

## Applicant Profile

### 1. Geopolitical Information

Total area (km<sup>2</sup>)  
 Land area (km<sup>2</sup>) \*  
 Water area (km<sup>2</sup>) \*  
 Geography type (predominant) \*  
 Heating degree days  
 Cooling degree days  
 Population \*  
 Rate of change in population \*  
 Estimated population by 2020 \*  
 Estimated population by 2050 \*  
 Percentage of urbanization \*

### 2. Socioeconomic information

Predominant economic sector \*  
 Community HDI  
 Community Gini coefficient  
 Unemployment rate \*  
 Percentage of population living in poverty

### 3. Government & community financial information

Community GDP \*  
 Government income  
 Average annual income \*  
 Government equity \*  
 Government expenditures  
 Average annual expenditure \*  
 Government debt \*  
 Debt service ratio \*  
 Number of government employees \*  
 Credit rating of the Local Government (if applicable)

### 4. Governmental Ambition (please also fill in detailed commitment information on the "Applicant Commitment" section)

Has your government made a greenhouse gas (GHG) mitigation commitment? \*  
 Has your government made a commitment to climate change adaptation? \*  
 Has your government made an action plan that addresses climate change mitigation? \*  
 Has your government made an action plan that addresses climate change adaptation? \*

### 5. Sectorial Information (the applicant must fill in project related sectorial information)

#### Buildings

Total floor size of residential buildings (m<sup>2</sup>)  
 Total floor size of commercial and institutional buildings (m<sup>2</sup>)

Total floor size of industrial buildings (m<sup>2</sup>)  
Total floor size of applicant government buildings (m<sup>2</sup>)

## Industry

Energy intensity of the industry expressed as the ratio between industrial energy consumption (in MWh) and the industrial Gross Added Value (GAV)

## Mobility

Final energy consumption in transport sector (MWh)  
Total annual amount of biofuels used in the transport sector (MJ)  
Total annual amount of renewable electricity used in the transport sector (MWh)  
Final energy consumption in public transport (MWh)  
Final energy consumption in applicant government's fleets (excluding public transport even if government-operated) (MWh)  
Number of passenger cars registered  
Capacity of public transport (commuters/day)  
Number of public transport users (commuters/day)  
Modal split of passenger transport (by percentage)  
*Walking*  
*Cycling*  
*Public transport*  
*Private motor vehicle*

## Energy supply

**Total annual primary energy supply (GJ)**  
*Share of fossil fuels in primary energy supply (%)*  
*Share of nuclear in primary energy supply (%)*  
*Share of renewables in primary energy supply, including hydro, biofuels, waste, solar, geothermal, etc. (%)*  
*Total annual energy derived from renewable resources (MWh)*

## Stationary energy generation

Total installed capacity of fossil and nuclear power generation plants (MW)  
Total annual power production from fossil and nuclear power plants (MWh)  
Total annual production of grid distributed heat and cooling from fossil and nuclear power plants (MWh)  
Total installed capacity of renewable energy (MW)  
Total annual power production from renewable energy plants (MWh)  
Total annual production of grid distributed heat and cooling from renewable energy plants (MWh)  
Power grid total transmission and distribution (T&D) losses (%)  
Percentage of population served by public power grid (%)

## Stationary energy consumption

**Final energy consumption (MWh)**  
*Final energy consumption in residential buildings (MWh)*  
*Final energy consumption in commercial and institutional buildings and facilities (MWh)*  
*Final energy consumption in manufacturing industries and construction (MWh)*  
*Final energy consumption in energy industries (MWh)*  
*Final energy consumption in agriculture, forestry and fishing activities (MWh)*  
*Final energy consumption in applicant government's buildings (MWh)*

## Waste management

Amount of solid waste generated (tons/year)  
Amount of solid waste collected (tons/year)

Percentage of population covered by regular solid waste collection service  
Percentage of solid waste that is disposed of in sanitary landfills (%)  
Total collected municipal solid waste per capita (kg /inhabitant / day)  
Percentage of collected solid waste that is recycled

