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# TAICHUNG CITY

## VOLUNTARY LOCAL REVIEW

*SUSTAINABLE DEVELOPMENT GOALS*



TAICHUNG CITY GOVERNMENT

SUSTAINABLE HAPPINESS / RICH TAICHUNG



TAICHUNG CITY

SUSTAINABLE DEVELOPMENT GOALS

# 2021 TAICHUNG CITY VOLUNTARY LOCAL REVIEW

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# I. Mayor's Preface



***What kind of the city is an ideal one in your mind?***

Living in the high-risk area and quick climate changes, the center gravity of traditional security will be replaced gradually by non-traditional security. Sustainable development has become the most important task for any government, and thus we pursue the city development and the balance according with the natural ecology.

Therefore, the United Nations enacted laws for 17 Sustainable Development Goals (SDGs) in 2015, including 3 dimensions : environmental protection, social progress, and economy growth. 17 Sustainable Development Goals will become the educational rules for the sustainable development in 2030 and the common language for the world to promote the sustainable vision.

Taichung City is a livable city with pleasant climate and abundant resources. To prosper this beautiful city, sustainable development is always an important idea for our policy planning. Early 2011, Taichung City created the "Promoting Low-carbon-city Office of Taichung City", which was the first city adopting the low-carbon among the administrative units. To promote sustainable development, Taichung has become the global model low-carbon city.

To actively promote Taichung to become a sustainable city and reach the SDGs made by the United Nations, Mayor of Taichung, Lu Shiow-Yen and her team have set the goals "Sustainable Happiness, Rich Taichung" as the visions. Taichung City Government merges the "sun, air, and water" into the environment, economy, and communities, and tailors policies for Taichung City, including "Blue Sky and White Cloud Action Plan" is to improve the air quality, making $PM_{2.5}$ decline 32.5% in 2020 and becoming the lowest level among 6 metropolises in Taiwan. In addition, Taichung MRT Green Line officially opened in April, 2021. Since then, Taichung has become the third city which owns MRT system. At the same time, we continue the plans for building the Blue Line, implementing a low-carbon city by taking more public transportations. We build the "Shuinan Trade and Economic Park (S.T.E.P)" as a demonstration based on the ideas of "wisdom, low-carbon and innovation" and The Central Park is the first large-scale urban ecological park in Taiwan. Taichung is also the first city to present "the setting and refund of livable ecological building", to bring more greens to the city and build a salubrious living environment. The growth of the electric bus and electric motor is also the highest in Taiwan. Taichung City Government has won the Premium Award of "Environmental Protection Administration , Executive Yuan"for 9 consecutive years, and assessed the Level A for "A score of Carbon Disclosure Project (CDP)" for 3 years in a row.There are many things we can ponder behind these great achievements, sticking with the cooperation and hardworking of our government and all sectors, we are able to share these honors with our citizens.

The climate change is gradually getting worse and becoming "climate emergence". Mayor Lu Shiow-yen signed the "Climate Emergency Declaration" on behalf of Taichung in January, 2021, proposed the "Sustainable 168 Goals Strategy", and declared the determination of building Taichung as a non-carbon city. The strategies include: "Promoting the usage of renewable energy to achieve the rate of 20% by 2030", "Building solar power facilities with power generation capacity of 1GW by 2030", "For the new hire purchase case in an industrial zone within the jurisdiction of this city, the manufacturers have to install the photovoltaic to the amount of 50% on the roof area", "Increasing public transportation electric vehicles by 40% by 2030", "The growth rate of electric motorcycle reaches to the amount of 200% by 2030", "The average concentration of $PM_{2.5}$ reaches the goal of 12 $\mu g/m^3$ by 2030". We hope that in the coming 10 years, we can truly implement the Sustainable Development Goals thoroughly to build Taichung as a pleasant and well-living city.

There will be many challenges ahead in the future, but we will keep confronting them. We will never slacken the prevention for the pandemic, continue protecting the safety of our citizens, and help to get through the pandemic crisis by means of all kinds of medical plans. Facing the water shortage that might happen again anytime, we will also be actively work on the drought resistance preparing and related strain, trying our best to lower the effects of life inconveniences brought by water shortage.

A happy city must be a city where people and ecology are in harmony. By implementing the first Voluntary Local Review (VLR), we present the results and views of Sustainable Development in Taichung, inviting our citizens to work with us, and cooperate with each other to make Taichung a better and sustainable happy city.

Mayor Lu, Shiow-Yen



# II. The Highlight Performance SDGs in Taichung

## Social



The number of Chinese medicine clinics and western medicine clinics are the top comparing to 6 metropolises (2019).



The coverage of Long-term care services is the top comparing to 6 metropolises (2021).



Fee for taking care children is the lowest comparing to 6 metropolises (2020).



The number of foreign English Teachers ranks the top comparing to 6 metropolises (2021).



The proportion of female entrepreneurs is close to 32%, which ranks the top comparing to 6 metropolises (2021).



The first "Gender Equality General Assembly Exam" in Taiwan was held in Taichung World Flora Exposition (2018).



The first city hosts "Female Theme Activities" (2021).



The highest proportion owning public toilets for male and female (1:4) (2020).



The highest number of hosting art and cultural activities (2021).



The first indigenous experimental education primary school (P'uma Elementary School) (2016) and junior high school (Pqwasan Laqi-mrkyas Tmali Ku Qalan Thitun) (2019).



The highest population increase rate (2021).



The best effectiveness of anti-drug (2021).



The highest open rate for the municipal information (2020).

## Economy



The highest device capacity of the renewable energy (2021).



The highest subsidy of safety self-guide tour (2020).



The highest Investment promotion comparing to 6 metropolitan cities (2020).



The six targets including: The growth number of the company registered, the growth number of businesses registered, the growth of commercial registered capital, the growth of business sales, the number of newly registered factories and the number of Taiwan's top three schemes have been the top among 6 metropolises in Taiwan (The first season of 2021).

## Environment



The evaluation of autonomous flood prevention communities held by the Water Resources Department has been ranked the top in Taiwan (2021).



The number of electric vehicles charging station ranks the top in the country (2021).



Scooter, Electric scooter： (2021)

1. The growth of the number of electric scooter/motorcycles has ranked the top in the country.
2. The number of electric scooter/motorcycles charging station has ranked the second top in the country.
3. The number of electric scooter/motorcycle battery exchange station has ranked the second in the country.
4. The frequency of Periodic inspection for scooter/motorcycle has ranked the top in the country.



Electric bus: (2021)

1. The number of electric buses has ranked the top in Taiwan.
2. The first city designs the "Zero-touch" bell to inform drivers while passengers get off buses.



Completed the MRT Green Line (2021).



The number of Air Quality Micro Sensor has ranked the top in Taiwan (2021).



Taichung Central Park has won the Silver Award in the FIABCI World Prix d'Excellence Awards (2021).



The per capita green space of the residents has increased to the number of 9.56m$^2$, and ranked the second in Taiwan (2020).

# III. The Introduction of Sustainable Development Goals

The United Nations published the《Transforming Our World: the 2030 Agenda for Sustainable Development》in 2015, setting 17 Sustainable Development Goals (SDGs), covering the global issues including Environmental Protection, Social Progress, Economy Growth, and including the 5P principles : the“Planet” of environment value, the “People” of social value, “Prosperity” and “Peace” of economy value, and the “Partnership” of the operational level. We hope that all citizens regardless of identities and background, we have obligations and responsibility to realize their life potential, and to live with dignity and high-quality life in a healthy environment.



## Sustainable Development Goals (SDGs)

*SDG 1* **No Poverty**
End poverty in all its forms everywhere.

*SDG 2* **Zero Hunger**
End hunger, assure food security and improve nutrition and promote sustainable agriculture.

*SDG 3* **Good Health and Well–being**
Ensure healthy lives and promote well–being for all ages.

*SDG 4* **Quality Education**
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

*SDG 5* **Gender Equality**
Achieve gender equality and empower all women and girls.

*SDG 6* **Clean Water and Sanitation**
Ensure availability and sustainable management of water and sanitation for all.

*SDG 7* **Affordable and Clean Energy**
Ensure access to affordable, reliable, sustainable and modern energy for all.

*SDG 8* **Employment and Economic Growth**
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent jobs offered for all.

*SDG 9* **Industry, Innovation and Infrastructure**
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

*SDG 10* **Reduce Inequalities**
Reduce inequality within and among countries.

*SDG 11* **Sustainable Cities and Communities**
Make cities and human settlements inclusive, safe, resilient and sustainable.

*SDG 12* **Responsible Consumption and Production**
Ensure sustainable consumption and production patterns.

*SDG 13* **Climate Action**
Take urgent action to combat climate change and its impacts.

*SDG 14* **Life below Water**
Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

*SDG 15* **Life on Land**
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

*SDG 16* **Peace, Justice and Strong Institutions**
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

*SDG 17* **Partnerships for the Goals**
Strengthen the means of implementation and revitalize the global partnership for sustainable development.

# IV. Introduction on Taichung

## 1. Basic Background Information

### Geography Introduction




Taichung City covers the total area of 2,215 square kilometers, wide and broad. Topographically, the east side of Taichung is higher than the west, and occupies 6.2% of the total area in Taiwan. There are 29 administrative districts in Taichung City, each of the area develops its own cultural characteristics, for example, Heping District is the district belonging to the aboriginal from mountain side and they have their own local autonomy in this area.

Administrative districts in Taichung City **29**

In total area cover Taichung City **2,215 square kilometers**



Occupies **6.2%** of the total area in Taiwan.

### Population

The population of Taichung City has grown from 264 million and 8,419 to 281 million and 8,139 in August 2021 since the registration was censored in 25th December 2010, and has become the second largest city in Taiwan. The population growth also reflects the social increase rate.

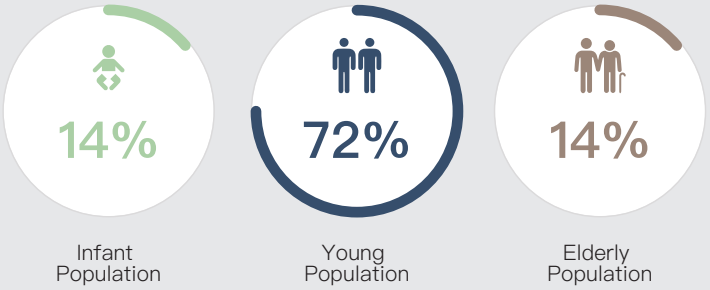
Before the city–county merger
**2,648,419 people**

Before 2010/12/25

After the city–county merger
**2,818,139 people**

2021. August

According to the calculation from Civil Affairs Bureau in March 2021, the population structure of Taichung City was mainly composed of 72% young population, and the infants and the elderly occupy the 14% of the population respectively. Information provided by the Chief Accounting Office; the birthrate has been declining.




Statistics to August 2021

## Gender Distribution

According to the information from Civil Affairs Bureau in August 2021, the female population are computed as 1,434,684 people, and the male population are computed as 1,383,455 people. The proportion of gender can be shown as 50.91% of female and 49.09% of male, the gender proportion is rather balanced.




## Ethnic Distribution

The Minnan ethnic stand the most part (about 79%), and secondly is Hakka ethnic (about 18%), foreign nationality and new resident (about 2%), and the aboriginal ethnic (about 1%) arranged in order.

# 2. Local Characteristics and Advantages

## The Advantage of Location Hub

Taichung City stands in the middle of East-South Asia hub area, owning Taichung Harbor and Taichung International Airport, coping with both advantage of sea and sky. Taichung has become a four-hour social circle accessible to South East Asia, Japan, Korea, and the coastal cities of China. Furthermore, Taichung City is also the center hub of Taiwan High Speed Rail and the transportation system in Taiwan, regarded as a convenient location.




