CDP Cities 2016 Information Request
Taoyuan City Hall

Module: Introduction

Page: Introduction

0.1
Please give a general description and introduction to your city including your city's boundary in the text box below.

Administrative boundary	Description of city
City/Municipality	Taoyuan City is an aerotropolis city situated at the center of Asia-Pacific. The industrial output of the city has always been the pioneer of the country. Recently Taoyuan city actively involved in development of renewable energy, sustainable transport and integrated environmental education into citizens' daily lives. These actions make Taoyuan City become a well-balanced green city economically and environmentally.

0.2
Emissions Accounting Choice

Reporting emissions is optional for all cities. By checking the boxes below you are indicating that you have fuel and/or greenhouse gas (GHG) emissions data to report at this time.

Select 'Government' to report emissions from your local government operations (sometimes referred to as 'corporate' or 'municipal' emissions).

Select 'Community' to report emissions from the entire city area over which the city government can exercise a degree of influence through the policies and regulations they implement (sometimes referred to as 'geographic' or 'city-wide' emissions).

Select both boxes to report fuel and/or emissions for both inventories.

IF YOU HAVE NO FUEL AND/OR GREENHOUSE GAS EMISSIONS TO REPORT DO NOT CHECK EITHER BOX.

Government
Community

Module: Governance

Page: City Details

0.3
Please provide information about your city's Mayor in the table below.

Leader title	Leader name	Current term start	Current term end	Total time in office (years)
Mayor	Cheng Wen-Tsan	2014	2018	2

0.4
Please provide details of your city's annual operating budget.

Annual operating budget	Currency	Budget year start	Budget year end
94750765000	TWD New Taiwan Dollar	Fri 01 Jan 2016	Sat 31 Dec 2016

0.5
Please provide details of your city's current and projected population.

Current population	Current population year	Projected population	Projected population year
2114172	2016		

0.6
Please provide details of your city's GDP.

GDP	Currency	Year of GDP	Source
529600000000	USD US Dollar	2014	World Bank

0.7
Please provide further details about the geography of your city.

Average annual temperature (in Celsius)	Land area (in square km)	Average altitude (m)	Longitude (e.g. -120.9762)	Latitude (e.g. 41.25)
23	1220.9		121.301019	24.993176

Page: Governance

1.0
Please describe the impact of national and/or regional climate change activities on your city's own climate change activities.

We formulated corresponding emissions reduction targets in accordance with greenhouse gas reduction and energy efficiency targets drawn up by Executive Yuan, and developed relevant carbon reduction policies and strategies in cities, besides we inspected the plans and results at least once every five years.

1.1
Does your city incorporate desired sustainability goals and targets (e.g. GHG reductions) into the master planning for the city?

Response	Description
Yes	The overall goal in Taoyuan City is to reduce 50% in 2050 compared with 2005

1.2
Please describe how your city collaborates with businesses in your city on sustainability issues or projects?

1.We set up making business greener service corps to assist industries to establish its determined reduction goal.
2. We held competitions and counseling workshop to encourage enterprises to pay more attention to the environment and sustainable development issues

Module: Risks & Adaptation

Page: Climate Hazards

2.0
Has a climate change risk or vulnerability assessment been undertaken for your local government area?

No

2.1
Do the current and/or anticipated effects of climate change present a significant risk to your city?

Don't know

2.1a
Please list the most significant climate hazards currently faced by your city and indicate the probability and consequence of these hazards.

Climate hazards	Probability of hazard	Consequence of hazard
Rain storm	Medium High	Medium High
Drought	Medium	Medium High
Heat wave	Medium Low	Medium Low

2.1c
Please identify how you expect climate change to affect the frequency and intensity of the hazards faced by your city and when you expect to experience those changes.

Climate hazards	Change in frequency	Change in intensity	Anticipated timescale
Rain storm	Increasing	Increasing	Current
Drought	Increasing	Increasing	Current
Heat wave	Increasing	Increasing	Current

Page: Climate Hazards II

2.1d
Please describe the magnitude of the impact of these hazards and identify three critical assets or services that may be most impacted.

