

Petaling Jaya City Council - Cities 2019

Introduction

(0.1) Please give a general description and introduction to your city including your city's reporting boundary in the table below.

	Administrative boundary	Description of city
City boundary	City / Municipality	Petaling Jaya City has a governance area of 97.2 square kilometre is governed by the Petaling Jaya City Council (MBPJ)

City Details

(0.3) Please provide information about your city's Mayor or equivalent legal representative authority in the table below:

	Leader title	Leader name	Current term end month	Current term end year
Please complete	Mayor	Mohd Sayuti Bin Bakar	April	2021

(0.4) Please select the currency used for all financial information disclosed throughout your response.

MYR Malaysian Ringgit

(0.5) Please provide details of your city's current population. Report the population in the year of your reported inventory, if possible.

	Current population	Current population year	Projected population	Projected population year
Please complete	658611	2010	800000	2020

(0.6) Please provide further details about the geography of your city.

	Land area of the city boundary as defined in question 0.1 (in square km)
Please complete	97.2

Governance and Data Management

Governance

(1.0) Does your city incorporate sustainability goals and targets (e.g. GHG reductions) into the master planning for the city?

Yes

(1.0a) Please detail which goals and targets are incorporated in your city's master plan and describe how these goals are addressed in the table below.

Goal type	How are these goals/targets addressed in the city master plan?
Emissions reduction targets	These goals are contained within the Petaling Jaya Low Carbon City Climate Plan which is the City Climate Action Plan initiative of the council. Under the terms of this climate action plan, the following goals are targeted: <input type="checkbox"/> Achieve a reduction in emissions of 30% from a 2014 baseline. <input type="checkbox"/> Become a leading low carbon city <input type="checkbox"/> Provide an integrated, coherent approach to carbon management <input type="checkbox"/> Motivate and inspire a common goal of reducing carbon. <input type="checkbox"/> Deliver long term financial savings This document sets the vision for transforming the PJ city council into a sustainable city. The council intends to build on international commitments that Malaysia has made to tackle climate change. The document basically defines which low carbon city activities will be carried out for the next 15 years by setting the baseline for strategic context and the subsequent case for action. Current carbon emissions and proposed actions are envisaged to reduce emissions At the same time, estimates on costs and savings have been made alongside monitoring and verification activities. In line with GPC basic city level reporting, our footprint is estimated to be almost 3500 ktonnes of CO2. In a BAU scenario, these emissions will double by 2030 due to population and expected economic growth. PJ city councils hopes to de-couple its growth from carbon emissions and thereby reduce its footprint in the context of a BAU scenario. The carbon footprints is estimated to reduce by 30% by 2030. The council has already identified projects that would help save 6 million tonnes of tCO2 alongside RM 9 billion. This would reduce approximately 50% of the savings required. To achieve its the council has set interim targets of reducing emissions by 10% by end of 2020 and 20% by end of 2025.
Energy efficiency targets	Building energy use has been identified as the largest energy consumption sector in Petaling Jaya. Under upcoming new building developments, the council intends to reduce emissions by 260 kilo tCO2 /yr. They plan to do this by supporting and promoting Green building Index implementation for new projects in order to make the required reductions For the Industrial & Commercial sectors, the council will encourage the reduction emissions by 44 kilo tCO2/yr. They will do this by encouraging energy management and monitoring & targeting. Furthermore, they would promote LED lighting along with the combined use of property energy efficient motors & drives They would also look into industrial process isolation as a form of mitigation measure. There is also the intention that the council would expect to reduce household residential emissions by 4 tonne CO2/year through the implementation of its property tax rebate scheme.
Renewable energy targets	Petaling Jaya city council has set a Renewable Energy target where 30% of its power generation would be reduced against 2030 BAU forecast. The way that they would do this is by installing Solar PV to generate 30% of 2030 forecasted requirements
Waste management targets	The council has set a goal and target that 30% of its residential households would practice recycling. The council has also set a target in which they intend to reduce the total amount of waste produced in Petaling Jaya by 10% by 2025 and 25% by 2030 against BAU growth estimates.
Other	The council has set a transportation strategy to reduce Private Vehicle Emissions where the goal is to reduce emissions by 30 kilo tCO2/yr. they intend to do this by increasing the size of their bus fleet and also to encourage public transport use through better links and scaled up Park N Ride schemes. They also intend to scale up the use of hybrid vehicles by providing free parking lots for hybrid vehicle usage. In terms of Electric Vehicles usage, the council intends to install supporting infrastructure via government assistance and target the procurement of 1000 EVs by the city's residents at the end of 2020. Cycling and pedestrians are also not forgotten. A master plan for cycling on Petaling Jaya main lanes has also been initiated.
Adaptation targets	There are a number of adaptation efforts being made. The council is expanding its urban forest canopy by planting 25,000 trees by the end of 2020 and 75,000 trees by 2025. The Petaling Jaya city council is also planning to commence with a climate risk and resilience study coming soon.

(1.1) Has the Mayor or city council committed to climate adaptation and/or mitigation across the geographical area of the city?

Yes

(1.1a) Please select any commitments to climate adaptation and/or mitigation your city has signed and attach evidence.

Name of commitment and attach document

Individual city commitment
mbpj-low-carbon-city-action-plan-2015-2030.pdf

Type of commitment

Both

Comments

Please refer to the MBPJ Low Carbon City Action Plan (City Climate Action Plan) document attached. The city climate action plan spans from 2015 - 2030. This document has calculated the GHG inventory for the whole city including the local government GHG emissions. MBPJ has now developed a city climate action up to 2030. This action plan commits the city to a target of reducing CO2 by 30% by 2030 against business as usual. The council has currently identified projects that could save 6 million tCO2 and RM 9 billion net. This will contribute to around 50% of the savings required.

Name of commitment and attach document

Individual city commitment
mbpj-carbon-management-plan-2015-2020.pdf

Type of commitment

Both

Comments

Majlis Bandaraya Petaling Jaya (MBPJ) worked with the Carbon Trust in 2015 in order to develop a carbon plan through to 2020. This Carbon Management Plan commits MBPJ to a target of reducing CO2 by 25% between 2014 and 2020, and underpins potential financial savings to the organisation of around RM 3.7m per year by that date. This is different from the above report as it is calculating CO2 emissions from their internal operations. Savings will be achieved through a variety of different projects, including upgrading building and street lighting to LEDs, upgrading building cooling systems and building fabric and installing solar panels on a number of buildings in MBPJ's portfolio. The cost of implementing the projects in this plan has been estimated at RM50, with anticipated financial savings of RM3,693,130 per annum by 2020. Due to the long duration of the projects to be implemented, these projects will yield savings well beyond the lifetime of this plan. Tackling carbon emissions within our own estate is the first step in understanding and identifying the emissions released by the municipality as a whole. This plan provides a platform from which we can extend our focus and catalyse action on carbon management across the Petaling Jaya. Summary of key goals: Achieve a reduction in emissions of 25% from a 2014 baseline by 2020 across the municipal estate and streetlighting Become a leader in carbon management in Malaysia Motivate and inspire staff to a common goal of reducing carbon to tackle climate change Deliver long term financial savings - RM3.7m per annum by 2020

Name of commitment and attach document

Individual city commitment
REL2-Carbon-Baseline-Report_PJS13_10122014-ver1.3.pdf

Type of commitment

Both

Comments

In 2011, the energy, green technology and water ministry (now known as the Energy, Technology, Science, Climate Change and Environment Ministry) introduced the Low Carbon Cities Framework (LCCF) to guide local authorities and developers in making decisions on greener solutions. It is aimed at achieving sustainable development, reducing carbon emissions in cities and townships and contributing towards the national commitment to reducing up to 40 per cent of greenhouse gas (GHGs), in terms of emission intensity by gross development product, by 2020 against the 2005 levels. The first phase of the LCCF involved five cities including Iskandar Malaysia in Johor, Hang Tuah Jaya in Malacca, Petaling Jaya in Selangor and Miri in Sarawak. In the case of Petaling Jaya, they are applying for diamond status recognition under the Low Carbon City Framework for their pilot study project in Section 13 which is a mixed development suburb within the city. The following report was prepared as the baseline report by the Government agency in charge of the low carbon city Framework: Green Technology Malaysia. The details of the possible savings for this pilot study are as the study attached.

Climate Hazards & Vulnerability

Risk and Vulnerability Assessment

(2.0) Has a climate change risk and vulnerability assessment been undertaken for the city area?

Yes

(2.0a) Please select the primary process or methodology used to undertake the risk and vulnerability assessment of your city.

	Primary methodology	Description
Risk assessment methodology	Agency specific vulnerability and risk assessment methodology	This Urban Storm water Management Manual for Malaysia (MSMA 2nd edition) is an improved version of the MSMA 1st Edition that provides planning & design guidance to all those involved in the management of storm water. The goal of this manual is to provide easy guidance to all regulators, planners and designers who are involved in storm water management implementation which is often undertaken by a number of organizations. The challenge is to ensure that the administration of planning, design and maintenance of storm water management systems is consistent across the relevant Local, State and Federal Authorities and the professions of urban development, environmental, water resources civil engineering and landscape architecture.

(2.0b) Please attach and provide details on your climate change risk and vulnerability assessment. Please provide details on the boundary of your assessment, and where this differs from your city's boundary, please provide an explanation.

Publication title and attach the document

Urban Storm Water management manual for Malaysia
MSMA2ndEdition_august_2012.pdf

Year of adoption from local government

2009

Web link

https://www.water.gov.my/jps/resources/PDF/MSMA2ndEdition_august_2012.pdf

Boundary of assessment relative to city boundary (reported in 0.1)

Larger – covers the whole city and adjoining areas

Explanation of boundary choice where the assessment boundary differs from the city boundary

The document is a federal document but has been adopted by the Petaling Jaya city council for local use

Areas/sectors covered by the risk and vulnerability assessment

Water Supply & Sanitation

Primary author of assessment

National / central government

Does the assessment identify vulnerable populations?

No

Publication title and attach the document

Guidelines for the rehabilitation and development of environmentally sensitive areas
GPP_KSAS_(Final).pdf

Year of adoption from local government

2012

Web link

<https://www.townplan.gov.my/index.php/agensi/penerbitan-planmalaysia/penerbitan-garis-panduan-perancangan/1873-pemuliharaan-pembangunan-kawasan-sensitif-alam-sekitar-ksas/file>

Boundary of assessment relative to city boundary (reported in 0.1)

Larger – covers the whole city and adjoining areas

Explanation of boundary choice where the assessment boundary differs from the city boundary

This is a federal document which was applied by the local government . Preparation of Planning Guidelines Conservation and Development (GPPPP) Environmental Sensitive Areas (KSAS) is intended to assist State Government and local authorities on how to specify type of land use and development activities which is allowed and not allowed in KSAS. Planning control is based on the standard requirements minimum planning for each type land use. This GPPPP can also be used in the preparation of the Development plan for controlled and purposeful planning and management of the environmentally sensitive area. Hence, it becomes a necessity for the state government to establish Natural Sensitive Area Committee (JKSAS) to assist local authorities control any form of development thus safeguarding the Environmentally Sensitive Area.