## Pleasant Climate

In addition to the west side mountain area classified as temperate climate, the other parts of Taichung City belong to subtropical climate. The annual average temperature is 23.7℃, having a cozy weather with no scorching heat and severe cold throughout the year.

The annual average temperature
**23.7℃**

Central Meteorological Bureau
1991-2020



## Le Cordon Bleu City

The main river in Taichung territory including Dajia River, Daan River, and Wu River, the secondary ones include Dali River, Han River, Toubiankeng River, Butze Creek, Caohu River, Gan River, and Fazi River, and the ordinary river includes Wenliao Creek. Most of the rivers come from the Central Mountain Range and Xue Mountain Range. Although there is no long and wide river in Taichung City, streams are seen ubiquitous. Han River, Luchuan Canal, Liuchuan Canal, Meichuan Canal, Mayuantou River, and Fazi River are relatively on a larger scale. Bring water into Taichung City by means of the city blue belt, achieving the effect of urban cooling by regulating the climate.

## Industrial Park

Taichung City is an important production base of tools like mechanical, aerospace, hand tools, machine tools, photoelectric panel, bicycle industry in domestic. Through the upgrade and the transformation of the industry, the fine industries take the leads in purchasing, promoting the industrial development related with production and components. The city government cooperates with the central government to build Taichung as the city of smartness, machine, and mechanical. Taichung City also promotes the industry of offshore wind power, and makes Taichung Harbor into the important base of wind power, building a complete wind power industry supply chain and bring up the green industry development.

**The 6 Industrial Parks**

**Machine Tools**
Ranked the 7th production in the globe
Ranked the 5th export in the globe
90% manufacture clustering in the central area

**Photoelectric Panel**
Ranked the 10th in the globe
10% of global output value
70% manufacture clustering in the central area

**Mechanical**
Ranked the 4th in the globe
90% manufacture clustering in the central area

**Bicycle Industry**
50% of global output value
78% manufacture clustering in the central area

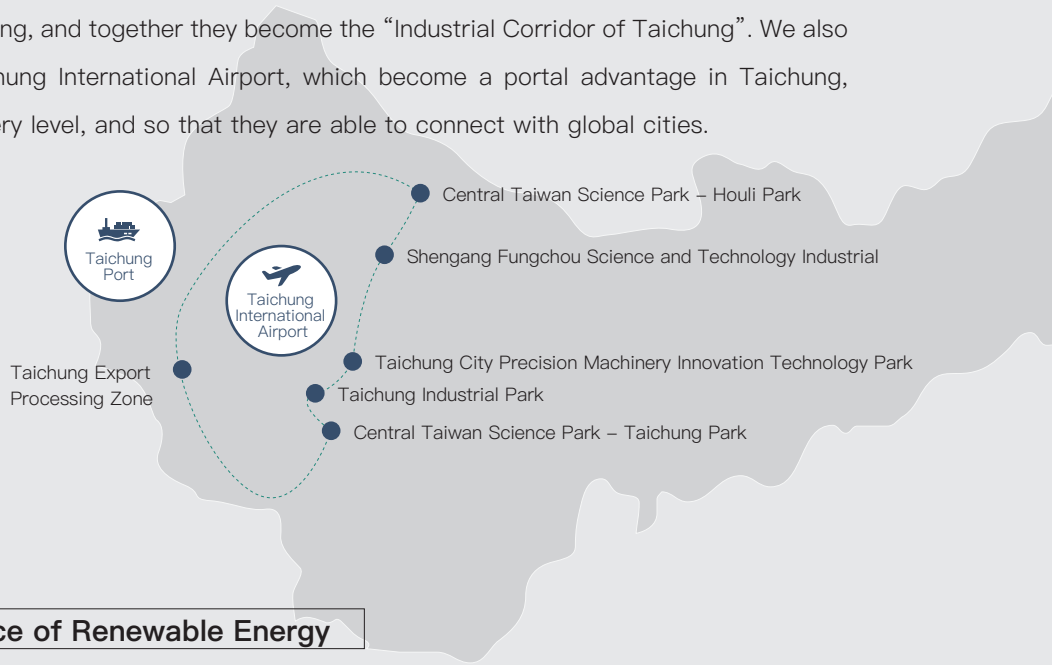
**Hand Tools**
Ranked the 3rd export in the globe
68% manufacture clustering in the central area

**Aerospace**
90% of air plane components come from the “Han-Shian”
Rank the 6th of the aerospace manufacturing in the world



There are also perfect industry chain structures, such as the Central Science Industrial Park and the Processing Export Zone in Taichung, and together they become the “Industrial Corridor of Taichung”. We also have Taichung Harbor and Taichung International Airport, which become a portal advantage in Taichung, promoting the intelligent machinery level, and so that they are able to connect with global cities.

**Complete industrial chain.**
**Build the industrial corridor for Taichung Metro Area**




## The Brilliant Performance of Renewable Energy

According to the statistics from Taiwan Power Company in 2021, the total device capacity of the renewable energy has ranked the top among 6 metropolises. The total capacity is 1,638,174 MW. The solar energy generation is an outstanding part in Taichung, the original plan was to make a triple growth to reach 353 MW in 2022, but the goal has been the breakthrough and reached the number of 355.15 MW in early 2021 which means that the goal will be set as 1GW in 2030.

The total renewable energy installation capacity in Taichung City



Wind installation
**132,145 MW**

Solar photovoltaic device
**355,154 MW**

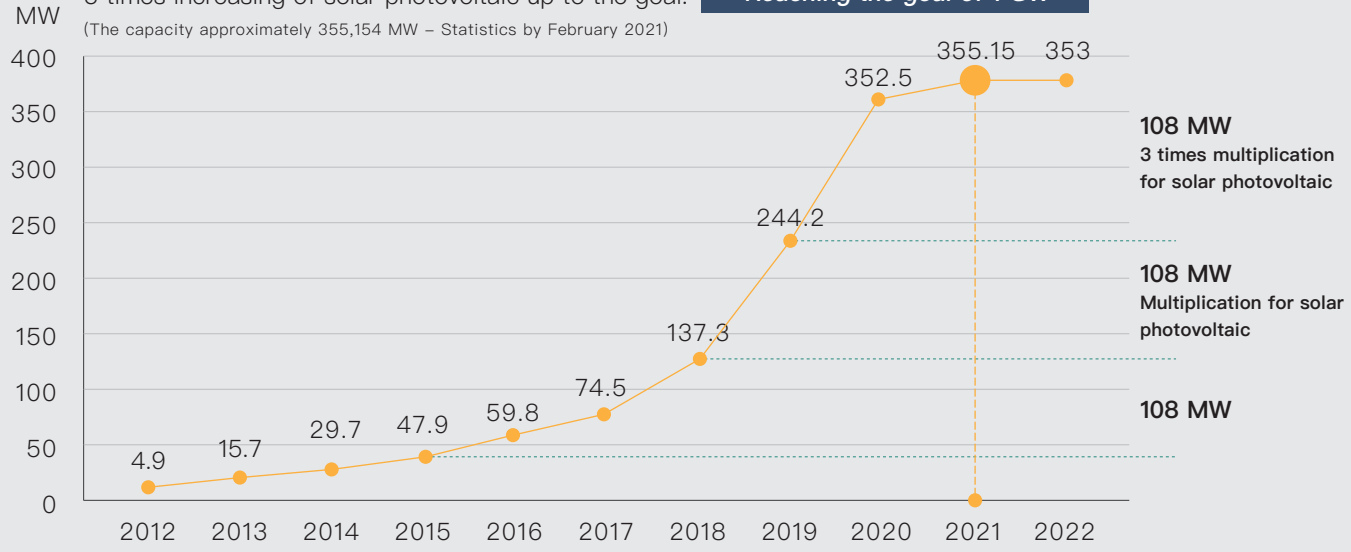
Hydraulic device
**1,150,875 MW**
(Approximately 80% of the total power generation)

**Rank the top among 6 metropolises**

The total device capacity
**1,638,174 MW**

3 times increasing of solar photovoltaic up to the goal.
(The capacity approximately 355,154 MW – Statistics by February 2021)

***Reaching the goal of 1 GW***





▲ Taichung International Convention and Exhibition Center

## Economically Active City

Our city promotes an economy development strategy named “3 Enriching Strategies of Taichung City : the front store, back factory, and the free port”. Taichung promotes the exhibition property through the “front store”, support the local company and wider the investment promotion, setting allowance such as exhibition awards and industry revitalization, and is able to prepare the investment ability of exhibition. Also, we build up the base of “back factory”, to develop the industrial park, and build up the perfect industrial settlement. The last one is to lower the tax and simplify the policy, providing investors with assistances and building the “prefecture of Taiwanese businessman” ahead of other 5 metropolises, making Taichung into a “free port” and marching into a prosperous and powerful city.

**To invite investments**

**To promote employment opportunity**

**To build Rich Taichung and new life**

### Front Store

Build the International Exhibition Center.

Build the International Exhibition Center, host exhibitions, presentations for investments, and industry development activities.

### Back Factory

Build up the perfect industrial settlement.

Industry Center Development, Qingquangang Logistics Business Park, enrich the industrial park, bicycle industrial center, Wenshan Science and Technology Innovation Park.

### Free Port

Build Taichung City into a free economic and trade hub in central area.

Combine the advantage of harbor, airport, high-speed rail and MRT to build Taichung City as a free port with free economic and trade hub.

## Friendly and Livable City

Taichung City Government promotes the "Well-designed Council House", creates amiable environment for childcare, and assures harmonious life for the senior. We provide many social welfare policies to all age groups, and therefore win the good reputation of the livable city.

### The optimal city in Taiwan that people want to live the most

According to 2020 survey of "Happy City" from Common Wealth Magazine, Taichung has won the honor of the most livable city for five consecutive years.

### The most livable city for the senior citizens

According to the research of the 50+ and the Global Views Monthly Magazine, Taichung City has become the most livable and friendly city in minds of the citizens.

### Well-organized the long-term care

We have deployed 1,457 service spots classified level "ABC" types, and create a caring mode for the community.

A: Community Integrated Service Center.
B: Compound Service Center.
C: Long-term Care for The General Citizens.

### Spots for community care

There are about 430 spots for community care service by 2020.

### Resume the subsidy of the elderly health insurance

City Government resumed the subsidy of the elderly health insurance in July 2019. Over 22 million senior citizens have benefited.

### Build the "Parent-child Center" and "Child Care Resource Center" widely

There have been about 12 parent-child center and 7 childcare resource centers since July, 2021.

### The project for increasing public kindergartens

City Government plans to increase at least 180 kindergartens started from 2019 to 2022.

### The project for increasing public childcare

There have been 10 public and private baby-care centers and 6 public community childcare centers since July 2021.

### Council House

There have been 4 council houses built in Taichung City, and 9 more ones will be planned to be built soon. Taichung City Government provides cozy residence, a social welfare agency, medical treatment, youth entrepreneurship and social resources for our citizens to meet the demands.

# 3. Team of Taichung City Government

## Taichung City Government Organization

There are 29 first-level sectors in Taichung City Government. In accord with the trend of Sustainable Goals of UN, The Committee of "Taichung City Government Sustainable Development promotes the plan for building a low-carbon city". By means of the effort and cooperation working with each bureau, we input the Sustainable Development Goals into our governance guidelines and show the determination to promote sustainable goals.