Final energy consumption for waste collection and treatment

#### Greenhouse gas emissions

Greenhouse gas (GHG) emissions directly from the administered area (scope1) \*(tCO2e)

Greenhouse gas (GHG) emissions induced from the administered area (Basic/Basic+)\* (tCO2e)

##### ***Induced Greenhouse gas (GHG) emissions from the stationary energy sector (tCO2e)***

*Greenhouse gas (GHG) emissions from residential buildings (tCO2e)*

*Greenhouse gas (GHG) emissions from commercial and institutional buildings (tCO2e)*

*Greenhouse gas (GHG) emissions from manufacturing industries and construction (tCO2e)*

*Greenhouse gas (GHG) emissions from energy generation supplied to grid (tCO2e)*

*Induced greenhouse gas (GHG) emissions from the transport sector (tCO2e)*

*Induced greenhouse gas (GHG) emissions from the waste sector (tCO2e)*

*Induced greenhouse gas (GHG) emissions from agriculture, forestry and land use (AFOLU)  
(tCO2e)*

*Induced greenhouse gas (GHG) emissions from industrial processes and product use (IPPU)  
(tCO2e)*

#### Water and sanitation

Percentage of population with access to potable water supply services

Percentage of population with sustainable access to an improved water source

Percentage of population with access to improved sanitation

Percentage of population served by wastewater collection (%)

Percentage of wastewater that received no treatment (%)

Percentage of wastewater receiving primary treatment (%)

Percentage of wastewater receiving secondary treatment (%)

Percentage of wastewater receiving tertiary treatment (%)

Total domestic water consumption per capita (liters / day)

Final energy consumption for production of drinking water (kWh/m3)

Water loss of the public water supply system, including leakage and non-authorized consumption  
(% of raw water)

Final energy consumption for wastewater treatment (kWh/m3)

#### Urban Planning, biodiversity and ecosystem services

Area of parks, protected areas and green infrastructure (including recreational areas, forests,  
coastal zones, etc.) (km<sup>2</sup>)

Area of brownfield sites (km<sup>2</sup>)

Area of impermeable surfaces (km<sup>2</sup>)

Area of informal settlements (km<sup>2</sup>)

Number of native species

#### Air quality

Fine Particulate Matter (PM2.5) concentration (microg/m3)

Particulate Matter (PM10) concentration (microg/m3)

NO<sup>2</sup> concentration (microg/m3)

SO<sup>2</sup> concentration (microg/m3)

O<sup>3</sup> concentration (microg/m3)

Is this the average modelled concentration for the territory?

If these are results from point measurements, indicate air quality control station location  
(Latitude\Longitude)

Resilience and climate adaptation

Has a climate change risk or vulnerability assessment been completed? \*

Climate hazards experienced currently /anticipated \*

Have you begun to implement climate change adaptation and resilience plans or policies? If so, \*  
how?

# Transformative Actions Program

Mandatory fields left to complete on this sheet:

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5690.01	
2947.62	
2742.39	
Coastal	
<i>Value</i>	<i>Year</i>
2778992	2014
0.32	2014
2831534	2020
2560434	2050
89.24	2013

Sector 1: Industry and manufacturing

<i>Value</i>	<i>Year</i>
3.92	2014

<i>Amount</i>	<i>Currency</i>	<i>Year</i>
505,500,000,000	USD - US Dollar	2014
113,570,213,000	TWD - Taiwan Dollar	2014
106,405,516,000	TWD - Taiwan Dollar	
904,053,407	TWD - Taiwan Dollar	2014
128,029,736,000	TWD - Taiwan Dollar	2014
136,494,531,000	TWD - Taiwan Dollar	
235,234,671,000	TWD - Taiwan Dollar	2013
5.27		2012
47,625		2014

Please include currency

Please include currency

Commitments " tab)

Write file name (pdf format)