Areas/sectors covered by the risk and vulnerability assessment

Environment, Biodiversity and Forestry

Primary author of assessment

National / central government

Does the assessment identify vulnerable populations?

Yes

Climate Hazards

(2.1) Please list the most significant climate hazards faced by your city and indicate the probability and consequence of these hazards, as well as the expected future change in frequency and intensity. Please also select the most relevant assets or services that are affected by the climate hazard and provide a description of the impact.

Climate Hazards

Flood and sea level rise > Flash / surface flood

Did this hazard significantly impact your city before 2019?

Yes

Current probability of hazard

Medium

Current consequence of hazard

Medium Low

Social impact of hazard overall

Other (Mainly traffic congestion incurs due to inconvenience posed to the public)

Future change in frequency

Increasing

Future change in intensity

Please select

When do you first expect to experience those changes?

Immediately

Most relevant assets / services affected overall

Transport
Society / community & culture

Please identify which vulnerable populations are affected

Other (Everyone is impacted)

Magnitude of expected future impact

Medium

Please describe the impacts experienced so far, and how you expect the hazard to impact in the future

Heavy rain causes drains to overflow thus causing flash floods. The occurrence of flash floods is also due to the back flow from the Klang River in Petaling Jaya.

(2.2) Please identify and describe the factors that most greatly affect your city's ability to adapt to climate change and indicate how those factors either support or challenge this ability.

Factors that affect ability to adapt	Support / Challenge	Please describe the factor and the degree to which it supports or challenges the adaptive capacity of your city
Infrastructure conditions / maintenance	Challenge	Drainage infrastructure is insufficient and costly to build. Poor waste disposal by the public also cause clogging of drains which reduces the ability of drains to divert excess rainwater.
Community engagement	Support	Rainwater harvesting systems are being mandated in commercial and institution developments as a source of water that could be used for non drinking water. On site detention tanks which also include Rainwater Harvesting systems are also mandatory.

Adaptation

Adaptation Actions

(3.0) Please describe the main actions you are taking to reduce the risk to, and vulnerability of, your city's infrastructure, services, citizens, and businesses from climate change as identified in the Climate Hazards section.

Climate hazards

Flood and sea level rise > Flash / surface flood

Action

Flood mapping

Action title

Hotspots for flash flood areas have identified

Status of action

Implementation

Co-benefit area

Disaster Risk Reduction

Disaster preparedness

Shift to more sustainable behaviours

Action description and implementation progress

The On Site Detention Tanks have been built and drainage systems have been upgraded. With these technologies in place, the capacity to detain water during heavy downpour or runoff has been enhanced.

Finance status

Finance secured

Total cost of the project

37000000

Total cost provided by the local government

37000000

Primary fund source

Local

Web link

The figure is based on the audited budget of the Petaling Jaya city council which is not disclosed to the public

Climate hazards

Flood and sea level rise > Flash / surface flood

Action

Landslide risk mapping

Action title

Guidelines on planning and development of Gasing Hill area in Petaling Jaya based on the level of danger and risk (2015)

Status of action

Implementation

Co-benefit area

Disaster Risk Reduction

Enhanced resilience

Disaster preparedness

Resource conservation (e.g. soil, water)

Ecosystem preservation and biodiversity improvement

Action description and implementation progress

A total of 229 slopes in Selangor are identified as critical and require immediate action by local authorities (PBTs) involved in the state. In Petaling Jaya, about 13 slopes require critical action. Consequently, Petaling Jaya is monitoring according to the method recommended by the inhouse engineering department together with the support of external geotechnical consultants. In this regard, Petaling Jaya city council has allocated financial provisions to outsource the maintenance of these slopes to external consultants as they do not have sufficient expertise.

Finance status

Finance secured

Total cost of the project

4200000

Total cost provided by the local government

4200000

Primary fund source

Local

Web link

Adaptation Planning

(3.1) Does your city council have a published plan that addresses climate change adaptation?

Yes

(3.1a) Please provide more information on your plan that addresses climate change adaptation and attach the document. Please provide details on the boundary of your plan, and where this differs from your city's boundary, please provide an explanation.

Publication title and attach the document

Petaling Jaya City Council Low Carbon City Plan
mbpj-low-carbon-city-action-plan-2015-2030.pdf

Areas covered by adaptation plan

Energy
Building and Infrastructure
Spatial Planning
Waste
Public Health and Safety

Year of adoption from local government

2015

Boundary of plan relative to city boundary (reported in 0.1)

Same - covers entire city and nothing else

If the city boundary is different from the plan boundary, please explain why and any areas/other cities excluded or included

Stage of implementation

Plan in implementation

Type of plan

Addressed in city sector plan

Has your local government assessed the synergies, trade-offs, and co-benefits, if any, of the main mitigation and adaptation actions you identified?

Intending to undertake in the next 2 years

Comment or describe the synergies, trade-offs, and co-benefits of this interaction

The council is serious about adaptation. Petaling Jaya city council is preparing adaptation plans for buildings and other important infrastructure in the next two years. The trade off is that these adaptation actions are a form of costly investment

Primary author of plan

Consultant

Description of the stakeholder engagement processes

The document was prepared by Carbon Trust through consultation with stakeholders of Petaling Jaya city as identified together with the council.

Web link

Adaptation Goals

(3.2) Please describe the main goals of your city’s adaptation efforts and the metrics / KPIs for each goal.

Adaptation goal

100,000 trees are to be planted by the city council to reduce urban heat island impact within Petaling Jaya

Target year

2030

Metrics / indicators

100,000 trees are to be planted by 2030, Interim targets have also been set for 2020 and 2025 respectively.

Percentage of target achieved so far

8

Does this target align with a requirement from a higher level of government?

Yes

Adaptation goal

New developments will have to adhere or meet the requirements of the green building standards. In other words, buildings have to meet the criteria on energy and water efficiency. This is to be reflected in the building plans submitted to the city council. This GBI requirement, however, is only required for bigger-scaled developments like commercial units or mixed developments. In addition, developers are also required to include a landscape area of about 10% to 15% in their projects. This space will have to be free from utilities and other structures and set aside for landscaping.

Target year

2030

Metrics / indicators

10-15% of total development area must be allocated for green spaces in new commercial development built in Petaling Jaya.

Percentage of target achieved so far

100

Does this target align with a requirement from a higher level of government?

Yes

City Wide Emissions

City-wide GHG Emissions Data

(4.0) Does your city have a city-wide emissions inventory to report?

Yes

(4.1) Please state the dates of the accounting year or 12-month period for which you are reporting your latest city-wide GHG emissions inventory.

	From	To
Accounting year dates	January 1 2014	December 31 2014

(4.2) Please indicate the category that best describes the boundary of your city-wide GHG emissions inventory.

	Boundary of inventory relative to city boundary (reported in 0.1)	Excluded sources / areas	Explanation of boundary choice where the inventory boundary differs from the city boundary (include inventory boundary, GDP and population)
Please explain	Same – covers entire city and nothing else	The emission inventory only covers Scope 1 emissions which is within the boundary of municipal's own operations.	

(4.3) Please give the name of the primary protocol, standard, or methodology you have used to calculate your city's city-wide GHG emissions.

	Primary protocol	Comment
Emissions methodology	Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)	

(4.3a) The Global Covenant of Mayors requires committed cities to report their inventories in the format of the new Common Reporting Framework, to encourage standard reporting of emissions data. If your city is reporting an updated inventory, we encourage reporting this in the CRF format, for which guidance can be found in the link below. Would you like to report your inventory in the CRF format or continue to report in the GPC format? Please ensure you respond to this question in order for the correct emissions breakdown questions to be displayed.

No – continue to use the GPC format

(4.4) Which gases are included in your city-wide emissions inventory? Select all that apply.

CO2

(4.5) Please attach your city-wide inventory in Excel or other spreadsheet format and provide additional details on the inventory calculation methods in the table below.

Emissions inventory format

GPC format: City Inventory Reporting and Information System (CIRIS) GPC Reporting tool

Document title and attachment

Petaling Jaya Low Carbon City Action Plan (Uses GPC BASIC)
mbpj-low-carbon-city-action-plan-2015-2030.pdf

Emissions factors used

IPCC

Global Warming Potential (select relevant IPCC Assessment Report)

IPCC 4th AR (2007)

Please select which additional sectors are included in the inventory

Please select

Population in inventory year

619925

Overall Level of confidence

High

Comment on level of confidence

The inventory was prepared by Carbon Trust, an accredited UK based company under the Malaysia Low Carbon Cities programme funded by the UK government About the Malaysia Low Carbon Cities Programme This is a three year programme working with municipalities within Greater Kuala Lumpur to create Low Carbon City Strategies. Following extended application processes in 2014, 2015 and 2016 where all municipalities within Greater Kuala Lumpur were invited to express interest in participating in the programme, Kuala Lumpur City Hall (DBKL), Petaling Jaya City Council (MBPJ) and Ampang Jaya City Council (MPAJ) have been selected to work in partnership with the Carbon Trust and the UK Foreign & Commonwealth Office, receiving dedicated support to develop robust five-year carbon management strategies for the Council own administrative estates as well as city-wide carbon reduction strategies. This approach has enabled the chosen Councils to lead by example in driving climate change mitigation initiatives in Greater KL, as well as saving energy costs for their own taxpayers. The Carbon Trust project team has worked closely with all three municipalities to develop a city-wide carbon reduction plan. The plan outlines the strategy for reducing the carbon intensity of the cities' buildings, transport and waste infrastructure. It also details the cities' plan for the uptake of renewable technology. These engagements are acting as compelling case studies of what city councils can achieve, and are leading the low-carbon city revolution across Malaysia and SE Asia more widely.

(4.6b) Please provide a summary of emissions by sector and scope as defined in the Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC) in the table below.

	Emissions (metric tonnes CO2e)	Where data is not available, please explain why
Stationary Energy: energy use – Scope 1 (I.X.1)		Data not available from council as Carbon Trust did not provide the excel sheet to the council. All the explanation is per the report attached.
Stationary Energy: energy use – Scope 2 (I.X.2)		
Stationary Energy: energy use – Scope 3 (I.X.3)		
Stationary Energy: energy generation supplied to the grid – Scope 1 (I.4.4)		
Transportation – Scope 1 (II.X.1)		
Transportation – Scope 2 (II.X.2)		
Transportation – Scope 3 (II.X.3)		
Waste: waste generated within the city boundary – Scope 1 (III.X.1)		
Waste: waste generated within the city boundary – Scope 3 (III.X.2)		
Waste: waste generated outside the city boundary – Scope 1 (III.X.3)		
Industrial Processes and Product Use – Scope 1 (IV)		
Agriculture, Forestry and Land Use – Scope 1 (V)		
TOTAL Scope 1 (Territorial) emissions		
TOTAL Scope 2 emissions		
TOTAL Scope 3 emissions		
TOTAL BASIC emissions		
TOTAL BASIC+ emissions		

(4.8) Please indicate if your city-wide emissions have increased, decreased, or stayed the same since your last emissions inventory, and describe why.

