of the facilities

and services provided at their neighbourhood, and towards this some form of grants should be provided for the resident organisations.

In order to ensure successful implementation of LA21 programs and activities under PPJ, it is proposed that the Unit obtains the support and guidance of the City Council of Petaling Jaya. In addition, it will be necessary to appoint a full time consultant for a specific period to ensure the activities are well planned and implemented. The consultant will also be able to train the staff to adopt LA21.

A LA21 Programme Implementation Committee ought to be established as well to monitor the overall implementation of LA21 at Putrajaya.

- 5. Heavy reliance on smart partnership. Many programmes outlined depends a lot on the involvement of various stakeholders in Putrajaya. Thus there is a need for a strong partnership and goodwill between the stakeholders and PPj in turning the Structure Plan intents into reality.
- 6. a need to obtain greater commitment of PJH. PJH is the largest developer with the largest landbase in Putrajaya. With direct involvement of PJH in development planning, it is possible for seamless success in implementing physical and infrastructure development in Putrajaya. It is thus important that PJH is invited to be a partner in land use development in Putrajaya by being a member of the Putrajaya Corporation Board. This will also require an amendment to Section 5 of Act 536.

7. to gazette the Structure Plan

- a need for a stringent monitoring mechanism to be put in place. This would require the followings:
 - Structure Plan i. *Implementation* Committee. This committee can also undertake to monitor the implementation of Local Plans that arise from this Plan. This committee is to be headed by the President of PPjand the secretariat is the Planning

Department. The committee meets periodically to monitor the progress of the proposed plans.

- ii. Periodical surveys. There is a need to conduct periodical surveys to evaluate the level of satisfaction of the services provided in PPj. The survey also includes services that are outside the jurisdiction of PPj, such as by the utility companies, and solid waste management. In order to ensure independence and effective response seeking, perhaps this should be done using the expertise of local universities. The results of the surveys should also be made public to stimulate provision of more quality services.
- iii. Administrative review committee. This committee will evaluate the quality of services provided (including the results of the independent surveys), assets management, enforcement implementation of good governance by PPj.



PERBADANAN PUTRAJAYA Kompleks Perbadanan Putrajaya 24, Persiaran Perdana, Presinst 3, 62675 PUTRAJAYA, Malaysia. Tel : 603 8887 7000 Fax : 603 8887 5000 www.ppj.gov.my