Yes, the latest version is completed	K_TAP_GHG mitigation commitment
Yes, the latest version is completed	K_TAP_adaptation commitment
Yes, the latest version is completed	K_TAP_mitigation action
Yes, the latest version is completed	K_TAP_adaptation plan

<i>Amount</i>	<i>Year</i>
138941030	2013

14,810,639	2014
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<i>Amount (MWh)</i>	<i>Currency</i>	<i>Year</i>
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<i>Amount</i>	<i>Year</i>
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862,120	2014
320,784	2014

<i>Amount</i>	<i>Year</i>
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<i>Amount</i>	<i>Year</i>
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<i>Amount</i>	<i>Year</i>
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<i>Amount</i>	<i>Year</i>
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<i>Amount</i>	<i>Year</i>
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923,999	2014
408,745	2014

100	2014
2.28	2014
0.403	2014
44.95	2014

<i>Amount</i>	<i>Unit</i>	<i>Year</i>
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<i>Amount</i>	<i>Year</i>
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43311472.44	2013
58,703,068	2013
53,530,976.11	2013
4,574,245.48	2013
48,920,249.80	2013
23,488,038.14	2013
4,173,818.35	2013
913,258.80	2013
85,014.80	2013

<i>Amount</i>	<i>Year</i>
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95.61	2014
53.47	2014
18.05	2014
273	2014

<i>Amount</i>	<i>Year</i>
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1763.47	2013

<i>Amount</i>	<i>Year</i>
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29.45	2014
64.10	2014
31.58	2014
13.10	2014
61.00	2014
Yes	

Latitude		Longitude	
Write file name (pdf format)			
Yes, the latest version is completed		K_TAP_vulnerability	
Hazard	Current	Anticipated	
Rain storm	Yes	Yes	
Heavy snow	No	No	
Severe wind	No	No	
Tornado	No	No	
Cyclone (Hurricane/Typhoon)	Yes	Yes	
Tropical storm	No	No	
Electrical storm	No	No	
Fog	No	No	
Extreme winter conditions	No	No	
Cold wave	No	No	
Extreme cold weather	No	Yes	
Heat wave	No	No	
Extreme hot weather	No	Yes	
Drought	No	Yes	
Forest fire	No	No	
Land fire	No	No	
Flash/surface flood	Yes	Yes	
River flood	Yes	Yes	
Coastal flood	Yes	Yes	
Groundwater flood	No	No	
Storm surge	No	No	
Salt water intrusion	Yes	Yes	
Ocean acidification	No	No	
Landslide	Yes	Yes	
Avalanche	Yes	Yes	
Rockfall	Yes	Yes	
Subsidence	No	No	
Water-borne disease	No	Yes	
Vector-borne disease	Yes	Yes	
Air-borne disease	Yes	Yes	
Insect infestation	Yes	Yes	
Other, please explain			





## Project profile

### Project information

Project title \*

Focus area \*

Project status \*

Project location: latitude \*

Project location: longitude \*

Estimated project implementation timeline (**start and end** date, if possible per phase)

*Project identification phase*

*Pre-feasibility study phase*

*Feasibility study phase*

*Finance and procurement phase*

*Project construction phase*

*Project operation phase*

*Project decommissioning*

Project Web page link

### Description

Brief project summary, including activities involved and their long-term impacts (max 2500 characters) \*

Please describe the social, political and economic context of the project, including current climate policy context, along with existing or planned climate strategies. (max 5000 characters) \*

Please describe the regulatory framework that supports this project (e.g.: applicant has mandate or ownership over infrastructure targetted by the project)

Please describe specific outputs of the proposed project (e.g. services, products, key mitigation and adaptation performance.etc) (max 3000 characters) \*

Total project area (km2)

## Project, staff and stakeholders

Please describe the project staff composition (number and capacity) (max 500 characters) \*

Project owner \*

Project manager (first and last name) \*

Experience and background of the project manager (max 2500 characters) \*

Project manager's position in government (if applicable)