	Change in emissions	Primary reason for change	Please explain and quantify changes in emissions
Please explain	Please select	<Not Applicable>	

(4.9) Does your city have a consumption-based inventory to measure emissions from consumption of goods and services by your residents?

	Response	Provide an overview and attach your consumption-based inventory if relevant
Please complete	Not intending to undertake	

City-wide external verification

(4.11) Has the city-wide GHG emissions data you are currently reporting been externally verified or audited in part or in whole?

Do not know

Historical emissions inventories

(4.12) Please provide details on any historical and base year city-wide emissions inventories your city has, in order to allow assessment of targets in the table below.

Inventory date from

January 1 2014

Inventory date to

December 31 2014

Scopes / boundary covered

Scope 1 (direct)

Scope 2 (indirect)

Scope 3 (other indirect)

Previous emissions (metric tonnes CO2e)

3496000

Is this inventory used as the base year inventory?

Yes

Methodology

Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)

File name and attach your inventory

MBPJ Low carbon city action plan 2015-2030

Comments

Emission sources and scopes included in a) All Scope 1 emissions from Stationary Energy sources (Excluding energy production supplied to the grid) b) All Scope 1 emissions from Transportation sources c) All Scope 1 emissions from Waste sources (excluding emissions from imported waste) d) All Scope 2 emissions from Stationary Energy Sources and Transportation e) Scope 3 emissions from treatment of exported waste Data quality for this 2014 is considered to be standard. It is recognized that the national 40% reduction target ses 2005 as a baseline. However, it is believed that using a 2005 baseline would not be appropriate or reflective of current city activities

Re-stating previous emissions inventories

(4.13) Since your last submission, have you needed to recalculate any past city-wide GHG emission inventories previously reported to CDP?

Please select

Emissions Reduction

Mitigation Target setting

(5.0) Do you have a GHG emissions reduction target in place at the city-wide level? Select all that apply.

Base year emissions (absolute) target

(5.0a) Please provide details of your total city-wide base year emissions reduction (absolute) target. In addition, you may add rows to provide details of your sector-specific targets, by providing the base year emissions specific to that target.

Sector

All emissions sources included in city inventory

Where sources differ from the inventory, identify and explain these additions / exclusions

Boundary of target relative to city boundary (reported in 0.1)

Same – covers entire city and nothing else

Base year

2014

Year of target implementation

2030

Base year emissions (metric tonnes CO₂e)

3496000

Percentage reduction target

30

Target year

2030

Target year absolute emissions (metric tonnes CO₂e)

2447000

Percentage of target achieved so far

8

Does this target align with the global 1.5 - 2 °C pathway set out in the Paris Agreement?

Do not know

Please indicate to which sector(s) the target applies

Energy industry
Heating and cooling supply
Commercial buildings
Residential buildings
Public facility
Industrial facilities
Transport

Does this target align to a requirement from a higher level of sub-national government

Yes

Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.

As pledged in our Nationally Determined Contribution (NDC), Malaysia intends to reduce the greenhouse gas (GHG) emissions intensity of GDP by 45% by 2030 relative to the emissions intensity of GDP in 2005. This consists of 35% on an unconditional basis and a further 10% is conditional upon receipt of climate finance, technology transfer and capacity building from developed countries. It is expected that Petaling Jaya's target is of higher value because it refers to reduction in absolute value rather than intensity.

(5.2) Is your city-wide emissions reduction target(s) conditional on the success of an externality or component of policy outside of your control?

Yes

(5.2a) Please identify and describe the conditional components of your city-wide emissions reduction target(s).

The lack of data compilation is a problem for Malaysian cities. Furthermore, the expertise to calculate emissions primarily lies with federal agencies rather than city or even state level.

(5.3) Does your city-wide emissions reduction target(s) account for the use of transferable emissions units?

No

Mitigation Actions

(5.4) Describe the anticipated outcomes of the most impactful mitigation actions your city is currently undertaking; the total cost of the action and how much is being funded by the local government.

Mitigation action

Buildings > Carbon emissions reduction from industry

Action title

Mandatory Green Building Index (GBI) for all new development projects in Petaling Jaya

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Policy and regulation

Financial mechanism

Sustainable public procurement

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO₂e)

128751.91

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Other (Accumulated CO₂ and energy savings from 2010)

Co-benefit area

Enhanced resilience

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Greening the economy

Economic growth

Promote circular economy

Job creation

Resource conservation (e.g. soil, water)

Ecosystem preservation and biodiversity improvement

Improved access to and quality of mobility services and infrastructure

Shift to more sustainable behaviours

Improved access to data for informed decision-making

Action description

In line with growing concerns about climate change and the need for sustainable building designs in Malaysia, the Green Building Index (GBI) tool was created in 2008. An initiative developed by Pertubuhan Akitek Malaysia (PAM) and the Association of Consulting Engineers Malaysia (ACEM), GBI serves to encourage developers to keep the environment in mind when designing and constructing buildings. This tool grades a development using key green building measures where the better the score, the higher the certification level. Ranked from GBI Certified, followed by GBI silver, GBI Gold and GBI Platinum, these certifications are issued by the GBI Accreditation Panel (GBIAP), an independent panel comprising of senior professionals. Even though the GBI accreditation is on voluntary basis based on market forces, Petaling Jaya City Council has made it mandatory for all type of commercial, residential and institutional (public service oriented) developments. As compared to other councils where this requirement is voluntary, the mandatory implementation has enabled Petaling Jaya to have 126 registered GBI buildings. Out of these 126 buildings, 21 buildings have been completed and verified as GBI buildings by the Green Building Index Private Limited together with the support of Petaling Jaya City Council. By ensuring that the developers to submit the design in conforming to the GBI requirements, the city council is adhering to achieving the Low carbon city climate action plan mitigation target. Many developers are attracted to apply for GBI these days because there are many benefits associated with the certification including

superior indoor air quality, increased living comfort through passive design, lower utility bills, higher resale value down the road and of course the promotion of a green cooperate image for the developer.

Finance status

Finance secured

Total cost of the project

0

Total cost provided by the local government

0

Primary fund source

Other (The GBI is solely a private sector initiative with support from the city council.)

Web link to action website

[http://www.mgbc.org.my/Downloads/IGEM2012/IGEM2012%20-%20MGBC%20GBI%20Updates%20\(VKL\).pdf](http://www.mgbc.org.my/Downloads/IGEM2012/IGEM2012%20-%20MGBC%20GBI%20Updates%20(VKL).pdf)

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Finance and Economic Development > Instruments to fund low carbon projects

Action title

Property Tax rebates for environmentally friendly household owners to facilitate low carbon residential units

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Implementation status

Monitoring and reporting

Estimated emissions reduction (metric tonnes CO2e)

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Other (The scheme, which was first introduced in 2011, has in total waived assessment worth RM 414,380.48 for 1,240 households in the city up to 2018)

Co-benefit area

Enhanced resilience

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Social inclusion, social justice

Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved resource quality (e.g. air, water)
Improved public health
Improved resource security (e.g. food, water, energy)
Resource conservation (e.g. soil, water)
Ecosystem preservation and biodiversity improvement
Improved access to and quality of mobility services and infrastructure
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

Petaling Jaya City Council (MBPJ) is the only local council in Asia that provides assessment rebates to homeowners practising green living. The rebate scheme is known as the Petaling Jaya Homeowners Low Carbon and Green Initiative assessment rebate scheme. The scheme, which was first introduced in 2011, has in total waived assessment worth RM414,380.48 for 1,240 households in the city up to 2018. In 2013, Petaling Jaya was awarded the Green Apple Award by The Green Organisation in London, UK, for this initiative. Apart from the international recognition above, the council's green assessment rebate project was chosen by the Energy, Science, Technology, Environment and Climate Change Ministry (MESTECC) as a pilot project for the implementation of the Green Technology Application For Low Carbon Cities. The selection of this Petaling Jaya City Council initiative is a big honour as it recognizes the council's efforts as a pioneer and innovator and thereby seeks to roll out this scheme in other Malaysian cities. The project is in line with the Government of Malaysia and the United Nations Development Programme's aim to have this implemented nationwide. Households that are keen will be evaluated based on conservation in the form of energy, water, waste, transportation and biodiversity. Energy savings points will be given based on the installation of solar panels, solar heaters, at least 70% of LED Lighting, roof insulation and less usage of electricity. Meanwhile, the installation of rainwater harvesting system, recycled use of water for cleaning or toilet use, and installation of flush box of less than six litres of water will be awarded points. Houses that practice composting, produce enzymes based on food waste and conduct recycling will also be given points. The scheme also rewards points to households that use hybrid vehicles, public transportation and bicycles. Houses with over 50% of open spaces covered in landscape, and that carry out a significant amount of greenery planting will also be awarded points. The applications by the participating household owners would be subject to an audit by an external 3rd party consultant. The consultant would actually verify if the household owners are actually doing and complying with the actions that they have reported. The compliance check seeks to ensure that these green efforts are properly and honestly implemented. In 2011, only 49 residents from the city participated in the scheme and received a total assessment rebate worth RM18,184.43 for 2012. Due to increased awareness and stakeholder education by the council in the past 8 years, the number has increased in 2018 where some 605 households in the city received some form of assessment rebate amounting to RM211,005.11. Petaling Jaya City Council is very proud of its initiatives as it shows the city's commitment towards sustainability.

Finance status

Finance secured

Total cost of the project

414380.48

Total cost provided by the local government

414380.48

Primary fund source

Local

Web link to action website

<https://www.thestar.com.my/metro/metro-news/2019/05/29/mbpj-offers-waivers-for-green-households/#mtFhiJsx6OU7Pp95.99>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

Mitigation action

Mass Transit > Improve bus infrastructure, services, and operations

Action title

Petaling Jaya City Free bus service

Means of implementation

Awareness raising program or campaign
Stakeholder engagement
Infrastructure development
Assessment and evaluation activities
Monitor activities
Verification activities
Development and implementation of action plan
Policy and regulation
Financial mechanism
Sustainable public procurement

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO₂e)

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Poverty reduction / eradication
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved resource quality (e.g. air, water)
Improved public health
Improved access to and quality of mobility services and infrastructure
Shift to more sustainable behaviours

Action description

Launched in May 2014, PJ City Bus is a free bus service for city folk and schoolchildren. There are presently 32 buses, including two electric vehicles, plying a total of six routes. Petaling Jaya city council allocated a total of RM10.9mil under MBPJ's 2018 budget for PJ City Bus service. The council is very prudent in that it allows the bus to serve as an advertisement medium to subsidize the cost of the bus service annually. Public transport is so important for the council that it pays Prasarana every month for renting its buses for the residents of Petaling Jaya to use. Overall, the PJ City Bus has an average of 10,000 users daily. It recorded a ridership of 2.7 million passengers from January to August of 2018. Since its inception in 2014, the buses operate daily from 6am to 9pm, with a frequency of 15 to 20 minutes on working days. They are disabled-friendly and equipped with free WiFi. The free WiFi service also allows Petaling Jaya city council to share information on its services as a way of acknowledgement management. This is especially pertinent since each bus can accommodate up to 59 people. Petaling Jaya city council has even been recognized by the Malaysia Book of Records with the "Most Number of Free Shuttle Bus Services Provided by Local Authority" title. The council has also gone one step further by developing the PJ City Bus App, a mobile app developed and managed by the council's Planning Department. The app benefits both users and city council since users can find out about bus routes, locate the nearest bus stop and track the estimated bus arrival time. With the inception of the smart app, the council is now able to monitor the bus operations for reports and analysis purposes. Most importantly, Petaling Jaya city council is able to assess the ridership and departure performances, such as whether the bus is on time or late.