Climate hazards	Magnitude of impact	Impact description	Asset or service	Asset or service	Asset or service
Rain storm	Less serious	Continuous rainfall causes flooding on the main roads and residential area	Water	Health and community	Food and agriculture
Drought	Serious	Decrease in rainfall between winter and spring	Water	Food and agriculture	Health and community
Heat wave	Less serious	Number of hot days had increased with old days decreased, besides , it showed increasing trend in both highest and lowest temperature of a day.	Energy	Commerical	Residential

2.2
Do you consider that the effects of climate change could threaten the ability of businesses to operate successfully in your city?

Response	Explanation
Yes	It is anticipated that the weather in Taoyuan City may encounter the increasing of rainfall gap between wet season and dry season. Population and industries increased in the city along with agriculture irrigation in spring time and the storage capacity of reservoir provided high opportunity for spring drought. Therefore, it is worth attention of how to use water resources efficient. In the face of greater and more intense rainfall events in the future, we should pay more attention to urban drainage system, predicted landslides region and climate risk that due to extreme weather events and design a comprehensive adaptation strategy to climate change.

Page: Adaptation

3.0
Please describe the process by which the city reviews its progress and manages overall responsibility for climate change adaptation.

We established inter-bureau platform of reduction and adaptation to climate change and integrated governance policies from different bureau through the platform.

3.1
Has the Mayor or local government committed to adapting to climate change across the geographical area of the city, town or settlement?

Yes

3.1a
Please select the type of commitment(s) and attach evidence.

Type of commitment	Attach	Comments
Compact of Mayors	https://www.cdp.net/sites/2016/95/54395/CDP Cities 2016/Shared Documents/Attachments/Cities-3.1a-C2-Attachment/Letter_Of _Intent_Taoyuan_City.pdf	Taoyuan City committed to the Compact of Mayors this March, attached with our letter of intent on the left.

3.2
Does your local government have a plan that addresses climate change adaptation?

In progress

3.2b
Please explain why not and/or any future arrangements you have to create a plan.

Until now, we integrated reduction plan to climate change from different bureaus in Taoyuan City through the platform mentioned above, and later this year, we will start to collect information about adaption plan to climate change from different bureaus and integrated them.

3.3
The Compact of Mayors requires cities to complete these additional questions on the climate hazards affecting your city and your city's plans to adapt to these hazards. Other cities wishing to disclose further detail about their adaptation efforts are also encouraged to fill out the download.

Page: Social Risks

4.0
Does your city face any social risks as a result of climate change?

Yes

4.0a
Please complete the table

Social risks	Anticipated timescale in years	Impact description
Increased demand for public services (including health)	Current	Some areas have higher percentage of elderly population without enough emergency medical resources.
Increased risk to already vulnerable populations	Short-term	More hot days may put energy disadvantages at risk

Module: Opportunities

Page: Opportunities

5.0
Does climate change present any economic opportunities for your city?

Yes

5.0a
Please indicate the opportunities and describe how the city is positioning itself to take advantage of them.

Economic opportunity	Describe how the city is maximizing this opportunity
Development of new business industries (e.g. clean tech)	In accordance with central energy policy, Taoyuan city dedicate to developing solar photovoltaic industries. We promote local government to install solar power on their rooftop through PV-Energy Saving Company (ESCO) methods. Furthermore, we encourage private sectors to install solar power on their rooftop with subsidy provided. Besides PV industries, we encourage Taiwan Power Company and other private companies to invest in wind energy in coastal areas within city's boundary.
Additional funding options	Some banks have committed to support solar PV installation by reducing the financing threshold.
Improved efficiency of operations	We promote using of high efficient devices, such as replacing streetlights and signal lights with LED, and using LED for public areas.
Increased attention to other environmental concerns	Take advantages of climate risk that occurred within the nation to raise public concern about climate change issues.
Increased infrastructure investment	To improve the resilient abilities in Taoyuan City, all the Infrastructure designs and construction designs should take the impact of extreme weather into consideration.

5.1
List any climate change-related projects for which you hope to attract private sector involvement, and provide any details on the estimated cost of the project

Project area	Project description	Cost of project (USD$)
Renewable energy	We plan to build floating solar power installation on the ponds in Taoyuan City, the press conference about floating solar power is expected to be held in this June	

Module: Emissions - Local Government Operations

Page: Local Government - Methodology

LGO1.0
Please state the dates of the accounting year or 12-month period for which you are reporting a GHG measurement inventory for your local government operations.