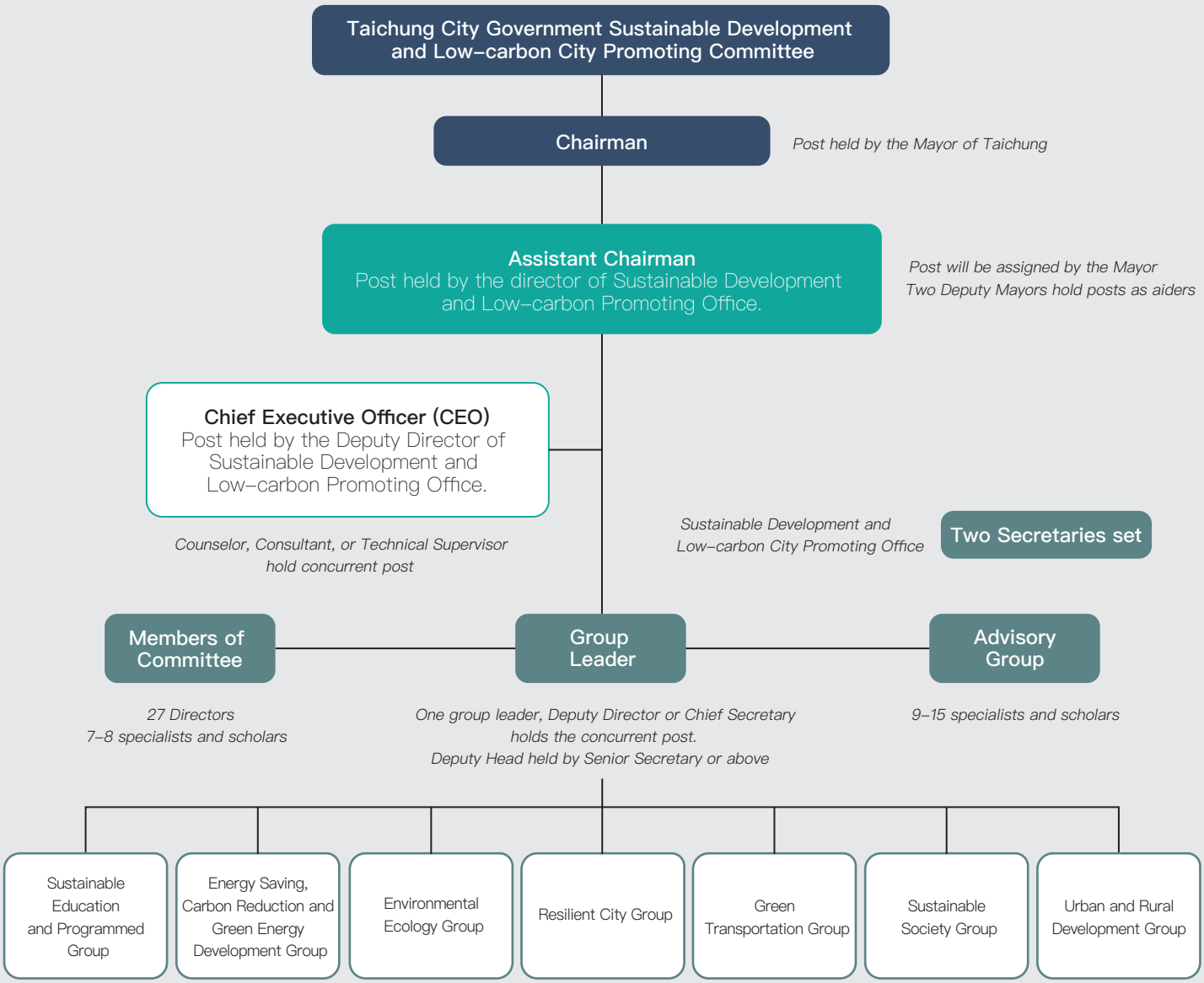
### Team of Taichung City Government

- Mayor of Taichung
- Deputy Mayor
- Secretary – general
- Deputy Secretary – general
- Taichung City Government Sustainable Development and Low-carbon City Promoting Committee

01 Secretariat
02 Civil Affairs Bureau
03 Finance Bureau
04 Education Bureau
05 Economic Development Bureau
06 Construction Bureau
07 Transportation Bureau
08 Urban Development Bureau
09 Water Resources Bureau
10 Agriculture Bureau
11 Tourism and Travel Bureau
12 Social Affairs Bureau
13 Labor Affairs Bureau
14 Police Department
15 Fire Bureau
16 Health Bureau
17 Environmental Protection Bureau
18 Cultural Affairs Bureau
19 Land Administration Bureau
20 Legal Affairs Bureau
21 Information Bureau
22 Local Tax Bureau
23 Sports Bureau
24 Budget, Accounting and Statistics Office
25 Department of Personnel
26 Civil Service Ethics Office
27 Research, Development and Evaluation Commission
28 Indigenous People Commission
29 Council for Hakka Affairs

## The Organization of Promoting Sustainable Development in Taichung

The committee of "Taichung City Government Sustainable Development and Low-carbon Promotion City" is a dedicated organization to promote sustainable development. The committee will hold a meeting every 6 months, promoting the policies of economic development, social progress, and environment protection. " Office for Taichung City Government Sustainable Development and Low-carbon Promotion" is affiliated in the committee divided into 7 sections including "The Sustainable Education and Planning Section", "The Energy Conservation, Carbon Reduction and the Green Energy Development Section", "The Environmental Ecology Section", "The Eco Transportation Section", "The Urban Resilience Section", "The Sustainable Society Section", and "The Urban and Rural Development Section".



# V. The Profile of VLR

## 1. Present and Future Challenges and Solutions

We have scrutinized the challenges of economy, society, and environment we might face in the present and future so that we have formulated the strategies and targets to promote the sustainable development of Taichung City.

| The three dimensions of sustainable development | Present Challenges | Future Solutions |
|---|---|---|
| Social | 1. Living with multiethnic.<br>2. The merging of county and city causes the increasing emigrant population.<br>3. Urban space, increasing living cost, the usage of resource.<br>4. The trend of declining birthrate and the aged society.<br>5. COVID–19 causes an impact on people's life. | 1. To assure people from different ethnics, cultures, ages, and genders receive equal resource and profit.<br>2. Promote the social welfare policy, assure the equality of resource, profit, and medical care for all age group, create an equal and inclusive society. |
| Economy | 1. Lack of the integration of industry chain and the combination with marketing.<br>2. Difficulties of industrial marketing due to the restrictions from the law.<br>3. COVID–19 causes economic impacts. | 1. Continue working on upgrading and the transformation of industries, marching the goal of the finance into sustainable development.<br>2. Research related policies of financial aid and employment, install safety network for working place and promote economic growth. |
| Environment | 1. Climate change, heat island effect, drought and flood.<br>2. The biggest thermal power plant causes air pollution and affects the citizens' health.<br>3. The consumption of the car and scooter fuel in Taichung is the major reason which affect the air quality. | 1. Merge the climate change measure into the policy of Taichung City Government. To alleviate climate changes and adjust to strengthen the resilience and recovery after the damages brought by the natural disasters.<br>2. Develop renewable energy, and continue to urge the Taichung Power Plant lowering the emission of greenhouse gas.<br>3. Increase the number of public transportation system, and promote the low–carbon transportations in the meantime, to control and replace those vehicles which emit high–pollution. |



## 2. Execution

### STEP 01 Analyze the advantages and challenges in the city.

- Inventory and analyze the advantages, resources and challenges of the city when promoting the sustainable development.

### STEP 02 Establish the strategic framework of sustainable development.

- To aim the challenges of society, economy, and environment that the city might face, we initiate the VLR for Taichung, planning the strategic framework of sustainable development for the future, promoting the related policies of sustainable development, leading Taichung to become a global city with sustainable happiness.

### STEP 03 To scrutinize the projects of sustainable development and establish target specification.

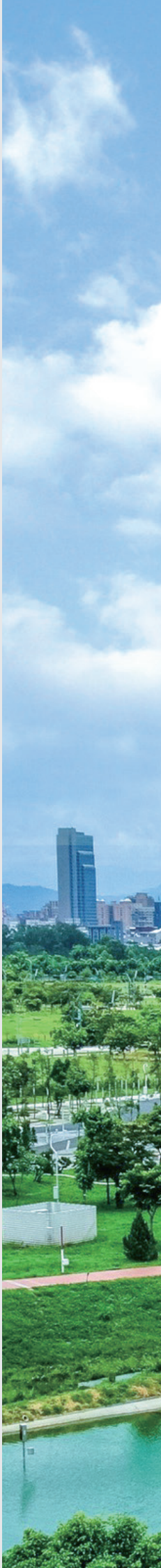
- **Communicate with each bureau and scrutinize every policy**
  We have organized 22 meetings and have profound communications with 25 bureaus, scrutinize every target under the “12 Development Strategy of Governance”, and set up goals and targets that will keep improving and achieving them by 2030.
- **References from made by global and local governments**
  We adopt the references “The Evaluation of the Index of The Competition” form Taiwan Institute of Economic Research, VLRs from Taipei City, New Taipei City, Taoyuan City, and other targets made by other global cities.
- **To establish a target system**
  By means of the sustainable development forums with each bureau, we sort 17 Sustainable Development Goals, 103 Targets and 106 Plans.

### STEP 04 Diversified Consulting.

- When finishing the first draft of the VLR, we invite experts and scholars and stakeholders covering economic, social, and environment area to revise the report. By taking their advice, we will be able to improve the contents of the VLR.

### STEP 05 Present the VLR.

- The VLR will be presented after the content is modified, and will be revised annually.





## 3. Inspections and Features

In order to upgrade the governance of Taichung City, combining with the sustainable development goals and create a better promoting regulation, Taichung City Government checks through different VLRs and accumulates experiences from different global and local cities to inventory the most suitable vision and features for Taichung City.

### Governances' merges SDGs

The characteristics of Taichung VLR are the strong connection between SDGs and the "12 Development Strategy of Governance", combining with the 17 Sustainable Development Goals, projects, and targets, correspond with economy, environment, and social dimension.

### Scrutinize the governance and promote the highlight results

We scrutinize the highlight results of sustainable development governances led by the team of Mayor Lu Shiow-Yen. We respond to the current global trends to present the important policies which present the achievement of Taichung. In addition, we refer to the "Sustainable Low-carbon Smart City Demonstration Zone — Shuinan Economic and Trade Park" and the "COVID-19 epidemic prevention and sustainable development action" as the thematic results of sustainable development.

### Profound review the implementation of the main bureaus

The contents of Taichung VLR cover the projects and targets of the main responsible bureaus within the sustainable development. We examine profoundly about the implementation results in the past and present, in able to scrutinize annually through the policy goals and how the sustainable development to be completed by each bureau by 2030.

# VI. Sustainable Development Strategic Framework

According to the local characteristic of Taichung City, the challenges we might face around environment dimension in 2030, social dimension, and economy dimension; along with the policy plans of Taichung City so as to establish the framework of sustainable development.

In order to create the sense of happiness for the citizen in Taichung, the sustainable development strategic framework of Taichung sets “Sustainable Happiness, Rich Taichung” as the future vision. According to the 3 dimensions of social, economy, and environment of sustainable development, “Amiable, Livable, and Communion Society”, “Expand constructions with flowing economy” and “Transformative energy and zero-carbon environment” as the sustainable development goals of Taichung City.

Each of the goals can be combined with the United Nation Sustainable Development Goals, and connect with the “12 Development Strategy of Governance” of Taichung. By connecting with the governance direction and the main core of SDGs, Taichung City will be an international sustainable happy city.



## 1. Vision：Sustainable Happiness, Rich City

Since Lu Shiow-Yen took the helm as the mayor of Taichung City Government, she has actively made improvements of 5 dimensions including “finance”, “infrastructure”, “economy”, “environment”, and “social welfare”. In the meantime, she is also committed to building into Taichung as “the vision of happiness” which makes all the citizens be able to feel blessed. As a result, “Sustainable Happiness, Rich City” has been set as the sustainable development goals for Taichung City.