Finance status

Finance secured

Total cost of the project

10900000

Total cost provided by the local government

10900000

Primary fund source

Local

Web link to action website

<https://www.pjtransport.my/>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Mass Transit > Improve rail, metro, and tram infrastructure, services and operations

Action title

Free bus service for School children

Means of implementation

Stakeholder engagement

Policy and regulation

Financial mechanism

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)**Energy savings (MWh)****Renewable energy production (MWh)****Timescale of reduction / savings / energy production**

Please select

Co-benefit area

Reduced GHG emissions

Poverty reduction / eradication

Social inclusion, social justice

Social community and labour improvements

Improved public health

Improved access to and quality of mobility services and infrastructure

Shift to more sustainable behaviours

Improved access to data for informed decision-making

Action description

School students residing within the Petaling Jaya City Council (MBPJ) operation boundary areas are able to use the dedicated free "PJCT School Bus" shuttle service to 11 different schools starting from 2015. It is available in the morning from 6.30 am and no members of the public will be allowed to board the bus except for students in school uniform. The free one-way shuttle service plies a 16 km-long route that begins at the PJ South 3/2 bus hub and terminates at the Taman Jaya LRT station. Generally, the entire journey is estimated to take around 55 minutes. The action is a social inclusion measure meant to benefit Petaling Jaya residents from the lower strata of society or Bottom 40 (B40) group.

Finance status

Finance secured

Total cost of the project

113542

Total cost provided by the local government

113542

Primary fund source

Local

Web link to action website

<https://www.pjtransport.my/>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Outdoor Lighting > LED / CFL / other luminaire technologies

Action title

Installation of LED Street Lighting in Petaling Jaya

Means of implementation

Stakeholder engagement

Infrastructure development

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Sustainable public procurement

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Please select

Co-benefit area

Please select

Action description

According to an initiation report by CGS-CIMB, 80% of street lamps in Malaysia are not LED-based and an estimated minimum of 872,269 street lights may be changed under this initiative. Housing and Local Government Minister Zuraida Kamaruddin had said that plans to replace the streetlights would be carried out in stages beginning September of 2019. It has been estimated that savings of about 50% from current energy expenses with this move. The commitment to installing LED lights are in line with the upcoming Energy Efficiency and Conservation Act (EECA) by the Ministry of Energy. Before using LED lights, the council used to utilize HPSV light types ranging from 150W to 400W. The use of LED lights in the Council is to use lights from 90W to 180W according to the site's suitability. The installation of LED street lights using funds from some of the available council funds, the PJ Safe City programme, Blackspot Program, ICU and lastly MARRIS.A total of RM31,263,589.66 was spent on about 5169 LED

street lighting fixtures for 79 roads / areas until 2018. So far, the council has made 54.5% reduction in cost savings from their 2011 electricity bill consumption. It is estimated that the council will fix another 336 LED lights for 6 other lanes within Petaling Jaya for 2019. As of now, about 37.5% of the existing streetlights in Petaling Jaya have been switched over to the LED type.

Finance status

Finance secured

Total cost of the project

31263589.66

Total cost provided by the local government

29000000

Primary fund source

Local

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Finance and Economic Development > Developing the green economy

Action title

Petaling Jaya Smart City Concept

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Sustainable public procurement

Implementation status

Implementation

Estimated emissions reduction (metric tonnes CO2e)

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Disaster Risk Reduction

Enhanced resilience

Disaster preparedness

Enhanced climate change adaptation

Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Social inclusion, social justice
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved public health
Security of tenure
Resource conservation (e.g. soil, water)
Improved access to and quality of mobility services and infrastructure
Shift to more sustainable behaviours

Action description

A SMART centre has been set up within the Petaling Jaya City Council (MBPJ) grounds to give stakeholders better access to relevant information. The PJ Smart Centre contains data related to city planning and the information will be made available upon request. The smart centre is part of the council's Smart PJ Project to become a sustainable city by 2030. Under the project, over RM 15mil has been allocated to boost 10 sectors: planning information, planning control, green city, safe city, community engagement, PJ Eye, transportation, digital publishing, complaints and waste management. The Smart PJ Project will be achieved through the building of physical structures such as the smart centre and the development of integrated digitised systems. The smart centre is located within the grounds of MBPJ's headquarters in Jalan Yong Shook Lin. The half-a-million ringgit structure will enable better public engagement through the availability of information such as crime hotspots and pothole-ridden areas. Reports on some of the council's projects and their impact are being showcased. At the moment, we do not have an integrated system whereby the public or stakeholders can access detailed information. Once the smart centre is ready, the information will be displayed as extracted from the city's geographical integrated system (GIS). Subsequently, city planners would be able to extract information on land use with detailed mapping through images captured by drones as an example of the type of information that would be available through the smart city project. Ultimately, the council could work more effectively with third parties by having such information readily available. The public and private sectors could then come together and plan suitable activities or projects when they understand the needs of certain areas better. Furthermore, the council is able to make speedier decisions based on real time and integrated data that is available through this system.

Finance status

Finance secured

Total cost of the project

15500000

Total cost provided by the local government

15500000

Primary fund source

Local

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Community-Scale Development > Eco-district development strategy

Action title

Installation of more closed-circuit TV cameras

Means of implementation

Education

Awareness raising program or campaign
Stakeholder engagement
Infrastructure development
Assessment and evaluation activities
Monitor activities
Verification activities
Development and implementation of action plan
Policy and regulation

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Disaster Risk Reduction
Enhanced resilience
Disaster preparedness
Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Poverty reduction / eradication
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Improved public health
Improved resource security (e.g. food, water, energy)
Security of tenure
Resource conservation (e.g. soil, water)
Ecosystem preservation and biodiversity improvement

Action description

As for the development of integrated digitised systems, the council has allocated RM4.6mil to instal more closed-circuit TV cameras (CCTVs) with analytic features to enable higher definition video images. Some RM 8.7mil would be allocated for the upgrade of information and communications technology related systems under the Smart PJ Project

Finance status

Finance secured

Total cost of the project

8700000

Total cost provided by the local government

8700000

Primary fund source

Local

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Waste > Recyclables and organics separation from other waste

Action title

SS20 Community Composting initiative

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO₂e)**Energy savings (MWh)****Renewable energy production (MWh)****Timescale of reduction / savings / energy production**

Projected lifetime

Co-benefit area

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Social inclusion, social justice

Social community and labour improvements

Greening the economy

Economic growth

Promote circular economy

Improved public health

Shift to more sustainable behaviours

Improved access to data for informed decision-making

Action description

After years of educating themselves and carrying out traditional food composting, residents in SS20, Petaling Jaya have progressed to the modern way of using a machine. Initially, the residents started with the single stream waste recycling method, which was a success. Later, they did traditional composting at their homes and near the community park. Now, the residents are into modern food composting using a machine where they use compost as fertilisers for their gardens and throughout the neighbourhood. The resulting compost has formed thriving vegetables and garden plants. Additionally, ever since residents started composting, there was not much leachate from the rubbish compactors. The 30-litre capacity composting machine that cost RM30,000 was bought with funds pooled by residents through the help of Petaling Jaya City Council (MBPJ) awards, state government funding, assemblyman and councillors. Basically, the residents bring their food waste and throw them in the machine to process three times a week. Each cycle takes about 20 hours to complete as compared to traditional composting, however, takes about a month. However, the technology cannot support chicken bones or (stoned fruit like mango) seeds.

Finance status

Finance secured

Total cost of the project

30000

Total cost provided by the local government

30000

Primary fund source

Local

Web link to action website

<https://www.thestar.com.my/metro/metro-news/2018/07/03/ss20-residents-unite-for-the-love-of-composting/#lrEoQSIMz0QHtz4.99>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Community-Scale Development > Eco-district development strategy

Action title

Formation of Sustainable Community in I-Play Park in Damansara Damai

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)**Energy savings (MWh)****Renewable energy production (MWh)****Timescale of reduction / savings / energy production**

Projected lifetime

Co-benefit area

Disaster Risk Reduction

Enhanced resilience

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Social inclusion, social justice

Social community and labour improvements

Improved resource quality (e.g. air, water)

Improved public health

Resource conservation (e.g. soil, water)

Ecosystem preservation and biodiversity improvement

Shift to more sustainable behaviours

Improved access to data for informed decision-making

Action description

One of the key aspects of building a sustainable city is greater engagement with stakeholders, especially children and those below the age of 35. The council wanted children and youths to have a greater say in projects affecting them. In many advanced countries, children are seen as a valuable asset in town planning as MBPJ had seen positive results based on previous engagements with children. The I-Play Park in Damansara Damai is a good example of this since some of the facilities were built based on ideas provided by children. Realising the benefits of involving children and youths, the council has created two new categories for them in the Sustainable Community Award 2017. The new categories are for children below 18 and youths between 19 and 35 years. As the result of the I-Play Park children's engagement, the council has since allocated RM60,000 for winners under the children's category and RM96,000 for the youths who showcase ideas that will benefit the PJ community

Finance status

Finance secured

Total cost of the project

156000

Total cost provided by the local government

156000

Primary fund source

Local

Web link to action website

<http://www.starproperty.my/index.php/articles/property-news/pj-smart-centre-will-improve-engagement-with-stakeholders/?search=damansara%20damai>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Waste > Recycling or composting collections and/or facilities

Action title

PJ Eco Recycling Plaza

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Implementation status

Implementation

Estimated emissions reduction (metric tonnes CO2e)**Energy savings (MWh)****Renewable energy production (MWh)****Timescale of reduction / savings / energy production**

Projected lifetime

Co-benefit area

Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Improved public health
Improved resource security (e.g. food, water, energy)
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