Wed 01 Jan 2014 - Wed 31 Dec 2014

LGO1.1
Please indicate the category that best describes the boundary of your municipal GHG emissions inventory.

Departments, entities or companies over which operational control is exercised

LGO1.2
Please indicate which of the following major sources of emissions are included in your municipal GHG emissions inventory.

Source of emissions	Status
Airport(s)	Not applicable
Buildings	Included
Buses	Not applicable
Electricity generation	Not applicable
Electricity transmission and distribution	Not applicable
Employee commuting	Not included
Incineration of waste	Not included
Landfills	Included
Local trains	Not applicable
Maritime port	Not applicable
Municipal vehicle fleet	Included
Regional trains	Not applicable
Roads / highways	Not applicable
Street lighting and traffic signals	Not included
Subway / underground	Not applicable
Thermal energy	Not applicable
Waste collection	Not applicable
Wastewater treatment	Not applicable
Water supply	Included
Unknown source	Included
Total	Not applicable

LGO1.3
Please give the name of the primary protocol, standard or methodology you have used to calculate GHG emissions.

Primary protocol	Comment
Local Government Operations Protocol (ICLEI/The Climate Registry/California Climate Action Registry/California Air Resources Board)	

LGO1.4
Which gases are included in your emissions inventory? Tick all that apply.

CO2
PFCs
CH4
SF6
N2O
NF3
HFCs

Further Information

For Question LGO1.5, we also include the weight of protein per person use per year for our inventory, but we couldn't find the unit that is suitable for this data, so we have it attached here.

Attachments

https://www.cdp.net/sites/2016/95/54395/CDP Cities 2016/Shared Documents/Attachments/CDPCities2016/LocalGovernment-Methodology/Waste_water_treatment_for_LGO1.5.docx

Page: Local Government - Energy Data

LGO1.5
Please give the total amount of fuel (refers to Scope 1 emissions) that your local government has consumed this year.

Source	Fuel	Amount	Units
Buildings	Natural gas	81546	m3 (cubic meters)
Buildings	Liquefied Petroleum Gas (LPG)	126630.35	Metric tonnes
Buildings	Diesel/Gas oil	356428.049	L
Landfills	Waste (municipal)	61478.264	Metric tonnes
Municipal vehicle fleet	Motor gasoline (petrol)	2175696.715	L
Municipal vehicle fleet	Diesel/Gas oil	416080.079	L
Municipal vehicle fleet	Biodiesel	8491.430	L
Buildings	Other: CO2 fire extinguisher	0.828	Metric tonnes
Buildings	Other: Sodium bicarbonate dry chemical fire extinguisher	7.118	Metric tonnes
Buildings	Other: Potassium bicarbonate dry chemical fire extinguisher	1.135	Metric tonnes
Buildings	Other: Refrigerant R134a	0.194	Metric tonnes
Buildings	Other: Refrigerant R410a	0.251	Metric tonnes

LGO1.6
How much electricity, heat, steam, and cooling (refers to Scope 2 emissions) has your local government purchased for its own consumption during the reporting year?

Source	Type	Amount	Units
Buildings	Electricity	94330585.88	kWh

Page: Local Government - GHG Emissions Data

LGO1.7
Please provide total (Scope 1 +Scope 2) GHG emissions for your local government's operations, in metric tonnes CO2e.

65157

LGO1.8
If applicable, please provide the following GHG emissions.

Scope 1: All direct GHG emissions
Scope 2: Indirect GHG emissions associated with the consumption of purchased or acquired electricity, steam, heating, or cooling.

Total Scope 1 activity in metric tonnes CO2e emitted	Total Scope 2 activity in metric tonnes CO2e emitted
16011	49146

LGO1.9
Do you measure Scope 3 emissions?

Yes

LGO1.9a
Please complete the table.

Source of Scope 3 emissions	Emissions (metric tonnes CO2e)	Comment
Emissions from Contracted Services	2698.46	includes: 1.Buildings 833.7275 tonnes 2.Water treatment 1786.2662 tonnes 3.Transportation 46.2058 tonnes 4.Fugitive emissions 32.2588 tonnes

LGO1.11
Where it will facilitate a greater understanding of your government emissions, please provide a breakdown of these emissions by department, facility, source, or by any other classification system used in your city.