Project manager E-Mail address \*

Project manager postal address \*

Role of the government in the project \*

Please list all of the government departments involved in the proposed project and describe the process of cross-department coordination \*

Please explain how the different levels of government (local, regional, national) collaborated in the proposed project activity \*

Please list the stakeholders involved in the proposed project and stakeholder engagement activities \*

Please explain how the private sector is engaged in the proposed project (specify their role in the design and implementation of the proposed project) \*

## Projective potential Additional Information

Based on your understanding of the Transformation Action Plan concept, and your answers provided on the TAP Overview sheet, please describe how do you think your project is transformative (max 2500 characters) \*

Is the project the first of its kind in the proposed jurisdiction? \*

If it is not the first of its kind, please explain how the proposed project scales up the ambitions and outcomes of similar projects already existing, in the one or more of the following aspects \*

*Scaling up impact in terms of energy efficiency (MWh/output / MWh/m2)*

*Scaling up impact in renewable energy generation(MWh)*

*Scaling up impact in population served*

*Scaling up impact in greenhouse gas reduction (T CO2e)*

*Other scaling up potential please specify*

Please explain how many and which community groups will benefit from the proposed project \*

Total population served by the project (number of inhabitants)

Explain how the proposed project optimizes the use of local resources (air, water, waste, land, biodiversity/ecosystems, energy) across services and sectors] \*

Please explain how the proposed project contributes to national and global sustainable goals \*

Does the project fill a gap in a wider system of service delivery?

Please explain the consequences of deferring the project in terms of health, safety, prosperity, etc.?

## **Benefits of the transformation**

**Please explain project co-benefits in securing safe and resilient energy supply, if applicable**

Planned increase in installed capacity of renewable energy within administrated area (MW)

Anticipated increase of renewable energy generation (MWh/year)

Anticipated reduction of net energy imports to total primary energy supply (%)

**Please explain project co-benefits in increasing access to energy, if applicable**

Anticipated increase in percentage of city population with authorized electrical service (%)

Anticipated decrease in average number of electrical interruptions (per customer per year)

Anticipated decrease in average length of electrical interruptions (hours per year)

**Please explain project co-benefits in improving urban air quality and public health, if applicable**

Anticipated reduction of Fine Particulate Matter (PM2.5) emissions (t/y)

Anticipated reduction of Particulate Matter (PM10) emissions (t/y)

Anticipated reduction of NO<sub>2</sub> emissions (t/y)

Anticipated reduction of SO<sub>2</sub> emissions (t/y)

Anticipated reduction of O<sub>3</sub> emissions (t/y)

**Please explain project co-benefits in improving urban livelihoods and employment, if applicable**

Anticipated decrease in percentage of population living in poverty (%)

Anticipated full-time employment positions created

Anticipated number of new jobs to be created during project implementation within the administrated area

Anticipated number of new jobs to be created within the administrated area that will remain after project completion

Anticipated decrease in unemployment rate (%)

**Please explain project co-benefits in promoting gender equality and empowering women, if applicable**

Anticipated increase in percentage of women employed in the government workforce (%)

Anticipated increase in percentage of female school-aged population enrolled in school (%)

Percentage of total elected officials who are women (%)

**Please explain project co-benefits in preserving ecosystems, if applicable**

Planned increase in permeable surface area (km<sup>2</sup>)

Percentage of total area to be developed upon for the project which is currently brownfield sites (%)

Please explain project co-benefits in increasing access to water/sanitation, if applicable

Planned increase in percentage of population with potable water supply service (%)

Planned increase in percentage of population with sustainable access to an improved water source (%)

Planned increase in percentage of population with access to improved sanitation (%)

Please explain project co-benefits in increasing access to sustainable mobility, if applicable

Planned increase in percentage of population living within 500 meters of a public transportation stop (%)

Please explain other co-benefits from the proposed project, if applicable

**Adaptation Potential**

**Adaptation Evaluation Plan**

Please describe how the proposed project will contribute to adaptation/mitigation efforts \*