AN integrated recycling centre is Petaling Jaya City Council's (MBPJ) next step towards dealing with waste in the city. Named the PJ Eco Recycling Plaza, the centre is possibly the first of its kind started by a local council. MBPJ is focusing on recycling polystyrene into plastic pallets and turning discards such as durian and coconut husks into bio-charcoal at the city council's integrated recycling centre in Sungai Way. Its main aim is to reduce the amount of waste going to landfills. Based on current estimates, the centre which will be fully operational by the third quarter of 2019. The goal is to work towards a sustainable and low-carbon city through the 3R concept which is reduce, reuse & recycle. This is in line with MBPJ's sustainable development goal and part of the new urban agenda requiring local councils to aspire towards a green city. Located in SS8 Petaling Jaya, the PJ Eco Recycling Plaza is a hub with various environment-related activities such as enzyme-making, upcycling of waste and the recycling of polystyrene, coconut husks and durian skin. The centre also aspires to be an eco-educational hub for students, the public and other local councils to learn on recycling. Previously, the centre was formerly a building leased out by MBPJ to a supermarket. The idea to set up such a centre started from the "good waste" being dumped by Petaling Jaya residents during festival spring cleaning. We provide free bulk waste collection, four times a year, and we have seen good condition cupboards and other household items thrown out. Instead of sending them to landfills which will cost the city council money, the council proposes to upcycle and sell them to the public for a minimal price. There are city council workers who are talented in upcycling waste and such activities are carried out here. In fact, items such as bulky polystyrene from electronic goods packaging were rarely recycled due to logistics issues. However, these items can be recycled into small plastic pallets and turned into items such as picture frames, furniture and even solid walls. To create 1m cubic compressed plastic block, we require 10kg of polystyrene. Polystyrene is lightweight but a bulky item. It is costly to transport this as it takes up space in the lorry and this puts off recycling efforts. As a responsible city council, the council intends to advocate polystyrene recycling and we have a machine that can recycle it. The council wishes to show the public how we do it here and welcome such trash to be sent to the centre. As for durian skin and coconut husks recycling, Lee said there was a lot of such waste in the city. These wastes were turned into bio-charcoal at the centre. The bio-charcoal functions like a conventional charcoal used for cooking during outdoor camping activities. However, charcoal is also used to absorb moisture and is placed in clothes cupboards. Another amazing activity going on is that the centre also carried out food composting and harvest biogas used to light up the PJ Eco Recycling Plaza building itself. As of now, the city council was in collaboration with F&N, Tetra Pak, Spark Foundation, INTCO Malaysia Sdn Bhd dan CH Green for the project. Non-governmental organisations and private sector companies promoting green living would be invited to showcase their efforts and engage in activities related to the environment at the PJ Eco Recycling Plaza. Furthermore, the centre also had a rainwater harvesting and vertical garden corner to promote eco living. About RM450,000 was spent on the two-storey building facade as well as the exterior renovation. About RM1mil will be spent to ensure the building is fully operational and RM840,000 was approved to complete the waste treatment facility here. Realizing its importance, the Selangor State Economic Planning Unit (Uopen) has allocated RM100,000 for this project.

Finance status

Finance secured

Total cost of the project

3000000

Total cost provided by the local government

2600000

Primary fund source

Local

Web link to action website

<https://www.thestar.com.my/metro/metro-news/2018/11/23/in-line-with-green-city-initiative/#XTIImPaWqxxgQEMI.99>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Finance and Economic Development > Instruments to fund low carbon projects

Action title

Selection & Continuance of assessment tax rebates as pilot project under the UNDP funded Green Technology Application For Low Carbon Cities project

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)**Energy savings (MWh)****Renewable energy production (MWh)****Timescale of reduction / savings / energy production**

Projected lifetime

Co-benefit area

Disaster Risk Reduction

Enhanced resilience

Disaster preparedness

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Social inclusion, social justice

Social community and labour improvements

Greening the economy

Economic growth

Promote circular economy

Improved resource quality (e.g. air, water)

Improved public health

Improved resource security (e.g. food, water, energy)

Security of tenure

Resource conservation (e.g. soil, water)

Ecosystem preservation and biodiversity improvement

Improved access to and quality of mobility services and infrastructure

Shift to more sustainable behaviours

Action description

GREEN living requires personal commitment but having incentives certainly helps create greater interest among the public to embark on a sustainable lifestyle. Petaling Jaya City Council (MBPJ) is said to be the first council not just in the country but also Asia to offer assessment tax rebates since 2011 to ratepayers who practise green living. Homeowners will be given a one-time rebate if they implement environmentally-friendly practices in their house and adopt a low-carbon lifestyle. The "Assessment Tax

Rebate for Eco-Friendly House Owners Low-Carbon Green City of Petaling Jaya Year 2018" is open for applications until July 31. The city council will provide an assessment rebate of up to 100% or a maximum of RM500 – whichever is lower – that will be reflected in their 2020 bill. The scheme, which was first introduced in 2011, has in total waived assessment worth RM414,380.48 for 1,240 households in the city up to the end of 2018. The council has won many forms of recognition for this initiative. In 2013, Petaling Jaya was awarded the Green Apple Award by The Green Organisation in London, UK, for this initiative. Additionally, the council's green assessment rebate project was chosen by the Energy, Science, Technology, Environment and Climate Change Ministry (MESTECC) as a pilot project for the implementation of the Green Technology Application For Low Carbon Cities. The project is in line with the United Nations Development Programme's aim to have this implemented nationwide. Households that are keen will be evaluated based on conservation in the form of energy, water, waste, transportation and biodiversity. Energy savings points will be given based on the installation of solar panels, solar heaters, at least 70% of LED Lighting, roof insulation and less usage of electricity. Meanwhile, the installation of rainwater harvesting system, recycled use of water for cleaning or toilet use, and installation of flush box of less than six litres of water will be awarded points. Houses that practice composting, produce enzymes based on food waste and conduct recycling will also be given points. The scheme also rewards points to households that use hybrid vehicles, public transportation and bicycles. Houses with over 50% of open spaces covered in landscape, and that carry out a significant amount of greenery planting will also be awarded points. Among the panel of judges include representatives from NGOs from the Centre for Environment, Technology and Development, Malaysia (Cetdem) who are very thorough when awarding points to the participants. It is the intention of the judges that all these green efforts to be properly and honestly implemented. Based on the council's record in 2011 only 49 residents from the city participated in the scheme and received a total assessment rebate worth RM18,184.43 for 2012. 2018 saw the highest number of participants for the scheme. Some 605 households in the city received some form of assessment rebate amounting to RM 211,005.11.

Finance status

Finance secured

Total cost of the project

560000

Total cost provided by the local government

560000

Primary fund source

Local

Web link to action website

<https://www.thestar.com.my/metro/metro-news/2019/05/29/mbpj-offers-waivers-for-green-households/#rwgAsylH4ZIDY5hL.99>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Waste > Recyclables and organics separation from other waste

Action title

Food Waste Composting at Desa Mentari

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation
Financial mechanism

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

4.2

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Poverty reduction / eradication
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved resource quality (e.g. air, water)
Improved public health
Improved resource security (e.g. food, water, energy)
Security of tenure
Resource conservation (e.g. soil, water)
Ecosystem preservation and biodiversity improvement
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

A food waste composting project is finally taking off at Block 3, Desa Mentari Highrise residential building with the support from the Petaling Jaya City Council (MBPJ). The Council provided a food waste anaerobic digestion composting machine to the community, which has been involved in several green initiatives, at an event launched by the Petaling Jaya Mayor Datuk Mohd Sayuthi Bakar over the weekend of 27 June 2019. The Council is serious about promoting waste-to-energy types of initiatives among the community. Block 3, Desa Mentari was selected and provided with the anaerobic digestion composting machine as part of MBPJ's long-term goal to strive towards being a sustainable city by 2030 as well as creating a zero waste community. The council has two other food waste composting machines located in SS2 and SS8. This is the first one handled fully by the community of Desa Mentari whom are economically poor. The Council wants to emphasis 3R (reduce, reuse and recycle) and promote a circular economy (where the goal is to reduce waste and reuse manufactured goods). Through this composting effort, the residents could even sell their liquid compost and biogas or using the liquid compost for urban farming. Subsequently, less money is spent by the Council on managing and discarding waste at the landfill. Since the composting machine could support up to 100kg of food waste each day. On average, the council spends about RM77mil for waste management in Petaling Jaya. Some 700 tonnes of waste is discarded in the city each day and 20% of the council budget is spent on waste collection and the cleaning of public areas. Due to the council's efforts in introducing the composting concept to the community, in 2016, the Block 3, Desa Mentari community came third at the state government organised river and beach cleanliness competition. They took second place in the same competition in 2017. In 2019, the community was roped into the composting project and has since gathered some 800 litres of liquid compost. Since MBPJ started engaging with the Block 3 residents to rehabilitate the then polluted Sungai Way river that flows through their neighbourhood some 10 years ago, the river water quality improved by leaps and bound with the help of the residents. The block residents took a step further with the help from Global Environment Centre and created a community garden along the river.

Finance status

Finance secured

Total cost of the project

150000

Total cost provided by the local government

150000

Primary fund source

Local

Web link to action website**Name of the stakeholder group**

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Buildings > Energy efficiency/ retrofit measures

Action title

Petaling Jaya City Council Building Carbon Management Plan

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)**Energy savings (MWh)****Renewable energy production (MWh)****Timescale of reduction / savings / energy production**

Projected lifetime

Co-benefit area

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Greening the economy

Economic growth

Job creation

Improved resource security (e.g. food, water, energy)

Shift to more sustainable behaviours

Improved access to data for informed decision-making

Action description

The council is also seriously implementing the measures that were recommended within the Carbon Management Plan report prepared by Carbon Trust funded by the British Government under the UK- Malaysia Low Carbon Cities programme. The Carbon Management Programme is a guideline to enable behavioural change by the council staff to attempt the practice of low carbon actions. Since then, The council is making full efforts to utilize biodiesel as much as possible where the use of diesel is twice to the use of petrol as per the council's transport fleet fuel consumption records in 2018. At the same time, the Petaling Jaya city council has made a concentrated effort to reduce energy consumption of its headquarters and other buildings. The internal building lights have also been changed to LED lights while the council has even purchased split unit air conditioners which can be switched off easily instead of depending on centralized air conditioning. The council has even switched to using air conditioners which utilize R410a which is a more environmental friendly refrigerant compared to the conventional R22. The cost of the study is nil as it was fully sponsored by the British government. However, the cost of retrofits is already covered under the council's ongoing annual

maintenance bill so it does not consider to allocate a special budget for the implementation of the measures as compared to the other climate actions reported here.