Department / Facility / Source / Other	Scope	Emissions (metric tonnes CO2e)
Residential-buildings/LPG、Natural gas、Diesel/Gasoil	Scope 1	1307.50
Residential-buildings/Electricity	Scope 2	49146.24
Transportation/Motor gasoline、Diesel/Gasoil、biodiesel	Scope 1	6240.61
Fugitive/Refrigerant、Fire extinguisher	Scope 1	688.18
Waste/Landfills、Wastewater treatment	Scope 1	7774.37

LGO1.12
Please indicate if your emissions have increased, decreased, or stayed the same from the previous year, and please describe why.

Change in emissions	Reason for change
This is our first year of calculation	

Page: Local Government - External Verification

LGO1.13
Has the GHG emissions data you are currently reporting been externally verified or audited in part or in whole?

No

LGO1.13b
Please describe your plans to verify your emissions in the future.

We plan to verify our Local Government emissions start from 2016 for the period of 1/1/2015-12/31/2015

Module: Emissions - Community

Page: Community - Date and Boundary

C1.0
Please state the dates of the accounting year or 12-month period for which you are reporting a GHG measurement inventory for your community.

Tue 01 Jan 2013 - Tue 31 Dec 2013

C1.1
Please indicate the category that best describes the boundary of your community GHG emissions inventory.

Administrative boundary of a local government

Page: Community - GHG Emissions Data

C1.2
Please give the name of the primary protocol, standard or methodology you have used to calculate GHG emissions.

Primary protocol	Comment
2006 IPCC Guidelines for National Greenhouse Gas Inventories	

C1.3
Which gases are included in your emissions inventory? Tick all that apply.

CO2
PFCs
CH4
SF6
N2O
NF3
HFCs

C1.4
Please detail total (Scope 1 + Scope 2) emissions for your community, in metric tonnes CO2e and provide a comment on the level of confidence in the accuracy of your community emissions figure.

Total emissions (metric tonnes CO2e)	Attach your inventory	Level of confidence	Comment on level of confidence
30073752.26	https://www.cdp.net/sites/2016/95/54395/CDP Cities 2016/Shared Documents/Attachments/Cities-C1.4-C2-Inventory/2013_Total_Emissions_Detail_for_Taoyuan_City.docx	Medium	For level of confidence we use the accuracy level of activity data collected multiply by accuracy level of emission coefficients used for calculation. accuracy level classification for activity data：「H」Regional statistics data :1 「M」Cities statistics data:2 「L」Central statistics data:3 accuracy level classification for emission coefficients：「H」Regional emission coefficients: 1 「M」National emission coefficients: 2 「L」International emission coefficients: 3 The result is 5.13, the value is between point 4-7, which classified as medium for level of confidence

C1.5
If applicable, please provide a breakdown of your GHG emissions by scope.

Scope	Metric tonnes CO2e	Level of confidence
Scope 1 emissions excluding emissions from grid-supplied energy generation	2686286.75	Medium
Scope 1 emissions from grid-supplied energy generation within the city boundary	12881544.34	Medium
Total Scope 1 emissions (Row 1 + Row 2)	15567831.09	Medium

Total Scope 2 emissions	14505921.17	Medium

C1.6

Where it will facilitate a greater understanding of your community's emissions, please provide a breakdown of these emissions by end user (buildings, water, waste, transport), economic sector (residential, commercial, industrial, institutional), IPCC sector (stationary combustion, mobile combustion, industrial processes, waste) or any other classification system used in your city.

End user / Economic sector / IPCC sector / Other	Sector	Scope	Emissions (metric tonnes CO2e)
Energy supply from buildings and AFOLU(住商-燃料)	Stationary energy (buildings)	Scope 1	817429.472
Energy supply from buildings and AFOLU(住商-用電)	Stationary energy (buildings)	Scope 2	2917035.159
Energy supply from Industries(工業能源-燃料)	Industrial buildings	Scope 1	9531145.470
Energy supply from Industries(工業燃料-電力)	Industrial buildings	Scope 2	11549692.996
Transportation(軌道-燃料)	Rail	Scope 1	2961.649
Transportation(軌道-電力)	Rail	Scope 2	39193.018
Transportation(道路-燃料)	Road	Scope 1	3905305.994
Industrial processes and product use(工業製程)	Stationary energy (buildings)	Scope 1	961127.135
Agriculture(農業)	Other: Agriculture	Scope 1	45549.479
Waste(廢棄物)	Waste	Scope 1	304311.888

C1.7

Please give the total amount of fuel (referring to Scope 1 emissions) consumed in your city during the reporting year.