## 2. The 3 Major Goals of Sustainable Development in Taichung

### Amiable, Livable, and Inclusive Society

Adopting the concept of the “Happiness” from the vision of “Sustainable Happiness”, Taichung, the most livable city in Taiwan, presents friendly environment and care-service for multiethnic, different age groups and gender equality by promoting the social welfare policy.

### Strengthening Infrastructure and Vital Economy

Adopting the concept of the “Rich Taichung” as the vision, Taichung expects to stimulate more investments by economic development strategies so that they will boost the employment rate and the growth of economy. In addition, Taichung City Government assures to complete major constructions gradually and provide better life for all the citizens.

### Transformative Energy and Zero-carbon Environment

Adopting the concept “Sustainable Happiness” as the vision, Taichung City Government values the ideas of governing the environmental rights of “sun, air, and water”, coping with the climate change to sign the urgent declaration. In order to develop the sustainable energy and promote the recycling and transformation of resources so that we can alleviate environmental pollution and carbon emissions to march ahead clean, healthy, and sustainable environment following with the goal of zero-carbon.



# 3. 12 Strategies as Developmental Governance

Since Mayor Lu assumed the office, she has actively built Taichung as the goal of "Home Plus" and extended 12 strategies as the developmental governance and each strategy links with SDG goals so that we can check the implementation status between the governance achievements and SDG by 2030. Moreover, we can readjust the overall planning for the city's governance blueprint by strategies and promoting Taichung as the city of sustainable happiness.

## International Portal



To promote the gateway of airport, Taichung harbor, High-speed Rail and so on developing trade and the economy zones to boost economic developments at home and abroad.

## Accessible Transportation



To develop the railway and build life network circle to promote green transportation and smart traffic service systems.

## Happy and Livable City



To promote well-designed council houses, create kindly nursing environment, improve public space, assure equal medical treatment, social welfare and livable life for genders and the elderly, and multi-ethnic society.

## Features for Districts



To promote agriculture industry in different districts, build the industry mixing with innovation, tour, and leisure and respect multicultural development.

## Health and Vitality



To build city oasis, create humanistic and friendly environment, complete bicycle systems and the care network for health and vitality.

## Green Environment



To guard the safety for water and soil, implement the reduction of air pollution, develop renewable energy, promote sustainable consumption and production to achieve the usages and management of the sustainable resources.

## Innovation and Venture



To promote "3 economic development strategies" for Taichung's prosperous economy, smart industry, cultural and creative industry and regional revitalization industry, and workable circular economy.

## Imagery Aesthetics



To promote city beautification project, soil and water conservation, and protect the nature and human resources.

## Water Resources Conservation



To promote the soil and water conservation, ecological conservation for ocean and land, build related constructions for disaster prevention, promote environmental education, strengthen the ability of the recovery after disasters and the ability of climate adjustment.

## Effective Government



Implement the government in the sunshine, regional management, effective government and smart governance, and create a sociality with efficiency, peace, and inclusiveness.

## Create Employment for The Youth



To encourage the youth to work for the government, create employment opportunity, adopt science and technology law enforcement to create a gateway for the fair and public judicial.

## Thoughtful Education



To provide fair and high-quality education for different age groups and ethnic groups, to achieve the idea of lifelong learning, and promote international education and science and technology education conforming to the trend of the times.

# VII. Sustainable Development Goals and Results

# SDG 1 No Poverty

## End poverty in all its forms everywhere

Taichung City Government provides subsidies and community support services to disadvantaged families, children, teenagers, and low (low-middle) income households and so on. We are committed to assisting the disadvantaged groups to cast off poverty and gradually return to a stable and safe life.

### Review SDG Targets of UN

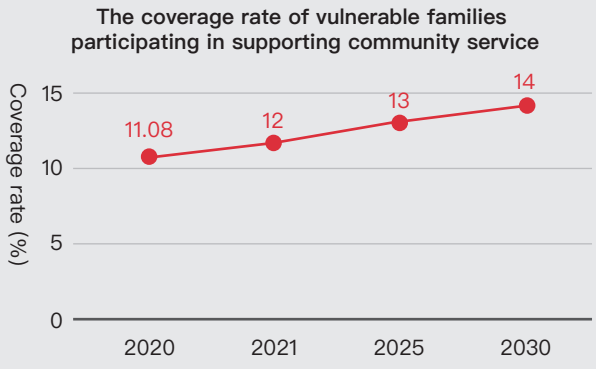
- **Target 1.2** : By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.
- **Target 1.4** : By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

### 1. Deploy Family Community to Support Service Project

To develop "Strengthen integrated services for families with multiple problems" and build a cross-system collaboration network with family-centered and community-based. Focus the problems from individual to family, and realize case unmet needs. Further develop individual and specialized services with community network resource. Deploy family and community support service. In response to vulnerable families multiple needs. Help family build a safe protection net by social welfare center.

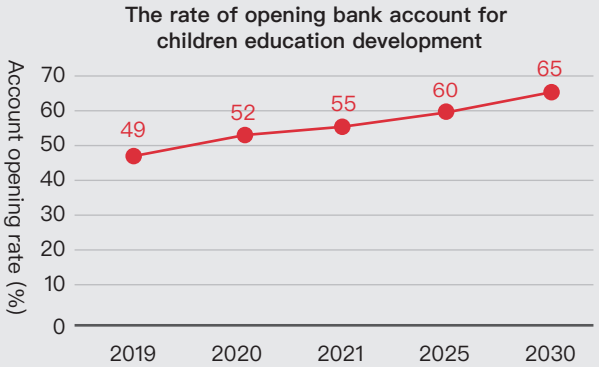



▲ Thanks to private charity units for donating materials to children's accounts for stable payment to households

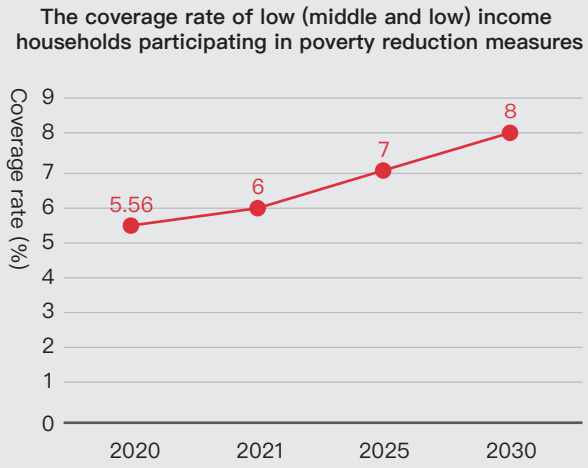



### 2. Opening Bank Account for Children Education Development

With positive assistance and social investment concept and savings account model. For low-income households or long-term placement children and young adult born after January first in 2016. Encourage them cultivate the habit of long-term monthly savings money. Each person can save up to 15,000 NTD per year, and the government will allocate the same amount. Accumulate future education and development funds for children to increase opportunities for higher education and career development in the future.



## 3. The Project for Poverty Reduction




Taichung implements diversified poverty alleviation programs and encourages economically disadvantaged families such as low-income households and low-middle-income households to participate in. Combine and strengthen cross-domain cooperation between the public and private sectors. Provide diverse supports. Strengthen disadvantaged households to achieve the goals of accumulating assets, investment in education, self-reliance in employment, and social participation. Increase the number of people participating in the program and return to a stable and safe life gradually.




▲ Youth groups – Self-exploration and career preparation course



# SDG 2 Zero Hunger

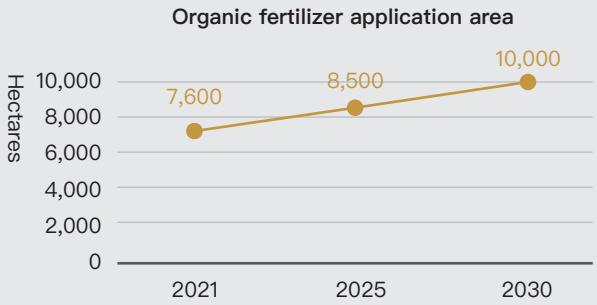
## End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Taichung City Government values food security. We improve land and quality of land through sustainable development food product system. Elevate the capacity of food and productivity, assure to supply sufficient food, promote the pesticide inspection at wholesale market and food industry registration on FDA platform to ensure food safety.

### Review SDG Targets of UN

- **Target 2.1** : By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- **Target 2.4** : By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- **Target 2.c** : Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

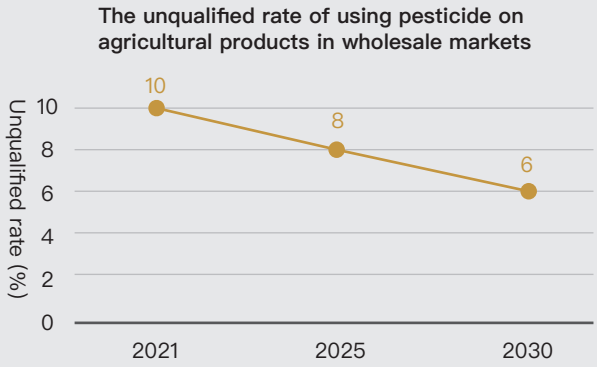
### 1. To Ensure Sustainable Food Production System

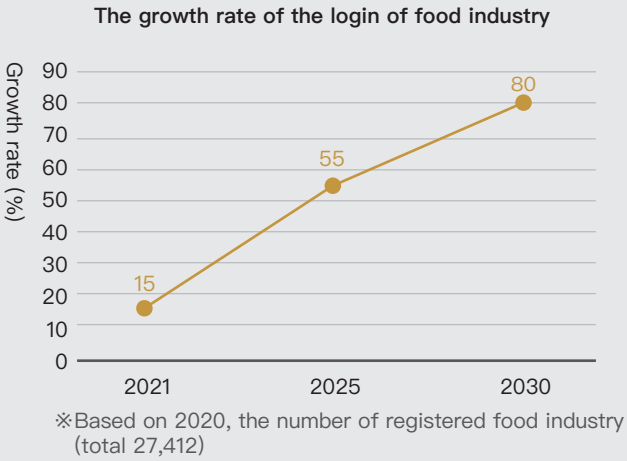



To reduce the use of chemical fertilizers and improve the soil quality, Taichung encourages farmers to adopt domestic organic fertilizers in crop production. It also can increase the amount of crop production and keep foods safety. For the sustainable agriculture, we construct Eco-friendly farming and maintain the ecosystem. In addition to the allowance from the Agriculture and Food Administration of domestic organic fertilizers. Taichung provides extra subsidy of one NTD per kilogram and the maximum for 6 metric tons out of per hectare. The applications of the area are up to 7,584 hectares. Comparing with the area of 6,816 hectares applied for in 2019, it increases approximately 1.11%. Our target will reach up to 10,000 hectares by 2030.

### 2. Strengthen the Inspections of Using Pesticide in Wholesale Markets to Keep Food Production

In order to provide security crop production for citizens and implement safety checks at every link in the supply chain to improve the management of self-directed pesticide used by agricultural product suppliers, we set up the mass spectrometer at wholesale market which is much faster and more accurate than biochemical method to test the type of pesticide and forbid or destroy the crop products of improper using pesticide in the market. We establish specifications for suppliers who fail to pass the inspection so as to improve the function of the wholesale market. If the cumulative number of unqualified inspections reaches 2 times, the supply and the suppliers' qualifications will be suspended. However, the suppliers' qualifications will be abolished if reaching 3 times of unqualified inspections.




※Based on 2020, the number of registered food industry (total 27,412)

### 3. Enhance Food Industry Registration on FDA Platform

Taichung implements the food registration on the platform of Food and Drug Administration (FDA) so as to effectively supervise the guidance and audit management. In the future, we will provide registration and consultation service nearby 30 public health centers in 29 districts in order to rise the rate of registrations.