Please describe how the proposed project will be monitored and evaluated \*

**Adaptation Potential**

Indicate the mitigation sector addressed by the proposed project (select only one) \*

Indicate the mitigation methods used in the proposed project (select at least one) \*

Please choose the type of emission reduction indicator used:

Estimated absolute emissions reduction (tCO<sub>2</sub>e per year) \*

Estimated total absolute emissions reduction in the project duration (t CO<sub>2</sub>e) \*

Estimated Business As Usual (BAU) emissions reduction (tCO<sub>2</sub>e per year) \*

Estimated total emissions reduction by comparison with a BAU baseline in the project duration (t CO<sub>2</sub>e) \*

If using a Business as Usual scenario, please disclose the methodology used to estimate the scenario

Estimated annual energy savings (MWh per year)\*(mandatory for energy projects)

Estimated total energy saving in the project duration (MWh)\*(mandatory for energy projects)

Estimated total installed capacity for renewable energy (MW)\*(mandatory for energy projects)

Estimated annual increase in renewable energy installed capacity (MW per year)\*(mandatory for energy projects)

**Adaptation Potential**

Area of adaptation intervention (select at least one) \*

Indicate the type of action used in the proposed project (select at least one) \*

If applicable, please describe how your project addresses the priorities identified in your climate change risk or vulnerability assessment \*

Please list how this project will contribute to amending or adopting policies and plans addressing climate-related hazards \*

Please describe how your project is reducing climate and extreme weather related loss and damage in human life and economic assets (including insured losses) and provide figures when relevant \*

Please describe how your project is raising awareness and building institutional capacity within and across local government departments to reduce stress related to climate hazards and/or improve disaster risk management and response \*

Please describe how the proposed project is including most vulnerable community groups \*

## Financial Feasibility

Estimated total budget of the project \*

Finance status \*

Percentage of secured budget \*

Please disclose secured financial sources | reference date \*

Private funding

Public funding from the governmental applicant's own budget

Public funding from the national budget

Please provide evidence of secured financial resources for the proposed project (loan approval, governmental fund, private investment) \*

Total cost for the local government \*

Anticipated annual revenue generated by the project during operation

Anticipated annual decrease in current budget costs generated by the project during operation

Does the project have a cost-recovery mechanism planned or in-place? If so, please describe

Describe any revenue guarantees such as a Power Purchase Agreement, subsidies or feed in tariffs, if applicable

Describe the regulatory framework that supports this project (e.g.: applicant has mandate or ownership over infrastructure targeted by the project)

If applicable, please indicate expected average interest rate for debt (%)

If available, please indicate the project Financial Internal Rate of Return (FIRR) (%)

If available, please indicate the project Financial Payback Period (FPBP) (years)

Please explain, if the proposed project experiences financial gaps (if the proposed project has received funding, but would require additional support)

If financial gaps exist, please provide an estimation of the required funds needed and explain what activities need to be financed | Write full file name (in pdf format)

Was a risk assessment conducted to identify risks that may jeopardize project implementation and successful completion? (e.g.: financial, economic, political, natural and climate, etc.)

What risks have been identified? (e.g.: financial, economic, political, natural and climate, etc.)

Does the project have a risk mitigation strategy?

Briefly describe the project's risk mitigation strategy

Total amount of funding being sought

Estimate of the required amount of funding needed in order to conduct an in-depth appraisal of the project, if applicable  
In a separate document please provide supporting evidence for the estimate of the required amount of funding needed for an in-depth project appraisal | Write full file name (in pdf format)

## Technical Feasibility

Please provide a short description of the technologies used in the proposed project \*

Are these technologies mature on the market? \*

Does the project owner hold the permission to use the proposed technologies? \*

Is the technology provider originating from the administrated area of the governmental applicant? \*

Is there local knowledge and capacity for project implementation, operation and maintenance? \*

## Documents for project implementation

Do you have the financial feasibility study for the proposed project? If yes, describe the method used to carry it, the positive and negative findings and overall conclusion. \*