Fuel	Amount	Units	End user / Economic sector / IPCC sector / Other	Sector
Crude oil	204757046.08	L	Energy supply from buildings and AFOLU(原油)	Stationary energy (buildings)
Natural gas	100685647.99	m3 (cubic meters)	Energy supply from buildings and AFOLU(天然氣)	Stationary energy (buildings)
Liquefied Natural Gas (LNG)	32214622.07	m3 (cubic meters)	Energy supply from buildings and AFOLU(液化天然氣)	Stationary energy (buildings)
Diesel/Gas oil	2664	L	Energy supply from buildings and AFOLU(柴油)	Stationary energy (buildings)
Waste (municipal)	122485.40	Metric tonnes	Energy supply from Industries(一般廢棄物)	Industrial buildings
Natural gas	600476634.49	m3 (cubic meters)	Energy supply from Industries(天然氣)	Industrial buildings
Other: biofuel	56673.97	Metric tonnes	Energy supply from Industries(生質燃料)	Industrial buildings
Diesel/Gas oil	58392.69	Metric tonnes	Energy supply from Industries(柴油)	Industrial buildings
Liquefied Natural Gas (LNG)	345059197.21	L	Energy supply from Industries(液化天然氣)	Industrial buildings
Liquefied Petroleum Gas (LPG)	17756987.35	m3 (cubic meters)	Energy supply from Industries(液化石油氣)	Industrial buildings
Coal (Anthracite)	3905071.71	L	Energy supply from Industries(無煙煤)	Industrial buildings
Coke breeze	40406.19	Metric tonnes	Energy supply from Industries(焦炭)	Industrial buildings
Coal (Bituminous or Black coal)	1004.13	Metric tonnes	Energy supply from Industries(煙煤)	Industrial buildings

Kerosene	287869953.88	m3 (cubic meters)	Energy supply from Industries(煤油)	Industrial buildings
Residual fuel oil	1407373.46	Metric tonnes	Energy supply from Industries(蒸餘油)	Industrial buildings
Lubricants	6457	L	Energy supply from Industries(潤滑油)	Industrial buildings
Coal (Lignite or Brown coal)	1159635463.85	L	Energy supply from Industries(褐煤)	Industrial buildings
Diesel/Gas oil	1117000	L	Transportation(軌道柴油)	Rail
Motor gasoline (petrol)	1065603112.62	L	Transportation(車用汽油)	Road
Diesel/Gas oil	509018077.82	L	Transportation(車用柴油)	Road
Biodiesels	10388124.04	L	Transportation(車用生質柴油)	Road
Liquefied Petroleum Gas (LPG)	6702929	L	Transportation(車用液化石油氣)	Road
Other: C4F8	2	Metric tonnes	Industrial processes and product use(工業製程)	Industrial buildings
Other: SF6	3.1	Metric tonnes	Industrial processes and product use(工業製程)	Industrial buildings
Other: C2F6	975.83	Metric tonnes	Industrial processes and product use(工業製程)	Industrial buildings
Other: pig iron	3552.48	Metric tonnes	Industrial processes and product use(工業製程-生鐵)	Industrial buildings
Other: Methanol	60.75	Metric tonnes	Industrial processes and product use(工業製程-甲醇)	Industrial buildings
Other: 玻璃化初胚	2.23	Metric tonnes	Industrial processes and product use(工業製程-玻璃化初胚)	Industrial buildings
Other: 玻璃基板	290916	Metric tonnes	Industrial processes and product use(工業製程-玻璃基板)	Industrial buildings
Other: 陶瓷電容器瓷粉	1679946.76	Metric tonnes	Industrial processes and product use(工業製程-陶瓷電容器瓷粉)	Industrial buildings
Other: 陶瓷-製品	422976	Metric tonnes	Industrial processes and product use(工業製程-陶瓷-製品)	Industrial buildings
Other: Nitrate	38015.19	Metric tonnes	Industrial processes and product use(工業製程-硝酸)	Industrial buildings
Other: carbon black	697.81	Metric tonnes	Industrial processes and product use(工業製程-碳黑)	Industrial buildings
Other: 廢玻璃(瓶.屑)	3042.7	Metric tonnes	Industrial processes and product use(工業製程-廢玻璃(瓶.屑))	Industrial buildings
Other: aluminum ingot	3144.69	Metric tonnes	Industrial processes and product use(鋁錠)	Industrial buildings
Other: 壁磚粉	17403.44	Metric tonnes	Industrial processes and product use(工業製程-壁磚粉)	Industrial buildings