### Five Links of Food Safety

The five links of food safety are quality control, rebuild production management, strengthen inspection, aggravate the punishment of unscrupulous companies and supervise food safety. Taichung was awarded the first prize of keeping food safety among six municipalities in 2019.



# SDG 3 Good Health and Well-being

## Ensure healthy lives and promote well-being for all at all ages

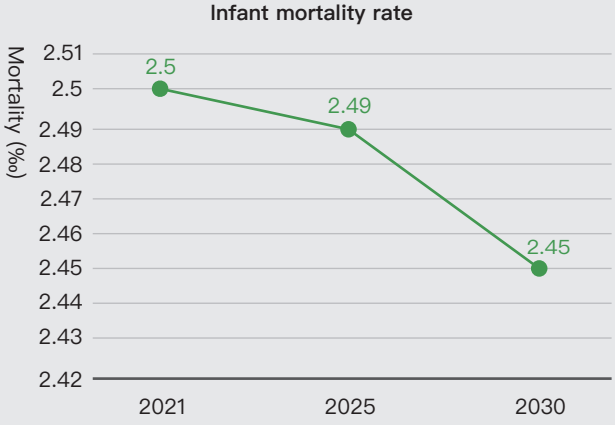
Taichung City owns complete infant, children and pregnant women care system and long-term system. We also pay attention to the fairness of medical resource and disabled. Prevent disease and death actively. Ensure citizen's health and well-being.

### Review SDG Targets of UN

- **Target 3.2** : By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.
- **Target 3.3** : By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.
- **Target 3.7** : By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.
- **Target 3.8** : Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
- **Target 3.9** : By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- **Target 3.d** : Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

### 1. Health Care Service for Pregnant Women and Children

Taichung promotes the program for follow-up care of pregnant women and infants in high-risk groups fit Health Promotion Administration. To provide health services for pregnant women with risk factors for health (e.g., tobacco, alcohol, multiple gestation, gestational high blood pressure, gestational diabetes, drug use and mental health problem), socio-economic risk factors (e.g., pregnancy under the age of 20, lower socio-economic status, victims of domestic violence without prenatal examination) or infant born to mother without prenatal examination, including health education, follow up care and referral services from pregnancy to 6 weeks / 6 months after delivery to improve the health of mothers and children. In the future we not only enhance the corporation between different depart but also promote the proper age for marriage and the pregnant health code through division of Obstetrics and Gynecology, Healthy Public Center and social media (e.g., Facebook, LINE). Reduce the rate of high-risk pregnancy comorbidity risk and preterm birth.

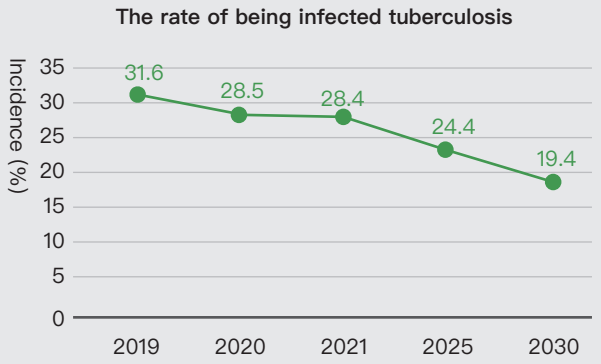


## 2. Directly Observed Therapy Treatment of Latent Tuberculosis



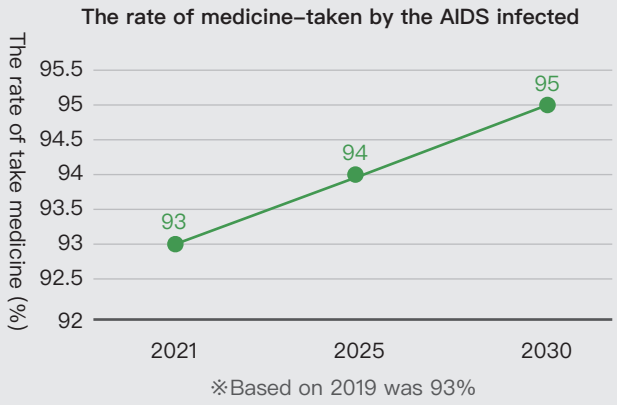
▲ Long-term care institution performs tests for the latent tuberculosis infection test

For those high-risk group (e.g., contacts, long-term care facilities residents and staffs, diabetes, hemodialysis, correction organizations and so on), we provide Interferon-Gamma Release Assay (IGRA), identify positive cases of latent tuberculosis infection immediately and provide treatment for latent tuberculosis infection to reduce the risk of subsequent tuberculosis.



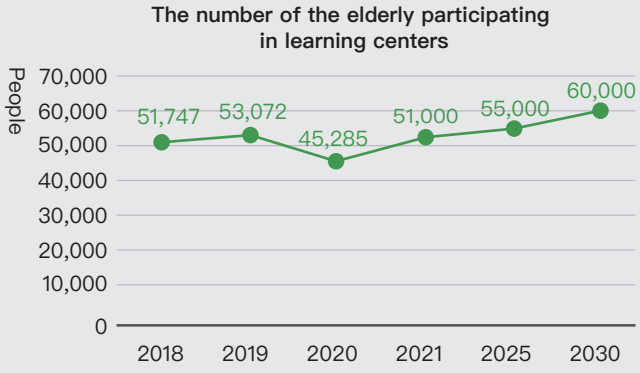

## 3. Medicine Supply for AIDS Infected

The medical system helps AIDS infectors recieve treatment earlier through health education, and teach them the importance of taking medication regularly. Enhance the right cognition of taking medicine to increase the motivation. Eliminate the difficulty of taking medicine and reduce the amount of HIV in the body. To avoid drug resistance because of unregularly taking medicine and reduce the risk of infect for steady life. Hence, the goal of HIV infectors taking medicine rate will increase to 95% by 2030.




## 4. Promoting the Project of Learning Centers for the Elderly

The elderly changes the characters from cared to self-care through learning. We encourage elder participants in community activities to realize the spirit of live and learn and expand their knowledge field. To raise the elderly's life quality not only prevent disability and dementia, but also assure their health and well-being.

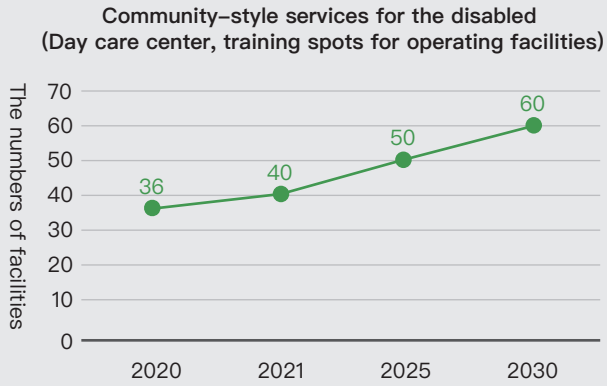



## 5. The Project for the Disabled to Create an Inclusive Society

To implement the Convention on the Rights of Persons with Disabilities (CRPD), Taichung offers proper and multiple community service and care to achieve participant equally, community care and inclusive society. Taichung will continue inventory the needs of each region, and make effort for funds to establish additional service bases. Support the disabled people can implement self-choice to live in community so as to reach SDG 3.

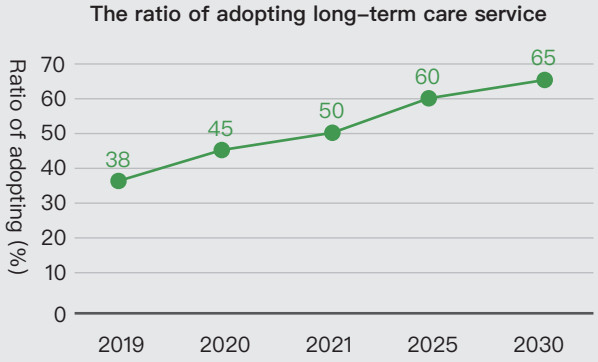


▲ Community daycare students are engaged in leisure activity–gardening maintenance




## 6. The Project for Ten Years of Long–term Care 2.0

Provide fully long–term care and establish service spot for disabled elderly. The coverage of long–term care is 48.62% and it was the highest level among 6 metropolises in Taiwan in March, 2021. In the future we will development potential case through promote, long–term center and service units so as to increase the coverage of long–term care to 65% by 2030.




## Modernization Municipal Hospital

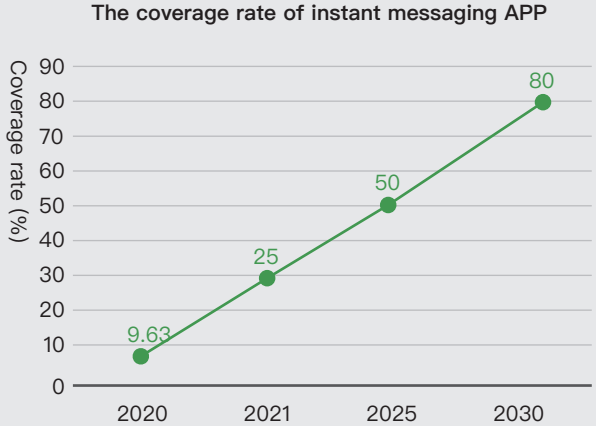
To provide more professional and local fully medical care service, we increase medical care service for Beitun district and other district. Integrate the original rehabilitation hospital and the second base of the geriatric hospital in a single case BOT method for overall planning. According to Act for Promotion of Private Participation in Infrastructure Projects publicly solicit private investors, to plan and establish Taichung City Elderly Rehabilitation General Hospital with development strategy of medical and care. Provide citizens with diverse services such as acute and chronic medical care, rehabilitation, geriatrics and long–term care.

## 7. APP–Set for Long–term Care



▲ The Commissioner of Health Bureau demonstrates how to use the long–term care APP for the elderly people

To those who need long–term care can apply for dial long–term care dedicated line 1966 or long–term care by APP. The APP can provide long–term care, check approved items, and limit usage. Keep abreast of the family's use of the service, and provide the latest long–term care service information. In response to the disabled not to move easily and need long–term transportation. The APP will combine long–term transportation with artificial intelligence. Provide on–line reservation for family and individual case. To assist service units to contact with family and individual case easily.



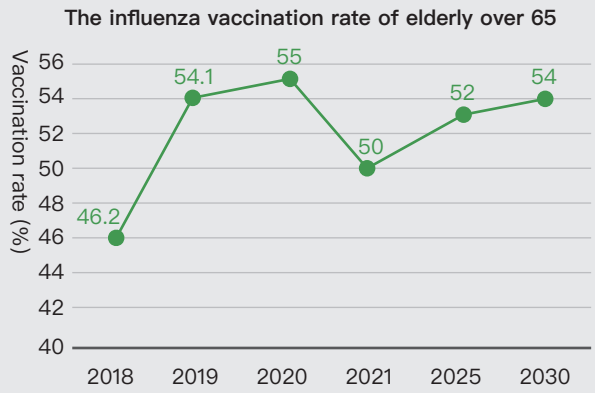
### 8. The Psychological Counseling Home and Fixed Spots Service for the Elderly

Provide psychological counseling services by professional psychologists for citizens with emotional distress and high-risk. Based on the number of psychological counseling services in 2020 (3,600 person-times). In order to improve citizens physical health, the city will plan accessible and psychological counseling service at Taichung's districts in the future. Also provide home-visiting service for disabled elder with emotional distress.




※Based on 2019 were 3,600 people of psychological counseling service

### 9. Influenza Vaccination Project




Elderly people over 65 years old are a high-risk group with severe flu complicated by influenza. Handle influenza vaccination project for qualified citizen with government-funded every year. Establish influenza vaccination station to increase accessibility and motivation for vaccination. The vaccination rate reaches 50%.