Finance status

Finance secured

Total cost of the project

0

Total cost provided by the local government

0

Primary fund source

Local

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Waste > Waste prevention policies and programs

Action title

Launching of MBPJ's Zero Single-Use Plastics campaign

Means of implementation

Education
Capacity building and training activities
Awareness raising program or campaign
Stakeholder engagement
Infrastructure development
Assessment and evaluation activities
Monitor activities
Verification activities
Development and implementation of action plan
Policy and regulation

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Disaster Risk Reduction
Enhanced resilience
Disaster preparedness
Enhanced climate change adaptation

Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Improved public health
Improved resource security (e.g. food, water, energy)
Security of tenure
Resource conservation (e.g. soil, water)
Ecosystem preservation and biodiversity improvement
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

The Petaling Jaya City Council has launched the MBPJ's Zero Single-Use Plastics campaign held at the council's headquarters on 2nd July 2019. The campaign is in line with the Federal Government's Roadmap Towards Zero Single-Use Plastics 2018-2030 that in October 2018. The ban on single-use plastics would also be imposed for business, hawker and development licences as well as infrastructure permits. For existing licence holders, this requirement will come into effect from January 2020. The city council will also increase the public's and business owners awareness of the use of eco-label items such as ECO 001 (biodegradable and bio-compost items) and ECO 009 (products made from biomass). As part of this campaign, Petaling Jaya City Council's (MBPJ) Solid Waste Management and Public Cleansing Department squad is on the lookout for people who practise a plastic-free lifestyle when shopping or getting takeaway. Personnel from the department will be patrolling Petaling Jaya, especially markets, food courts, restaurants, shopping malls, supermarkets, schools, government agencies and private companies to catch people in the act. The identified waste warriors will be acknowledged for their green efforts and be given souvenirs, a T-shirt, certificate and have their photo uploaded to the city council's social media platforms.

Finance status

Finance secured

Total cost of the project

6000

Total cost provided by the local government

6000

Primary fund source

Local

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Finance and Economic Development > Instruments to fund low carbon projects

Action title

Establishment of RM 3 million community grant programme by Petaling Jaya City Council

Means of implementation

Education
Capacity building and training activities
Awareness raising program or campaign
Stakeholder engagement
Infrastructure development

Assessment and evaluation activities
Monitor activities
Verification activities
Development and implementation of action plan
Policy and regulation
Financial mechanism

Implementation status

Implementation

Estimated emissions reduction (metric tonnes CO2e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Disaster Risk Reduction
Enhanced resilience
Disaster preparedness
Enhanced climate change adaptation
Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Poverty reduction / eradication
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved resource quality (e.g. air, water)
Improved public health
Improved resource security (e.g. food, water, energy)
Security of tenure
Resource conservation (e.g. soil, water)
Ecosystem preservation and biodiversity improvement
Improved access to and quality of mobility services and infrastructure
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

The Petaling Jaya City Council (MBPJ) has launched a RM3 million community grant for PJ Sustainability programme called PJ SEED. The social, environment, economy development (SEED) scheme enables "stakeholders, residents associations, joint management bodies and non-governmental organisations to plan and implement projects based on their proposals that will help MBPJ improve relevant areas. It was informed the amount of the grants are from RM5,000 to RM50,000 each project but that "higher amounts could be considered based on technical evaluation and latest requirement". It was also highlighted that the submitted projects must have the potential to generate positive impact on neighbourhoods such as reducing the risk of pollution, and saving the city council's expenses in urban management and development. Interested organisations such as NGOs and schools in Petaling Jaya are encouraged to apply. In the meantime, a panel would be established "to administer the awarding of the grants". "This is part of MBPJ's continued effort to encourage valued stakeholders and relevant parties to participate. It is hoped that interested applicants will submit their proposals to enhance sustainable economic, environmental and social development in Petaling Jaya. Interested parties can refer for more information at www.mbpj.gov.my. The closing date is Sept 30 2019 but it will be back next year as it is an annual grant.

Finance status

Finance secured

Total cost of the project

3000000

Total cost provided by the local government

3000000

Primary fund source

Local

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Waste > Recyclables and organics separation from other waste

Action title

Smart PJ Waste Solution Lab in SS2, Petaling Jaya

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

126

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Per year

Co-benefit area

Disaster Risk Reduction

Enhanced resilience

Disaster preparedness

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Social inclusion, social justice

Social community and labour improvements

Greening the economy

Economic growth

Promote circular economy

Improved resource quality (e.g. air, water)

Improved public health
Improved resource security (e.g. food, water, energy)
Security of tenure
Resource conservation (e.g. soil, water)
Ecosystem preservation and biodiversity improvement
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

Installed by 2017, the waste solution lab, located in Jalan SS2/63, uses the circular economy method where waste is recycled into items at source to benefit society. Typically, we live our lives based on a linear economy, where trash is disposed directly to the landfill. However, if the linear could be turned into circular economy, then more trash will be recycled and less trash sent to landfills. Currently, about 600 tonnes of waste is disposed of a day, based on an MBPJ study with 49% comprising organic waste. If all the organic waste can be recycled and made into compost, ultimately half of PJ city's organic waste could be reduced by half. The lab in SS2 is a pilot project, which went fully operational in May 2017. It has been processing 15 tonnes of food waste, monthly, in two compost machines. The waste is turned into liquid fertiliser, biogas and detergent. The compost machines are currently managed by MBPJ in collaboration with the local small traders. In 2017, only 30 hawkers from the SS2 morning market, food court and Ibu Mee stalls are contributing to the organic waste. However, the council has brought in more waste from residents and hawkers in other Petaling Jaya areas to provide additional supplies. For years the area used to be a smelly dumpsite. Now, we have this lab and there is no more smell or indiscriminate dumping but an educational green site, instead. Apart from the compost machines, there is also an education centre that is open to public from 9am to 5pm on weekdays. Visitors can learn about benefits of going green, recycling and view the gallery as well as see the anaerobic digester machine on display. There is also a mini green house with vegetation and plants, fertilised by the bio-organic fertiliser produced from organic waste. Biogas is being used to fuel the carbonization process of converting the coconut harsh to bio-charcoal. The public can purchase the organic fertiliser and other products made from the compost machine at the education centre.

Finance status

Finance secured

Total cost of the project

850000

Total cost provided by the local government

850000

Primary fund source

Local

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Community-Scale Development > Eco-district development strategy

Action title

The Learning Cities Award 2019 by The UNESCO Institute for Lifelong Learning (UIL)

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities
Verification activities
Development and implementation of action plan
Policy and regulation
Financial mechanism

Implementation status

Implementation

Estimated emissions reduction (metric tonnes CO2e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Enhanced resilience
Enhanced climate change adaptation
Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Poverty reduction / eradication
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved public health
Security of tenure
Improved access to and quality of mobility services and infrastructure
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

PETALING Jaya City Council's (MBPJ) free bus programme, the recycling bag made of bunting by housewives and the city's library in the park initiatives were among the notable projects that earned the city council the Learning Cities Award 2019 by The Unesco Institute for Lifelong Learning (UIL). MBPJ took a year to compile activities that were carried out for the community which encouraged growth in terms of learning among city folks. "The Recycling Bag project, which was MBPJ's initiative in 2017, has helped low-income housewives generate income through sewing. The city council provided them the knowledge and equipment, and they sewed bags using the city council's old used bunting and banners. At the same time, the council is now in the midst of building a library in Taman Jaya which will see communities coming together and exchange books and will further foster the reading and learning culture. The city council was working closely with non-governmental organisations and universities and colleges and was open to learning new ideas. Among the partners that the council worked with include Saito University College and Unitar International University located in the city to pursue their education too. In fact, the Learning City Award Jury felt City of PJ has shown exemplary progress and commitment to promote education and lifelong learning at the local level. It was mentioned in the UNESCO website that despite their very different starting points and the various economic, political, social and environmental contexts, all of the Unesco Learning City Award 2019 winners which include PJ initiated innovative and target-specific policies and programmes that provide fruitful opportunities for their communities to benefit from lifelong learning.

Finance status

Finance secured

Total cost of the project

250000

Total cost provided by the local government

200000

Primary fund source

Local

Web link to action website

<https://unesco.org.my/v2/portfolio/unesco-learning-city-2019/>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Community-Scale Development > Brownfield redevelopment programs

Action title

PJ Section 13 urban renewal

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Implementation status

Implementation

Estimated emissions reduction (metric tonnes CO₂e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Enhanced resilience

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Social inclusion, social justice

Social community and labour improvements

Greening the economy

Economic growth

Promote circular economy

Job creation

Improved resource quality (e.g. air, water)

Improved public health

Improved resource security (e.g. food, water, energy)

Resource conservation (e.g. soil, water)

Ecosystem preservation and biodiversity improvement

Improved access to and quality of mobility services and infrastructure
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

SECTION 13 in Petaling Jaya covers an area of 109.96 ha and is served by three major roads — Jalan Universiti, Jalan Kemajuan and Jalan Semangat was initially an industrial enclave, expanded in the 1960s to become a bustling area with commercial and residential development activities. Section 13 is slowly being transformed into a mixed-use development enclave, as seen by the new buildings and ongoing projects coming up there. This came about after Majlis Bandaraya Petaling Jaya (MBPJ) and landowners began working together to unleash the full potential of the area in the last 10 years. Some landowners have cashed out while others are redeveloping their parcels to capitalize on the growth. The MBPJ's Special Area Plan (Rancangan Kawasan Khas or RKK) for Section 13 envisions this area to be transformed into a green and low carbon business park for PJ. The Plan provides guidance to developers on the green elements that they must incorporate including minimum green area requirement, incentives to encourage the development of green buildings accredited under Green Building Index or GBI and various control mechanism on sustainable development. To date, 10 completed development projects in this area have been accredited with GBI certification. Consequently, the integration of residential and commercial priorities has seen PJ City council making it mandatory for companies investing in this area to work closely with their neighbouring landowners to link their developments with sky bridges or footpaths to increase accessibility by foot. This is in line with MBPJ's ruling to link all developments in this area to ease traffic congestion and to provide alternative on eco-mobility. Upon completion, the area will be a showcase on transforming a previous brownfield area into a low carbon business park development for cities to emulate in Malaysia.