C1.8
How much electricity, heat, steam, and cooling (referring to Scope 2) has been consumed by your city during the reporting year?

Type	Amount	Units	End user / Economic sector / IPCC sector / Other	Sector
Electricity	5588189960	kWh	Energy supply from buildings and AFOLU	Stationary energy (buildings)
Electricity	11549693	kWh	Energy supply from Industries	Industrial buildings
Electricity	75082409	kWh	Transportation	Transportation

C1.11
Do you measure Scope 3 emissions?

Yes

C1.11a
Please complete the table

Source of Scope 3 emissions	Emissions (metric tonnes CO2e)	Comment
Aviation	5535106.13	

C1.12
Please indicate if your emissions have increased, decreased, or stayed the same since your last emissions inventory, and please describe why.

Reason for change	Please describe why
Increased	Our emission increased compare to year 2012, most due to the fact that business continues to grow in our city. The emission of third rail and vehicle fuel increased by 3.2% and 1.35% in transportation sectors while the emission from IPPU and agriculture sectors increased 44.58% and 14.79% respectively. Even so, the emission from residential and commercial buildings sector and waste sector decreased by 3.83% and 3.63% demonstrates that educational propaganda for energy conservation and carbon reduction works well in our city.

Further Information

For our inventory in Taoyuan City, we also include the activity data from agriculture, waste for our source of emission which refer to the term "Fuel" used in CDP questionnaire, however, the source and the unit we use is hardly sort into table above in Question C1.7, thus we upload all the other information as supplement here.

Attachments

https://webadmin.cdp.net/sites/2016/95/54395/CDP Cities 2016/Shared Documents/Attachments/CDPCities2016/Community-GHGEmissionsData/2013_Community_activity_data_that_is_not_included_in_Question_C1.7.docx

Page: Community - External Verification

C1.13
Has the GHG emissions data you are currently reporting been externally verified or audited in part or in whole?

No

C1.13b
Please describe your plans to verify your emissions in the future.

We plan to verify our Community emissions start from 2016 for the period of 1/1/2014-12/31/2014

Module: Strategy

Page: GHG Emissions Reduction - Local Government Operations

6.0
Do you have a GHG emissions reduction target in place for your local government operations?

No

6.0b
Please explain why you do not have a local government operations emissions reduction target.

Our management focuses for local government operations are to save energy and reduce resources consumption, haven't had any specific reduction target yet.

6.1
What actions are you undertaking to reduce your emissions in your local government operations?

Emissions reduction activity	Anticipated emissions reduction – cumulative over the lifetime of the action (metric tonnes CO2e)	Action description
Building		New public buildings with total project cost over NTD 200 million should achieve "Intelligent Green Building" label, and total project cost that is over NTD 50 million must obtain "Green Building" label, and those with total project cost less than NTD 50 million shall at least meet the

codes and standards		criterion of “Daily Energy Conservation” indicator and “Water Conservation” indicator.
LED / CFL / other luminaire technologies		Put forward a complete ban on using mercury street lights, and replace them with LED streetlight.
Water recycling and reclamation		Taoyuan City government provides subsidy for campus establish rainwater recovery systems and encourages schools include concept of circulation system of water resources into teaching plan.

Page: GHG Emissions Reduction - Community

7.0
Please describe the process by which the city reviews its progress and manages overall responsibility for emissions reduction.

Based on greenhouse gas inventory results, we investigated our industrial structure and emission sectors, and differentiate the authority and responsibilities for Emission sources. And then we set our reduction targets through inter-bureau platform meeting focusing on the part that is under cities governance.

7.1
Does your city have a climate change action plan for reducing GHG emissions?

Yes

7.1a
Please attach your city’s climate change action plan below.