The vaccination rate for 65 years old citizens was 49.9% in 2017, 46.2% in 2018 and 54.1% in 2019 respectively. The vaccination rate will be effected by the numbers of vaccine and side-effect after getting shots. In order to keep elder's health and raise the willing of vaccination, the city provides the various incentive measures and multiple promotion channels.

#### Influenza Vaccination

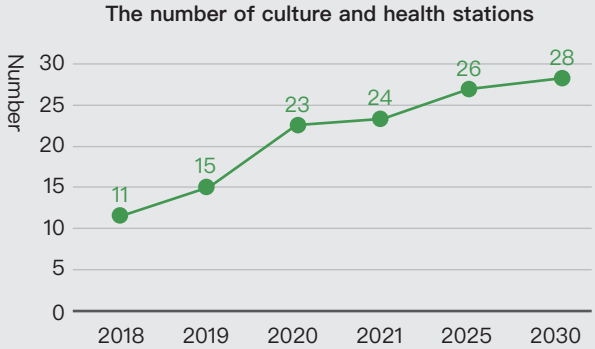
There are 741,270 doses of influenza vaccine which have been administered. The population of coverage rate is 26.29%. 2020 Influenza vaccination plan evaluation-project management performance award, Taichung City won the special prize among 6 metropolises in Taiwan. Expected to start on October 1st in 2021.

#### Cervical Vaccine

In order to keep women out of the threat of cervical cancer, we cooperate with the central government to promote the use of human papillomavirus vaccine (HPV) campus vaccination services for first-year female students in junior high schools.

### 10. Long-term Care for Indigenous People — Plan for Setting Up Culture and Health Station

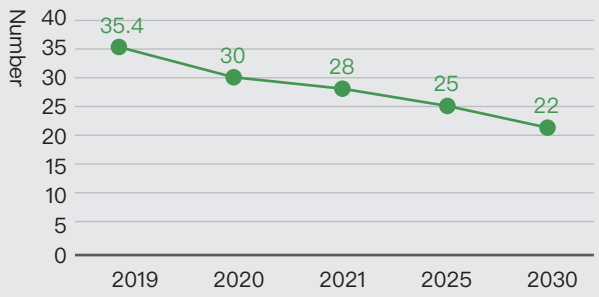
According to the Long-term Care for Indigenous People — Plan for Setting Up Culture and Health Station in 2021 released by Taichung Indigenous People Commission, the health station is made up with profession team to take care of elder. Enhance the aboriginal to support each other's culture. Provide long-term care service with act according to ethnicity and local conditions by "indigenous people take care of the aboriginal people". Maintain the inheritance of tribal culture and fit the care needs of the elderly in resource-poor areas.



### 11. Plan to Reduce the Number of Buildings Caused by Fire

In order to effectively reduce the occurrence of building fires, actively use the results of fire investigations to effectively feedback fire prevention. For specific types of fires (such as construction sites or illegal buildings, etc.) assist in the investigation or strengthen management of the relevant letter. The number of building fires from January to May in 2021 was 251. At the same period in 2020 was 412. Reduce 161 cases in total. In the future, we will also actively feedback the results of fire investigations into fire prevention measures, and continue to effectively reduce the occurrence of building fires, casualties, and property losses.

**The number of buildings caused by fires per 100,000**

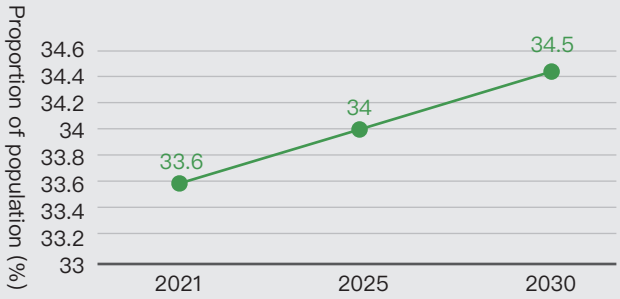



### 12. The Project for Building National Sports Center

The construction of national sports center venues enriches the city's sports facilities. Provide a good sport environment and develop good exercise habits. Increase citizen's motivation for sport. To development various physical fitness, sports, fitness, etc. as the goal through establish national sports centers.

So far, North, Nantun, Xitun and South District have already established National Sports Center. Now we plan to establish at Qingshui, Taiping, Beitun, Tanzi, Dali, and Fengyuan. To build a sports and energetic city. In the future, through integration with the private sector and outsourcing operations. By means of private industry recruiting profession sport and operate talents for professional assessment. Private demand and current sports trend planning course. It is expected that the opening of operations can effectively increase the proportion of the regular exercise population.

**The proportion of the citizens taking exercise regularly**







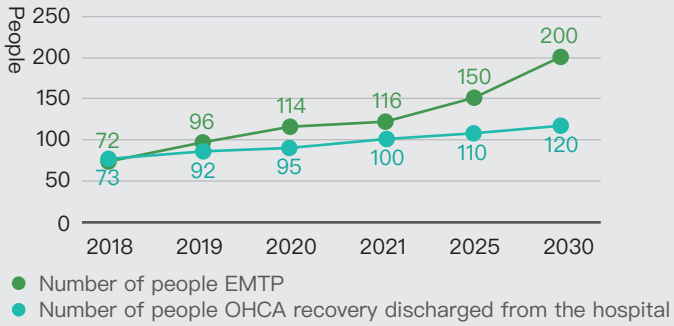
▲ Dali Civil and Sports Center

### 13. To Elevate the Training for Emergency Medical Paramedic

There are five links of chink of survival and each one is indispensable. One of the links is to rescue patients with Out-of-Hospital Cardiac Arrest (OHCA) case implement advanced cardiac life support skill by Emergency Medical Technician-Paramedic (EMTP) on site. Continuously improve the success rate and survival rate of patients in OHCA cases in this city.

The large number of emergence cases are the first, third, sixth and eight corps and the second corps located at remote area. Choose one corps gather EMPTs and implement dual-track ambulance services (basic life support and advanced life support) for acute and severe cases to increase implementation rate of pre-established medical procedures by EMPT. Extend the emergency treatment in the emergency room of the hospital to the scene, provide professional and effective emergency treatment immediately. To provide the citizens with a better-quality emergency ambulance service and be a standard city of emergency ambulance in Taiwan.

**The number of people recovering from OHCA discharged from the hospital and EMPT**



# SDG 4 Quality Education

## Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

The performance of the education in Taichung values fairness, and adaptability for all ages and ethnic groups along with thoughtful and practical concepts of lifelong learning and providing international and technical knowledge.

### Review SDG Targets of UN

- **Target 4.2**：By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.
- **Target 4.7**：By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.
- **Target 4.a**：Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.
- **Target 4.b**：By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.
- **Target 4.c**：By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

### 1. The Project for Increasing Public Preschools

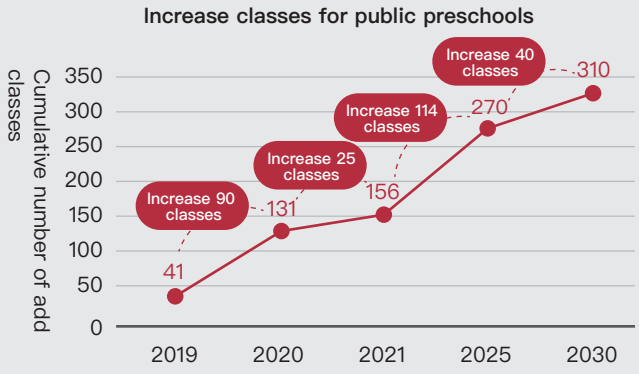
In response to the declining birthrate and create a safe and parity child-care environment, and alleviate the burden of child-care for parents, Taichung City has cooperated with the "countermeasure project of declining birthrate" in Taichung (2018~2022). Accelerate the spreading of publicizing the education insurance, we actively inventory the surplus space, free space of public facilities of schools in Taichung City. Adding public kindergartens and non-profit kindergartens in order to lift the chance for children going into public kindergartens, and satisfy childcare needs for parents.

In view of that preschool education is not included in the part of compulsory education, the educational security service is presented by the cooperation publicly and privately. The proportion of public and private kindergartens is 3:7. According to the countermeasure project of declining birthrate (2018~2022), we set up a goal of providing at least 40% of children to be able to learn in public kindergartens. To accomplish this goal, we set up "the project for increasing public preschools", and promote middle-term and long-term goals to make



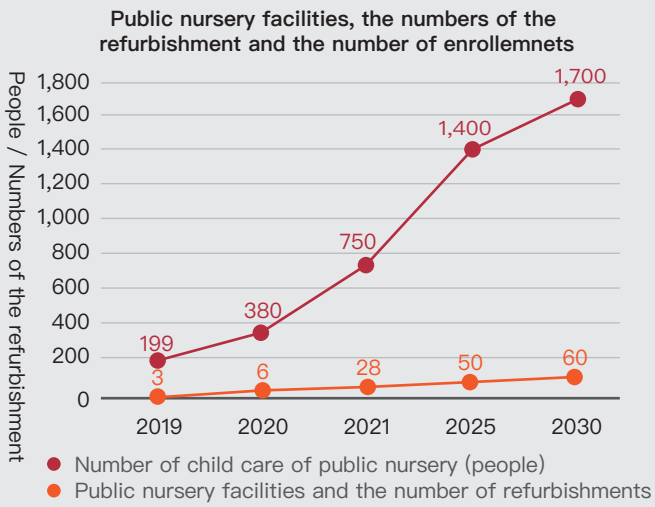
▲ Interaction between the mayor and kindergarten students in Buzi non-profit preschool

sure that every child is able to receive the high-quality preschool education and care, and well prepared for primary school.




## 2. The Project for Increasing Public Nursery Centers

To alleviate the declining birthrate and respond the request of the needs about public nursery from the citizens and promote affordable and convenient nursery service, Taichung helps young parents to get into employment market without barriers. Therefore, we promote "the project for increasing public nursery centers" to spread the action of "public nursery" widely. In order to speed the schedule of public nursery, the government establishes the "promoting group of increasing the public nursery". Social Affairs Bureaus, Urban Development Bureau, City Fire Bureau, Construction Bureau, Land Administration Bureau, Education Bureau, Civil Affairs Bureau, and Office of Housing Development provide the contact person to help to search for suitable places for installing public nursery, consulting about setting up the public nursery and achieving the goal of setting up the public nursery successfully. To reach the increasing 10 times of the goal, we assure to provide the health care and welfare for the young children.






### The Development Center of Technology and Profession Education in Taichung City

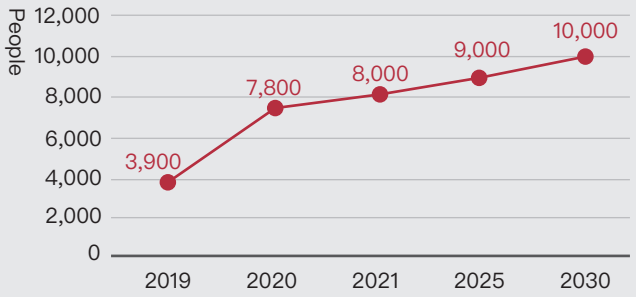
In order to promote the technical and vocational education of Taichung, we establish the "Development Center of Technology and Profession Education in Taichung City". We promote organizations such as guidance group of implementations of teacher, professional working group, counseling team of group lessons, information center of career temptation, and international education mission group, equipment, lessons, industry-university cooperation, career exploration, and international technology.

We also draw up an annual implementation work plan, implementing the staggered connection, cooperating with Education Bureau, Economic Development Bureau and Labor Affairs Bureau, promoting the technical and vocational education comprehensively in Taiwan to achieve the vision of the functionary within the technical and vocational education.

### 3. Promote International Education

Promote English cloud-lesson, the joint dual-degree project, bilingual education, and projects of international experiment classes. By setting up of online English learning environment, cooperating with schools and education system at home and abroad, nourishing students to master English, creating a high-light bilingual education and international educational environment in Taichung.