Do you have the technical feasibility study for the proposed project? If yes, describe the method used to carry it, the positive and negative findings and overall conclusion. \*

Do you have the environmental impact assessment for the proposed project? If yes, describe the method used to carry it, the positive and negative findings and overall conclusion. \*

Do you have a risk and vulnerability assessment report for the proposed project? If yes, describe the method used to carry it, the positive and negative findings and overall conclusion. \*

Do you have a GHG reduction report for the proposed project? If yes, describe the method used to carry it. \*

Please identify specific barriers to the implementation of the proposed project (e.g. economic, environmental, technical, institutional, financial issues, etc) (max 1000 characters). \*

Please explain how the TAP would help overcome the barriers identified above

**Has the proposed project received all necessary permits for implementation?**

Land use permits

Construction permits

Technology property protection contracts

Bid documents

Energy Performance Contract (EPC) contracts

Supply contracts

Insurance contracts

Power Purchase Agreement (PPA)

Others, please specify

Mandatory fields left to complete on this sheet:	34
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Kaohsiung Climate Change Adaptation and Sustainability Promotion Program
Adaptation action
Implementation

From:	Until:

After Kaohsiung City merged with Kaohsiung County to become Greater Kaohsiung, which covers broader administrative divisions, Kaohsiung now encompasses more diverse land usage and natural resources.

It could be seen from Kaohsiung's experience with major disasters such as Typhoon Morakot, Typhoon Fanapi that the existing environment of Kaohsiung is extremely sensitive to climate change, which affects industry, natural resources, ecology and citizen property of the city to various degrees.

Examination of Kaohsiung's tolerance concerning potential disasters is necessary, as

Kaohsiung City merged with its surrounding county on Dec 25, 2010, increasing the area of land and the population, up to 2,770,000 people. Possessing a diversity of natural geographical features, Kaohsiung serves as an important hub of Taiwan with the Kaohsiung international harbor, airport and therefore excellent logistic networks for logistic and financial industries. On the other hand, Kaohsiung county is of abundant agricultural resources, manufacturing industries and hi-tech industries, entitling the merge with several advantages.

The climate change strategy of Kaohsiung is directed by “mitigation” and “adaptation.” Since 2005, the city has dedicated herself to promote GHG emission reductions, expecting by doing so it could reduce the global warming phenomenon along with its environmental impact. However, as the broader impact of climate

According to authorization from central government, this program at the beginning formed Kaohsiung's climate change adaptation project group as a cross-sectional platform. It linked to the existing Kaohsiung Sustainable Development Committee. The program as well analyzed Kaohsiung's background information and location to discuss the existing issues and potential impacts from climate change. Through defining 8 primary domains to clarify important issues, the program meanwhile determines specific scenarios as an analytic basis for climate change projection. The expert consultancy group is invited to investigate key issues and recheck adaptation



This program established and drafted Kaohsiung's climate change adaptation strategies, in which adaptation issues, adaptation strategies, action plans and advisory groups are presented. Figures of adaptation strategies and action plans in each of the 8 domains are as follows:  
Disasters: 14 adaptation strategies and 99 action plans;  
Water Resources: 10 adaptation strategies and 59 action plans;  
Agricultural Production & Biodiversity: 9 adaptation strategies and 31 action plans;  
Coastal Zones: 11 adaptation strategies and 45 action plans;  
Land Use: 12 adaptation strategies and 52 action plans;

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Environmental Protection Bureau, Kaohsiung City Government

Fu-Chen, Hsieh

Environmental Protection Bureau, Kaohsiung City Government-Head of Planning Section

Environmental Protection Bureau, Kaohsiung City Government-Head of Planning Section

fuchen0621@gmail.com

No.834,Chengching Rd. , Niaosong Dist., Kaohsiung 833 , Taiwan

Supervisor: Central Environmental Protection Bureau  
Executor: Local Environmental Protection Bureau