Finance status

Finance secured

Total cost of the project

3000000000

Total cost provided by the local government

3000000000

Primary fund source

Public-private partnership

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Finance and Economic Development > Developing the green economy

Action title

Uplifting and alleviating living standards for Petaling Jaya poor through green economy

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Financial mechanism

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Poverty reduction / eradication

Social inclusion, social justice

Social community and labour improvements

Greening the economy

Economic growth

Promote circular economy

Job creation

Improved public health

Shift to more sustainable behaviours

Improved access to data for informed decision-making

Action description

The Petaling Jaya City Council (MBPJ) has sought assistance and financial endorsement from the Selangor State Government's People's Care Initiative to support products generated from the City Community Income Generation Assistance Center (PPKB) for use by the State Government Program. The recycle and reuse of banner materials and posters to be made into usable products has enabled the council to receive encouraging response as it supports single mothers and impoverished families to obtain a livelihood. The Recycled banner project has received recognition via the provision of innovation patents by the Malaysian Intellectual Property Corporation (MYIPO). The Recycled Banner project enabled the council to become the winners of the Social Innovation (Creation) award and the Best Hybrid Project at the State Level Public Service Innovation Council 2017. Since its initial inception in 2017, The Petaling Jaya City Council (MBPJ) today had launched its 4th Community Development Income Generation Center (PPKB) at Kampung Lindungan PJS Community Hall. The opening of the fourth PPKB center was an MBPJ initiative to help develop the urban economy and improve the quality of life of the people. Among the goods the centre produces include frozen food, pau, donut, ice cream, biscuits and even clothes. The council intends to support the building of such centres as they also contribute to the strengthening of plastic-free campaigns because PPKB also produces products from wasted materials such as banners and suspended trays into items used daily such as bags, mats and aprons. A total of 30 single mothers participated in the project and managed to generate average of RM 1,500 per month as extra income. "Indirectly, it can curb the problem of pollution and make the Petaling Jaya city environment more conducive as well as reduce the cost and waste at the landfill,"

Finance status

Finance secured

Total cost of the project

70000

Total cost provided by the local government

54000

Primary fund source

Public-private partnership

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Food and Agriculture > Encourage sustainable food production and consumption

Action title

Petaling Jaya Agrobox Scheme

Means of implementation

Education
Capacity building and training activities
Awareness raising program or campaign
Stakeholder engagement
Infrastructure development
Assessment and evaluation activities
Monitor activities
Verification activities
Development and implementation of action plan
Policy and regulation
Financial mechanism

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Enhanced resilience
Enhanced climate change adaptation
Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Poverty reduction / eradication
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Job creation
Improved resource quality (e.g. air, water)
Improved public health
Improved resource security (e.g. food, water, energy)
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

RESIDENTS of Taman Medan, Petaling Jaya can be proud of their successful urban farming project known as the Agrobox. The project, which has helped provide crops and fish for residents' personal consumption, is a success story worth talking about. The balance of vegetables and fish are sold for a small profit. The one-year-old Agrobox is located inside a white double-deck cabin. The initiative, first of its kind in Malaysia is a collaboration between the Petaling Jaya City Council (MBPJ), Malaysian Institute of Sustainable Agriculture (MISA) and the residents. The kick-start grant and guidance for the project was by MISA while MBPJ provided the space and logistic support for it. This interesting ecosystem modern farming project is located on vacant land beside a futsal court in Jalan PJS1/25. The ground floor of the cabin has two large water tanks containing colourful kaloi fish. The upper floor which is accessible via a metal ladder has vegetables such as spinach and lettuce growing healthily. The Agrobox technology allows the plants on the higher deck to be watered using water from the fish tank at the lower bunk. The fish droppings, which

contain natural fertiliser, help the vegetables grow organically. The Agrobox project was sustainable through the profit of sales from the fish and vegetables. A total 181 participants from PJS 1 South Avenue are involved in the project. The project has won several council level awards such as the Anugerah Komuniti Mampan MBPJ 2017. Meanwhile, MBPJ has bagged a national-level award for the project from the Institute of Landscape Architects Malaysia (ILAM) for Green Initiatives 2017. Due to the success of the project, the council has eight Agrobox projects in the city altogether. Among the more successful communities are those in Taman Megah and Kota Damansara.

Finance status

Finance secured

Total cost of the project

800000

Total cost provided by the local government

640000

Primary fund source

Public-private partnership

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Food and Agriculture > Encourage sustainable food production and consumption

Action title

Petaling Jaya City Council Food Bank Scheme

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Implementation status

Operation

Estimated emissions reduction (metric tonnes CO2e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Enhanced resilience
Reduced GHG emissions
Improved resource efficiency (e.g. food, water, energy)
Poverty reduction / eradication
Social inclusion, social justice
Social community and labour improvements
Greening the economy
Economic growth
Promote circular economy
Improved public health
Improved resource security (e.g. food, water, energy)
Shift to more sustainable behaviours
Improved access to data for informed decision-making

Action description

PJ City Food Bank is one of the many creative projects under the PJ Local Agenda 21 by MBPJ. MBPJ launched PJ City Food Bank in 2012 and since has been the hand that coordinates food supplies from the local factories, restaurants and hostels and giving them to those in need. The PJ City Food Bank is not only an initiative to aid students from low-income families, but it also aims to teach all the youth good and healthy eating habits. Petaling Jaya is, without a doubt, a famous food hub, with its crowded hawker stalls to its flourishing hipster cafes around every corner. With the abundance of food available in this town, it is almost difficult for most of us to imagine that many from our own communities within PJ may not always have enough to eat. In fact, there are some who get through the day with barely one small meal or even breakfast. But not all students can afford breakfast. In Azlinda's school alone, there are 150 students from low income families who rely on the Rancangan Makanan Tambahan (RMT) programme by the Ministry of Education for food during school hours. With these school-going children and teenagers in mind, Majlis Bandaraya Petaling Jaya (MBPJ) launched a three year PJ City Food Bank Program. This joint effort with Bank Rakyat has set in motion efforts such as a Food Truck for the 'Free Breakfast for School Kids' programme. The 'Free Breakfast for School Kids' program is a similar concept to the old Milo trucks that used to grace our schools in the 1980s and 1990s where students can look forward to this fun food truck. A 5 tonne lorry was modified as a mobile pantry which would be used as an on-the-go kitchen to bring school-goers meals. The 'Free Breakfast for School Kids' program, launched in May of 2017, aids 13 schools within Petaling Jaya. Sekolah Kebangsaan Taman Medan Petaling Jaya is one of the schools on the list. Other than helping parents and students in the community who are less fortunate, this program encourages all students (even those not selected for the program) to have breakfast. The food served follows a well balanced diet and students on the program usually get milk, sandwiches and fruits. Additionally, some 300 students from SK Lembah Subang from low income families are part of the 'Free Breakfast for School Kids' program. Besides schools, MBPJ has facilitated food donations from various corporate donors to orphanages and shelters since 2014. 63 homes have received food donations through the PJ City Food Bank Programme. The donors, mostly companies and supermarkets, donated dry food such as instant noodles, rice, packet drinks, Milo, sugar, crackers, biscuits, milk, oil and snacks. In August 2017, MBPJ launched the 'Meals on Wheels' weekend program where food is distributed to approximately 3000 senior citizens, the poor and disabled in selected areas within PJ. 'Meals on Wheels' includes buying cooking ingredients and preparing the food in a gotong-royong style to ensure the freshness of the food and for a home-cooked feel to it because while giving is important, the quality and standard of the food is as important. Food donation and soup kitchens are fuel to communities, especially in Malaysia, a country of food enthusiasts. Ensuring citizens of all ages and backgrounds are provided for in a thoughtful, dignified and even fun manner is the way forward to a healthier, happier, fuller Petaling Jaya.

Finance status

Finance secured

Total cost of the project

2000000

Total cost provided by the local government

400000

Primary fund source

Public-private partnership

Web link to action website

<http://www.pjkita.my/whats-happening/fuelling-communities-with-food-the-pj-city-food-bank/>

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation action

Water > Water use efficiency projects

Action title

Rainwater Harvesting system implementation

Means of implementation

Education

Capacity building and training activities

Awareness raising program or campaign

Stakeholder engagement

Infrastructure development

Assessment and evaluation activities

Monitor activities

Verification activities

Development and implementation of action plan

Policy and regulation

Financial mechanism

Implementation status

Implementation

Estimated emissions reduction (metric tonnes CO2e)

0

Energy savings (MWh)

0

Renewable energy production (MWh)

0

Timescale of reduction / savings / energy production

Projected lifetime

Co-benefit area

Disaster Risk Reduction

Enhanced resilience

Disaster preparedness

Enhanced climate change adaptation

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Greening the economy

Economic growth

Promote circular economy

Improved resource quality (e.g. air, water)

Improved resource security (e.g. food, water, energy)

Resource conservation (e.g. soil, water)

Ecosystem preservation and biodiversity improvement

Shift to more sustainable behaviours

Improved access to data for informed decision-making

Action description

NEW developments, be it commercial or residential must fulfil a list of green criteria set by the Petaling Jaya City Council (MBPJ) before the approval is given. This is all part of MBPJ's plan to make the city a sustainable one come 2030, by kicking off with a low carbon city framework programme that commenced in 2011. Developments including semi-detached structures and bungalows with minimum of 1,500 sq.ft of roof cover will have to be fitted with a rainwater harvesting system. Meanwhile, new commercial and mixed commercial developments will have to fulfil five elements including rainwater harvesting. This comes under the Guidelines for Installing A Rainwater Collection and Utilisation System. Apart from the new development projects, existing buildings installing rainwater harvesting system are given incentive in the form of property assessment tax rebate for building retrofitting. The Council

has also installed rainwater harvesting system in 8 schools.

Finance status

Finance secured

Total cost of the project

200000

Total cost provided by the local government

170000

Primary fund source

Public-private partnership

Web link to action website

Name of the stakeholder group

<Not Applicable>

Role in the GCC program

<Not Applicable>

Name of the engagement activities

<Not Applicable>

Aim of the engagement activities

<Not Applicable>

Attach reference document

<Not Applicable>

Mitigation Planning

(5.5) Does your city have a climate change mitigation or energy access plan for reducing city-wide GHG emissions?

Yes

(5.5a) Please attach your city's climate change mitigation plan below. If your city has both action and energy access plans, please make sure to attach all relevant documents below.

Publication title and attach document

Petaling Jaya Low Carbon City Action Plan
mbpj-low-carbon-city-action-plan-2015-2030.pdf
mbpj-carbon-management-plan-2015-2020.pdf

Year of adoption from local government

2016

Web link

Areas covered by action plan

Energy
Transport (Mobility)
Building and Infrastructure
Industry
ICT (Information and Communication Technology)
Spatial Planning
Agriculture and Forestry
Water
Waste
Public Health and Safety
Business and Financial Service
Social Services

Boundary of plan relative to city boundary (reported in 0.1)

Same – covers entire city and nothing else

If the city boundary is different from the plan boundary, please explain why and any areas/other cities excluded or included

Stage of implementation

Plan in implementation

Has your local government assessed the synergies, trade-offs, and co-benefits, if any, of the main mitigation and adaptation actions you identified?

Yes

Comment or describe the synergies, trade-offs, and co-benefits of this interaction

Has there been a stakeholder engagement plan to develop the plan?

Yes

Primary author of plan

Dedicated city team

Opportunities

Opportunities

(6.0) Please indicate the opportunities your city has identified as a result of addressing climate change and describe how the city is positioning itself to take advantage of these opportunities.