**The number of students participating in international education programs**






▲ Build a quality online English learning environment

### 4. Promote Lifelong Learning

Taichung City establishes 11 community colleges and 29 senior learning centers by the diversified courses not only build up their own learning career planning but arouse their consciousness of the citizenship. In addition, Taichung citizens are encouraged to attend public affairs to keep up with international views along with local identities. By means of characteristic courses from the senior learning center, we boost citizens over 55-year-old to maintain their health-care and raise up the quality of living to be able to dedicate themselves to offer services.

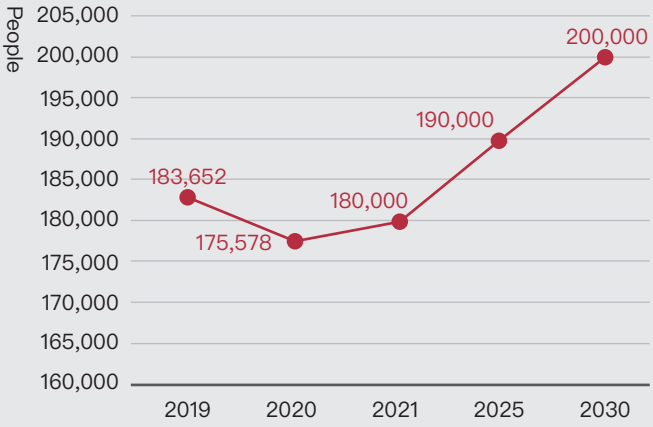
Lifelong learning institutions respond to different learning needs and offer multi-learning courses, keep supplying disadvantaged groups (such as the physically



▲ Teach the elders to enhance the flexibility of their hands by making handicraft with environmental paper clay

and mentally handicappers, new residents, and aboriginals) with their allowance and courses offer on education, in order to increase the ambition of lifelong learning and eliminate the learning dilemma of resource gap.

**The number of participants in lifelong learning courses**




### 5. The Project for the Growth of Using Libraries

We keep enriching resources of the public library in Taichung City. The annually growth target of the number of books being borrowed has been set since 2019. We encourage every library to promote reading, also encourage people to borrow books from libraries, using the resources in the library to achieve the goal of lifelong learning.

The total number of collecting resources in 2020 was 5,331,294 books, the total number of borrowings was 13,812,839 books. In average, each person borrowed 4.9 books, and the number of reading books was 8,373,478 books.

Furthermore, we started buying every kind of E-books and digital resources, the number of E-book collections

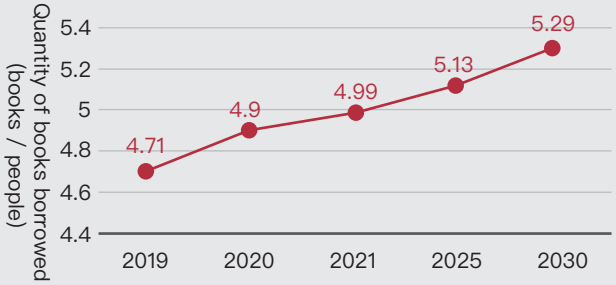


▲ Bookmobile seen ubiquitously

in libraries to reach the number of 52,389 books, and the number of people borrowing books reached 325,632 times in 2020.

We will keep promoting the resources in libraries in the future, such as holding book fairs with specific themes, or using the internet and SNS to promote the collection to raise the visibility for the libraries. Combining with the "Moving Library" and working with different schools let the collections can be seen in not only the communities and schools, but also in rural areas, social welfare agencies, and correction institutions to learn without restrictions and let reading become more convenient.

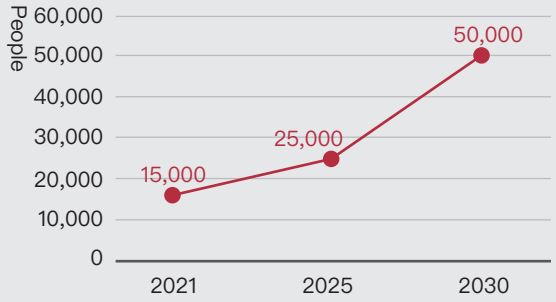
**The average amount of books borrowed by citizens**




## 6. Promote Science and Technology Education

Taichung has added technology education since 2019 in order to build an intelligent and mechanical city. With the concept of cross disciplinary knowledge base, we highlight literacy guidance course and evaluation. To provide students the integrated learning experience so that training student have knowledge, ability and attitude of solve problems in the real world. The facilities and resources in Self-made Education and Technology Center can offer technology course and teaching research and development group as an experimental field and plan various research and workshops together to enhance the effectiveness of self-made education.

**The number of teachers and students below high school participating in science and technology education**





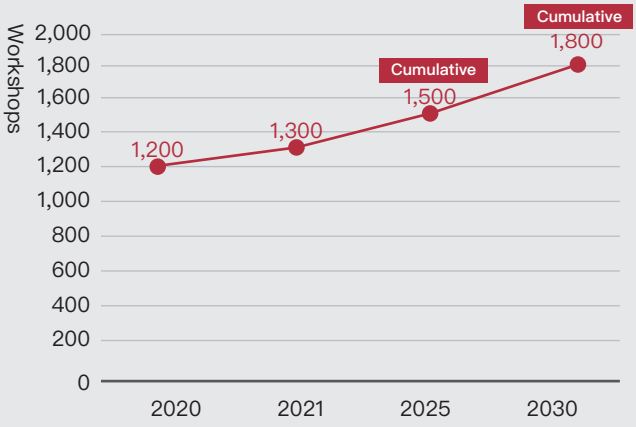


▲ Self-made Education and Technology Center

## 7. Intensive Workshops for Teachers

The concept of the education "focus on adaptive learning and own the sense of achievement" is the main education policy in Taichung. Principles and teachers' professional development and education quality are relatively important. By promoting principle and teacher's mechanism and professional lead, the quality teaching contains disciplinary knowledge, teaching ability and attitude.

**Managing intensive workshops for teachers**



# SDG 5 Gender Equality

## Achieve gender equality and empower all women and girls

In response to the promotion of gender equality awareness and the protection of women's rights, the gender equality committee was established to promote gender-friendly measures and end discrimination against gender in all its forms everywhere, concerning about gender equality, environmental safety, social welfare, and social participation.

### Review SDG Targets of UN

› **Target 5.c** : Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

### 1. To Promote Gender Mainstreaming

In order to lead in the concept of gender equality into the daily business of various government agencies and administrative district offices, and make people feel gender-friendly everywhere in their lives, we promote several genders-friendly measures to cover all aspects of life, and gradually build gender-friendly city to implement gender equality.

#### The Pioneer in Taiwan, Adjusting the Gender Rate of Public Toilets to 1:4



▲ The restroom of Wen-Xin Forest Park MRT station, incorporate into the music dresser table and attend to gender-friendliness and aesthetics

Taichung City values the concept of gender equality and hopes to create a friendly and inclusive society. Therefore, the Sunshine Public Toilet Plan is promoted by gender rate, men and women with different physiological conditions and toileting time, and the rate of male and female public toilets should be adjusted appropriately. According to the Ministry of the Interior's "Building Technical Regulations", the gender ratios for toilets is 1:3 and Taichung is the first in Taiwan to improve the gender ratios for toilets to 1:4 to implement gender equality.

#### Establish Gender-friendly Environmental Assessment Indicators for "Flora Exposition" and "Lantern Festival"



▲ Breastfeeding room set up in the Houli Forest Park Area of Flora Exposition

To welcome international large-scale events such as "Flora Exposition" and "Lantern Festival", we create the first "Gender-Friendly Environmental Assessment Indicators" including the installment of the breastfeeding room, pedestrian walkways for wheelchairs and walking, and clear multi-lingual publicity signs. The indicators are combined to create a gender-friendly environment.

## Gender-friendly in Taichung

In Taichung City, the "Gender Mainstreaming Implementation Project" and the "Promote the Innovative Project for Gender Equality" guide all administrative district offices to lead in the concept of gender equality into activities in the neighborhoods.

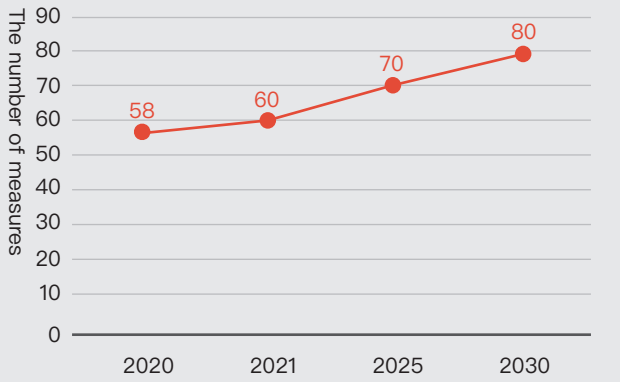
### Shopping Festival of Taichung Women Go, Promoting Gender Equality Awareness and the Economy



▲ Press conference of "2020 Women Go"

Taichung sets the first shopping festival which creates the consumption amount of more than 1.6 billion in view of women's economy, combining beauty, sports, and leisure, and lodging and catering, boosting local industries and improve economic efficiency. In addition, statistics on female-managed companies in our city are slightly higher than the national average value, leaping to the first of the six capitals.

**The number of measures for gender equality with friendly**






# SDG 6 Clean Water and Sanitation

## Ensure availability and sustainable management of water and sanitation for all

Taichung City cares for drink water security. Protect water and land environment, promote water resource education and maintain sewage treatment works positively to ensure clean and sanitary running water available for the citizens.

### Review SDG Targets of UN

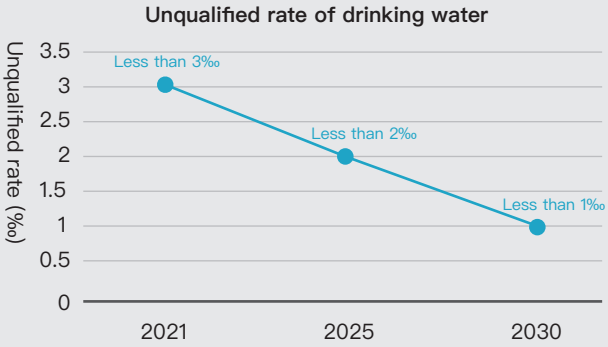
- **Target 6.1**：By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- **Target 6.3**：By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

### 1. To Assure the Safety of Drinking Water for Citizens

Promote drinking water quality sampling plan. Test water quality of 25 water treatment plants and water supply point in Taichung. To enhance the test quality of water treatment plants after the alarm of typhoon or torrential rain dismiss. In order to provide safe drinking water for citizen, we supervise water quality strictly.




▲ Running water quality sampling

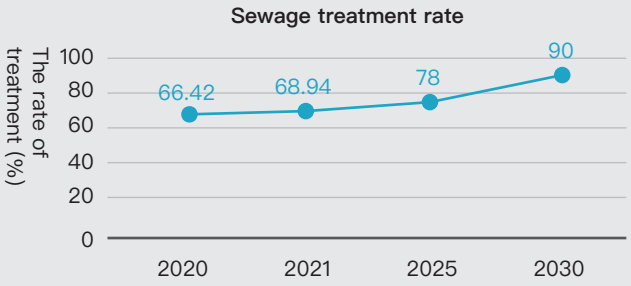



### 2. Promote the Construction Project for Connecting Pipes of the Sewage Sewer Users

Promote the project to increase pipes connecting and ratio of sewage treatment. By 2030, the goals of sewage treatment will rise to 90%. Back alley along with obstacle without connecting pipes should be removed before deadline or it will be torn down mandatorily by law. The ratio of the front alley connect pipes covers only 60%. Back alley connecting pipes mandatorily raising to 90% which improves the efficiency of the pipe's connection. It is estimated to accumulate users to 350 thousand in the future by 2025. 430 thousand accumulated users in total reaches by 2030. Improve water quality and reduce river pollution to ensure availability and sustainable management of water and sanitation for all.