Civil Affairs Bureau, Social Affairs Bureau, Environmental Protection Bureau, Cultural Affairs Bureau, Municipal Open University, Information Bureau, Research, Development, and Evaluation Commission, Education Bureau, Health Bureau, Economic Development Bureau, Environmental Protection Administration

China Petroleum Corporation, Taiwan Power Company, NGOs

Private sectors provide information necessary for planning, such as position of petrochemical pipelines from CPC or background data of pylon from Taiwan Power Company; data collected is for disaster prevention and climate change adaptation;




Actively reviewing potential threats brought by climate change, Kaohsiung establishes climate change adaptation strategies to reduce its environmental impact that may endanger citizens of Kaohsiung's lives and property. Besides, the program further aims to construct a sustainable Kaohsiung.

In 2005, Kaohsiung and Pingtung co-constructed "Sustainable Development Committee of Kaohsiung and Pingtung area", for the purpose of cross-regional cooperation. Distinct and common goals of sustainable development are expected to be fulfilled by formulating "Sustainability Rating System of Kaohsiung and Pingtung Area." The rating system serves as a mechanism to demonstrate the sustainability level with details of the area. From this, Kaohsiung adjusted its organizational structures, from 8 domains with 3 aspects to 6 groups (sustainable prospects, sustainable environment, sustainable transportation, sustainable economy, sustainable education, health and benefits) with 3 primary aspects (environment, health, economy.) By intensifying horizontal communication, a sustainable and ecological city is expected.


<i>Area</i>	<i>Yes/No</i>
Infrastructure - Transport	Yes
Infrastructure - Buildings	Yes
Infrastructure - Commercial	Yes
Utilities (Water, waste, energy)	Yes
Resource and waste management (food, energy, water, waste)	Yes
Ecosystems and biodiversity	Yes
Land use regulations	Yes

Coastal protection	Yes
Disaster Risk Management	Yes
Insurance and Investment	No
Business continuity	No
Tourism	Yes
Health	Yes
Education and awareness	Yes
Capacity building	No
Behavioral change	No
Social justice	No
Urban risk data and analysis	Yes
Science, research, and technology	Yes
Other, please specify	

<i>Type of action</i>	<i>Yes/No</i>
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Integrated approaches (adaptation, mitigation, and/or Disaster Risk Reduction)	Yes
Engineering solutions	No
Ecosystem-Based Adaptation	No
Community Based Adaptation	No
Early warning systems	No
Green infrastructure	No
Policy and regulation	Yes
Mapping and GIS	Yes
Information / Communication Technology (IT/ICT)	No
Multistakeholder collaboration	No
Other, please specify	

Questionnaire investigation among experts is adopted to confirm the order of key issues regarding climate change. Respondents will be Kaohsiung official bureaus and central organizations whose authority and responsibility relate to the 8 domains. This program takes the average value of each domain: from the one that gets the highest score to the one that gets the lowest. The domain which gets the highest score is considered the domain that suffers the most from environmental impacts brought by climate change (such as precipitation variation, temperature variation, extreme

This program has compiled and planned Kaohsiung Adaptation Strategies and Actions Draft, building on analysis of environmental impacts and vulnerability in 8 primary domains. Through vulnerability valuation and investigation, vulnerability of each of the 8 primary domains is represented.

Figures of adaptation strategies and action plans based on the analysis above are as follows:

- Disasters: 14 adaptation strategies and 99 action plans;
- Water Resources: 10 adaptation strategies and 59 action plans;
- Agricultural Production & Biodiversity: 9 adaptation strategies and 31 action plans;
- Coastal Zones: 11 adaptation strategies and 45 action plans;
- Land Use: 12 adaptation strategies and 52 action plans;
- Infrastructures: 7 adaptation strategies and 52 action plans;
- Industry and Energy Supply: 7 adaptation strategies and 46 action plans;
- Health: 5 adaptation strategies and 40 action plans;


<i>Amount</i>	<i>Currency/date</i>
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