Opportunity	Describe how the city is maximizing this opportunity
Development of energy efficiency measures and technologies	The city has been updating its infrastructure with Energy efficient technologies that have helped save their energy consumption and reduce GHG emissions
Increase opportunities for partnerships	There has been an uptake in green business partnership between the council and the private sector. In some cases, the council has served as a showcase for the benefits of green technology
Increased attention to other environmental concerns	Awareness towards the various aspects of the environment especially the benefits of clean rivers and other adaptation measures have been beneficial to the council
Increase in clean technology businesses	The installation of anaerobic digestion waste composting system has enabled other new clean technology businesses such as compressed biogas for cooking purpose and carbonisation of coconut harsh into bio-charcoal.
Development of waste management / recycling businesses	Application and using of apps for collection of recyclables from community in which time and cost are saved. Pilot project in collaboration with private sector is on ongoing at SS22A neighbourhood. Used beverage cartons box are collected and turned into composite panels board for building purpose. This building material is widely used for interior and partition purpose.
Increased infrastructure investment	NEM (Net energy metering) scheme and FIT (Feed in tariff) scheme announced by the Government of Malaysia early this year stimulate the development of renewable energy especially solar source in PJ. Energy Service Companies are offering attractive scheme to corporate, industries and residential owners for installing the solar panel.
Development of sustainable transport sector	The building of electric car charging station at various premises such as Council's office, petrol station, shopping complex and public parking are stimulating the take up rate on low carbon mode of transportation. Up date, 13 charging stations are ready for use and free of charge. Apart from that, Council is providing PJ City Free Bus service with 32 buses plying 6 routes. Incentives in the form of property tax rebate is also offered to the residents for commuting with alternative eco-mobility and low carbon transportation. This further encourage the interest on walking, cycling and riding with public transportation.
Development of resource conservation and management	Waste generated are being used as resources through the concept of circular economy. Food Bank has been established to channel excessive food to needy community. Food waste are converted to compost and biogas. Used cooking oils are processed to be bio-diesel. Used and old bulky items such as furniture, electrical appliances, clothes and accessories have been repaired and upcycled to be used again. PJ Eco Recycling Plaza was established to conserve these resources. Apart from that, community forests are developed to cater to the need of public without jeopardizing the rich biodiversity.

(6.1) Does your city collaborate in voluntary partnership with businesses in your city on sustainability projects?

Yes

(6.1a) Please provide some key examples of how your city collaborates with business in the table below.

Collaboration area	Description of collaboration
Energy	Installation of energy saving measures including purchase of Energy efficient equipment at lower prices for the council
Building and Infrastructure	Increase of GBI certified buildings within the city as Green has been proven beneficial in saving both Energy and financial costs in the long run
Transport (Mobility)	Working closely with transport service provider e.g Prasarana (Government owned transportation provider) so that route coverage is comprehensive and premise owners for allowing the transport infrastructure e.g. charging station, special car parking for e-hailing service to be provided.
Spatial Planning	Development based on Transit Oriented Development, smart city, compact city concept and guidelines as stated in the statutory local plans have given full confident to developers on proper and comprehensive development. These plans include the RTPJ 1, 2 and Special Area Plan of Section 13
ICT (Information and Communication Technology)	Through smart city platform, Council is working with service providers like Google, IBM on data capturing, analytical process and decision making tools so that monitoring and management of the daily affairs can be more efficient and effective. Phase 1 of The Smart City with focus on landuse, complaints, enforcement, property data and tax has been completed and in operation.
Waste	The Council is working corporate, NGOs, small traders and residents to convert the food waste into compost and bio-gas. 5 centres running with anaerobic digestion composting machines are in operation now. Through Food Bank, food receives from businesses is given out to the needy registered with the Council. Apart from its social objective, this program has helped in reducing food to be thrown away as waste.
Social Services	Council is given special attention to the people with disabilities, underprivileged, senior citizen, youth, poor, single parent by way of providing aids to them. These include food, exemption on fees for renting and business license, discount, privilege on facilities e.g. car parking lot and daily need. Apart from that, skill training is provided leading them for independent living. 4 sewing centre accommodate 30 single parent have been established for participants to work on project of making woven bag from used PVC advertising bunting or banners.
Water	Working with private sector and environmental NGO on the river rehabilitation programme to improve quality of the urban water way. Members of the community along rivers have been engaged to help monitor water quality, to beautify the river bank and to organise community activities. These programmes started 15 years ago covers 3 rivers in PJ, namely Sg Penchala, Sg Way and Sg Klang River. Water quality has been improved and reached Level III which is suitable for activities according to the Water Quality Classification of Malaysia.

(6.2) List any emission reduction, adaptation, water related or resilience projects you have planned within your city for which you hope to attract financing and provide details on the estimated costs and status of the project. If your city does not have any relevant projects, please select No relevant projects under Project Area.

Project area

Renewable energy

Project title

Upscaling of biogas facilities for storage and usage at various sites

Stage of project development

Project feasibility

Status of financing

Project not funded and seeking full funding

Project description

The council has installed various food digestors at many places and is seeking funding to implement biogas storage and upkeep facilities to provide renewable energy for various facility usage.

Total cost of project

600000

Total investment cost needed

600000

Project area

Energy efficiency / retrofit

Project title

Low Energy Office of PJ

Stage of project development

Pre-feasibility

Status of financing

Project partially funded and seeking additional funding

Project description

Retrofitting existing Council buildings to be green and energy efficiency. A total of 4 buildings have been identified and scope of works involved mainly cooling and lighting system.

Total cost of project

4000000

Total investment cost needed

1000000

Project area

Waste recycling

Project title

Material Recovery Facilities

Stage of project development

Scoping

Status of financing

Project not funded and seeking partial funding

Project description

MRF at sub-city scale is required so that resources from the waste can be recovered and volume of waste to be disposed can be reduced

Total cost of project

2000000

Total investment cost needed

1500000

Local Government Emissions

Local Government Operations GHG Emissions Data

(7.0) Do you have an emissions inventory for your local government operations to report? Reporting a Local Government Operations emissions inventory is optional.

In progress

(7.1) Please state the dates of the accounting year or 12-month period for which you are reporting an emissions inventory for your local government operations.

	From	To
Accounting year dates	January 1 2014	December 31 2014

(7.2) Please indicate the category that best describes the boundary of your local government operations emissions inventory.

Departments, entities or companies over which financial control is exercised

(7.3) Please give the name of the primary protocol, standard, or methodology used to calculate your local government operations emissions inventory and attach your inventory using the attachment function.

	Primary protocol and attach inventory	Comment
Emissions methodology	Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC), (WRI, C40 and ICLEI) mbpj-carbon-management-plan-2015-2020.pdf	The emission sources we've included in our baseline are listed below, divided into scopes 1, 2 and 3, in accordance with the World Resources Institute (WRI) standards, to enable comparison with other organisations. The emissions volumes identified are approximate, and limited by the accuracy and completeness of available data.

(7.4) Which gases are included in your emissions inventory? Select all that apply.

CO2

Energy

(8.0) Does your city have a renewable energy or electricity target?

Intending to undertake in the next 2 years

(8.0b) Please explain why you do not have a renewable energy or electricity target and any plans to introduce one in the future.

	Reasoning	Comment
Please explain	Please select	

(8.1) Does your city have energy consumption data to report?

No

(8.6) Does your city have a target to increase energy efficiency?

Yes

(8.6a) Please provide details on your city's energy efficiency targets.

Scale

Local government operations

Energy efficiency type covered by target

Reduce total energy consumed (in MWh)

Base year

2014

Total energy consumed/produced covered by target in base year (in unit specified in column 2)

1691.46

Target year

2016

Total energy consumed/produced covered by target in target year (in unit specified in column 2)

1600.87

Percentage of energy efficiency improvement in target year compared to base year levels

5.36

Percentage of target achieved

5

Plans to meet target (include details on types of energy in thermal /electricity)

Awareness training on energy management system for all staff to enhance participation for energy conservation program. Install sub meters at each floor to monitor energy consumption. Energy management training for higher management. Technical training on energy efficiency for operators/engineering staff. Lighting retrofit / replacement with LED bulb.

Please indicate to which energy sector(s) the target applies (Multiple choice)

Other (Local government head quarter)

Transport

(10.0) Do you have mode share information available to report for the following transport types? Select all that apply.

Passenger transport

(10.1) What is the mode share of each transport mode in your city for passenger transport?

	Private motorized transport	Rail/Metro/Tram	Buses (including BRT)	Ferries/ River boats	Walking	Cycling	Taxis or For Hire Vehicles	Other
Please complete	75.4	12	13					

(10.5) Please provide the total fleet size and number of vehicle types for the following modes of transport:

	Number of private cars	Number of buses	Number of municipal fleet (excluding buses)	Number of freight vehicles	Number of taxis	Transport Network Companies (e.g. Uber, Lyft) fleet size	Customer-drive carshares (e.g. Car2Go, Drivenow) fleet size
Total fleet size							
Electric							
Hybrid							
Plug in hybrid							
Hydrogen							

(10.7) Do you have a low or zero-emission zone in your city? (i.e. an area that disincentivises fossil fuel vehicles)

No

Food

(12.0) How many meals per year are served through programs managed by your city? (this includes schools, canteens, hospitals etc.)

100

(12.4) Does your city have any policies relating to food consumption within your city? If so, please describe the expected outcome of the policy.

	Response	Please describe the expected outcome of the policy
Please complete	Yes	See PJ Foodbank Action in mitigation section for further description

Water Security

Water Supply

(14.0) What are the sources of your city's water supply? Select all that apply.

Other source (Dam)

(14.1) Where does the water used to supply your city come from?

From adjacent river basins (by water transfer schemes) outside the city boundary

(14.2) What percentage of your city's population has access to potable water supply service?

100

(14.3) Are you aware of any substantive current or future risks to your city's water supply?

Yes

(14.3a) Please identify the risks to your city's water supply as well as the timescale and level of risk.

Risks	Estimated timescale	Estimated magnitude	Risk description
Increased water demand	Short-term	Serious	Heavy demand for water due to increasing population within Klang valley

Water Supply Management

(14.4) Please select the actions you are taking to reduce the risks to your city's water supply.

Risks

Increased water demand

Adaptation action

Use of non-potable water outside

Status of action

Operation

Action description and implementation progress

Installation of Rainwater harvesting system among other climate actions. Tree planting to prevent water runoff during heavy rain
Higher green spaces to absorb water excess during rainfall leads to increased water security

(14.5) Does your city have a publicly available Water Resource Management strategy?

Yes

(14.5a) Please provide more information on your city's public Water Resource Management strategy.

Publication title and attach document

Selangor State Water Management Strategy Plan
Pelan-Strategik-LUAS-2017-2021.pdf

Year of adoption from local government

2017

Web link

<https://www.luas.gov.my/v3/images/penerbitan/PelanStrategik/Pelan-Strategik-LUAS-2017-2021.pdf>

Does this strategy include Sanitation services?

No

Stage of implementation

Plan in implementation

Submit your response

What language are you submitting your response in?

English

Please read and accept our Terms and Conditions

I have read and accept the Terms and Conditions

Please confirm how your response should be handled by CDP.

	Public or non-public submission
I am submitting my response	Publicly (recommended)