Publication title	Year of publication	Attach	Web link
Low Carbon Green City Flagship Projects	2015	https://www.cdp.net/sites/2016/95/54395/CDP Cities 2016/Shared Documents/Attachments/Cities-7.1a-C3-AttachPlan/Taoyuan_City_Low_Carbon_Green_City_Flagship_Projects.pdf	

7.2
Do you have a GHG emissions reduction target in place for your community?

Yes

7.2a
Please provide details of your total city-wide emissions reduction target. In addition you may provide details of your sector-specific targets, by providing the baseline emissions specific to that target.

Sector	Define target boundary	Baseline year	Baseline emissions (metric tonnes CO2e)	Percentage reduction target	Target date	Comment
Total	Taoyuan City	2005	30474326	50%	2050	In accordance with Central Government policy

7.3
What actions are you undertaking to reduce emissions city-wide?

Emissions reduction activity	Anticipated emissions reduction – cumulative over the lifetime of the action (metric tonnes CO2e)	Action description
Improve bus infrastructure,		We improve the willingness of city people to use public transportation through different kind approaches. First, we review all the bus routes and route map for public transportation to ensure the service to reach entire city. And then we check the quality of service and continue to improve the

services, and operations		accuracy and added value of public transport inquiry platform enable bus passengers to track bus movements accurately in real time.
Carbon emissions reduction from industry		We set up “Making Business Greener Service Corps” to assist industries to establish its determined reduction goal.
Energy efficiency/ retrofit measures		We provide grants to improve low-carbon communities, and encourage people to put low-carbon life into effect.
Low or zero carbon energy supply generation		Taoyuan city dedicate to developing solar photovoltaic industries. We promote local government to install solar power on their rooftop and moreover we promote solar photovoltaic installation on the rooftop of communities and factories.
Improve fuel economy and reduce CO2 from motorized vehicles		To improve the traffic congestion in certain area, we use advanced traffic management systems designed on traffic signal to enhance the efficiency and safety. And with less traffic congestion lower carbon dioxide would be discharged into the air.
Building codes and standards		We should require buildings that are over 6 floors to adopt green roof design and with no less than 50% of the floor area on the roof through the review mechanism for urban design.
Water recycling and reclamation		We increase the rate of using sewer pipeline, and reuse the water after it went through water resource recycling center.

Page: Renewable Energy

8.0
Please indicate the energy mix of your electricity at the city-wide scale.

Energy source	Percent
Coal	37.60%
Gas	32.40%
Oil	2.80%
Nuclear	18.60%
Hydro	3.40%
Biomass	0.00%
Wind	1.80%
Geothermal	0.00%
Solar	0.20%

8.1
Does your city have a renewable energy or electricity target?

No - my city does not have any renewable energy or electricity target

8.1c
Please explain why you do not have a renewable energy target or a renewable electricity target and any plans to introduce one in the future.

The Energy policies is led by central government, and Taoyuan City will continue promote the development of renewable energy in accordance with Central Government policy.

Page: Water Supply Risks

9.0
Do you foresee substantive risks to your city's water supply in the short or long term?

Yes

9.0a
Please identify the risks to your city’s water supply as well as the timescale and level of risk.

Risks	Timescale	Level	Risk description
Increased water stress or scarcity	Current	Serious	Population and industries number increased in the city along with agriculture irrigation in spring time and the limited storage capacity of reservoir provided high opportunity for spring drought in the future.
Flooding	Current	Serious	Due to the increase number of severe typhoons developed in tropical area, the intense and continuing rainfall result to flooding on main roads and home areas.
Declining water quality	Short-term	Less serious	Extreme rainfall events result to the difficulties of controlling water supply in reservoirs. ◦

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9.1

Please describe the actions you are taking to reduce the risks to your city's water supply.

Risks	Adaptation action	Action description
Increased water stress or scarcity	Conservation awareness and education	We encourage the use of water-saving devices and recycling through Propaganda campaign.
Flooding	Stormwater management (natural or man-made infrastructure)	Review the flood prevention design standards, and ensure all the Infrastructure designs and construction designs should take the impact of extreme weather into consideration.
Declining water quality	Watershed preservation	Strengthening the soil and water conservation around the catchment area, in order to reduce the chance of hillside and mudslide from erosion of heavy rainfall and maintain the water quality in lower basin.

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