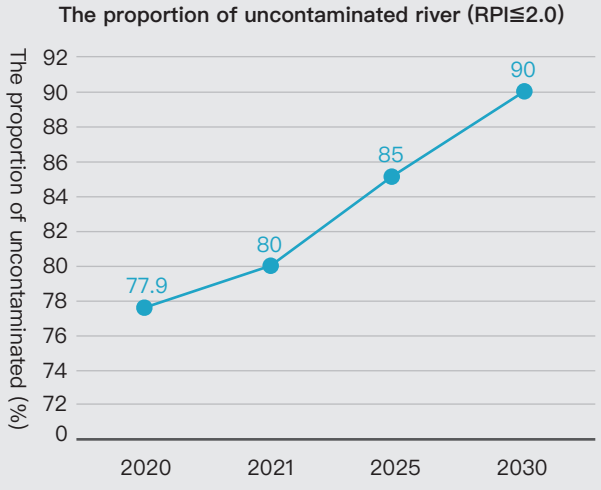


▲ The ongoing construction for sewage project in West District




### 3. Protection for Maintaining Water Quality

Taichung is dedicated to maintaining water quality from source by coach industry to reduce pollution. Tracking pollution by using technology (water sensor, time-lapse camera, water quality automatically continuous monitoring and so on). Promote waste water from stock farming can be reused on farming. Change the manure polluted wastewater into nature fertilizer. Reduce waste water flowing into river directly so as to reduce river pollution.






▲ Set up the water box

### Drought Resistance Urgently, 10 Sets of Q-Water Purification Equipment and 6 Sets of RO Water Purification and Filters Equipment




▲ Water purification facilities of Q-WATER

Due to the drought resistance this year (2021), Taichung City Government works with the Water Resources Department and promote the "Drought Resistance Water Source Emergency Plan 2.0". There were about 338 temporary water supply stations, now has added to the total amount of 347 stations, assisting medical institutions, schools and social welfare institutions become the priority to receive the water supply, initiating the district water supply of "supply 5 days and stop 2" in April, 2021.

In order to soothe the water restrictions brought inconveniences to people's livelihood and industries, the government seeks for the substitute water resource instantly. The government sets up 10 sets of Q-Water Purification Equipment at the new construction site and other suitable places (Such as Nantun District Wenxin Aiyue, Dali District Yuanlin Zhuging, North District Lao Fo Ye, East District LaLaport e.g.), using the underground water from the construction ,the water will be available to supply after the purification and filter. There were 10 sets of equipment been installed before April 30, 2021, and worked till July 15, 2021. There are 3 sets of equipment being moved to the Fazi River Water Treatment Plant, and other 7 sets of equipment have been moved to Water Resources Bureaus under the Water Resources Department and Taoyuan City Government for continuing to use.

Taichung City Government installs 3 sets of large RO water purification and filters equipment used separately at the Shuinan Water Resources Center and Wenshan Water Resources Center, with total 6 sets of equipment. This equipment can supply cooling water for industry and even for technologist replacing tap water, and been installed before the end of May, 2021. The Ministry of Economic Affairs Water Resources Department informed Taichung's water-using lights has remained the normal operation since August 5, 2021. As a result, the water purification equipment will stop working temporarily and begin to be refurbished. These 6 sets of RO water purification and filter equipment were escrowed by Taichung after being refurbished, and halted before October 30, 2021 at the Wenshan Water Resources Center.



▲ After sewage disposal, water purification and environmental greenification in Luchuan, trees are viewed along the riverbank with beautiful sight

### Improvement For Rivers and Water Quality Project

Taichung promotes and plans for river renovation and water quality positively, included Liuchuan, Luchuan, Dong Da River, Wu-qi Ditch, Li Ming Ditch, Hui Lai River, Chao Yang River, Han Xi ditch, Fazi River and so on. By water environment improvement, Taichung City will be built as a beautiful water-culture city.



▲ After rectification of Liuchuan Canal, it is the first landscape river bank in Taiwan with a low-impact development design

# SDG 7 Affordable and Clean Energy

## Ensure access to affordable, reliable, sustainable and modern energy for all

The city actively develops renewable energy through smart street light installation with LED, green energy utilization and generation power of resource cycle providing affordable and reliable sustainable energy .

### Review SDG Targets of UN

- **Target 7.a** : By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil–fuel technology, and promote investments in energy infrastructure and clean energy technology.
- **Target 7.b** : By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, Small Island Developing States (SIDS) and Landlocked Developing Countries (LDC), in accordance with their respective programmes of support.

### 1. Actively Promote Renewable Energy and Transition

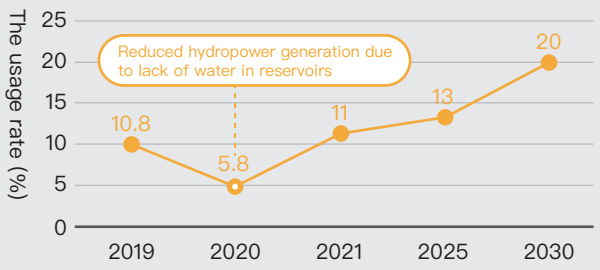
The city actively promotes energy transition and green energy policies, including:

1. Solar energy on public roofs
2. Photovoltaic installation for high energy–consumption users installation of 10% renewable energy
3. Promote rooftop–type solar
4. Generation power of resource cycle
5. LED light installed

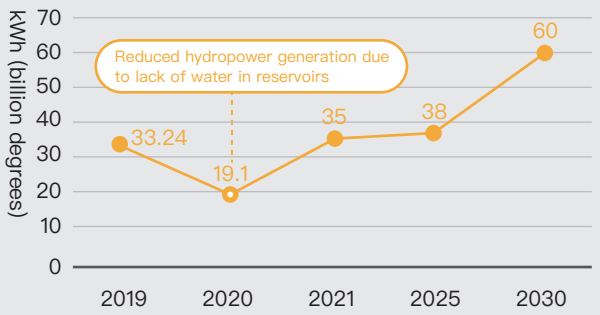
According to the recent Taipower Company's latest renewable energy installation in June 2021 by the capacity data, the city's total renewable energy installed capacity is approximately 1,673MW, ranking the top in the country.

Continue to promote remaining public buildings and public land, factories, and public housing in the future. Photovoltaic installation and assist in developing central offshore wind power policies to build offshore wind power in the city and upgrade the city's usage rate of renewable energy.

**The usage rate of renewable energy**




**Accumulation of the generation degree for renewable energy**



### Establish Offshore Wind Power Industry Zone in Taichung Harbor to Promote Green Energy Industry Development

The city actively promotes the development of offshore wind power industry by cooperating with Port of Taichung, Taiwan International Ports Corporation Corporation to build offshore wind power industry zone in Taichung Harbor, currently includes: Yeong Guan Energy Technology Company, Taiwan Power Company, Tien Li Offshore Wind Technology Company, Tai-Shing Engineering, and Construction Company and other companies have leased land; CS WIND Taiwan and Changhua, Taiwan, setting up a tower factory near the offshore wind power industrial zone, currently also domestic and foreign wind power industry players actively contact and cooperate, building a complete wind power industry supply chain. Taichung Harbor is expected to become a significant offshore wind power hub, driving green energy development and economic growth.

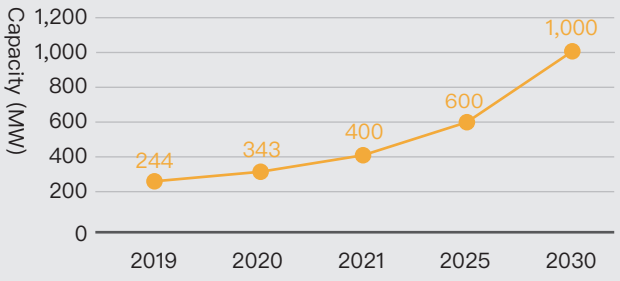




▲ Detention pond floating solar photovoltaic in Wuri HSR

Efforts made by the bureaus of the City Government and enterprises, campuses and the active participation in the city's solar photovoltaics, the promotion is undergoing smoothly. According to the data released by Taipower, the statistics shown by the end of May 2021, the city's solar photovoltaic accumulator has a capacity of approximately 376MW. The government sets KPIs for each bureau required actively promote the setting solar photovoltaic, fully developing solar photovoltaic construction. The 353.3MW tripled target expected to reach by 2022 which has been fulfilled ahead of the schedule. The government once again promotes a four-fold increase in solar energy target, the cumulative installation capacity will reach 465MW by 2022 and spares no effort to promote the development of solar photovoltaics, marching ahead the vision of 1GW by 2030.

**The cumulative capacity for solar power generation**




## 2. Plan for Promoting to Use Green Energy for Industry

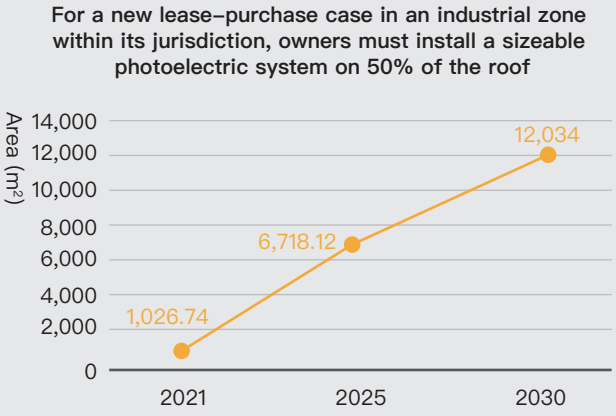
The city proposed an update two-year solar photovoltaic development plan in 2021, executing the “Plan for promoting to use green energy for the industry”, to ensure that all people can get affordable, reliable, sustainable, and modern energy. Taichung is



▲ Photoelectric installation on the roof of Taichung City Zhongping Junior High School

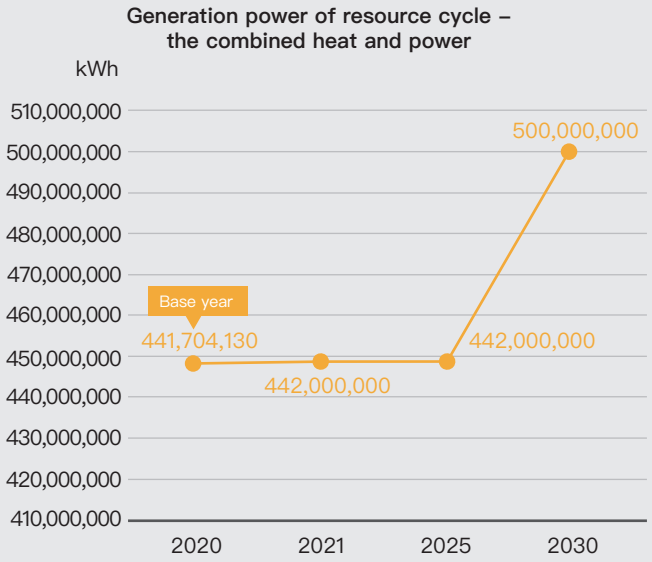
selected as the industrial zone under the jurisdiction of the prefecture as the central axis for the promotion of rooftop photovoltaic equipment, encouraging to adopt 50% of the roof top installed with solar photovoltaic facilities.

Taichung is a main production base of the domestic machinery industry. With increasing demand, the development of green energy is an essential policy. Solar photovoltaic equipment on the roof of the factory buildings becomes the priority to promote the goal of green energy in the industries within the jurisfication.

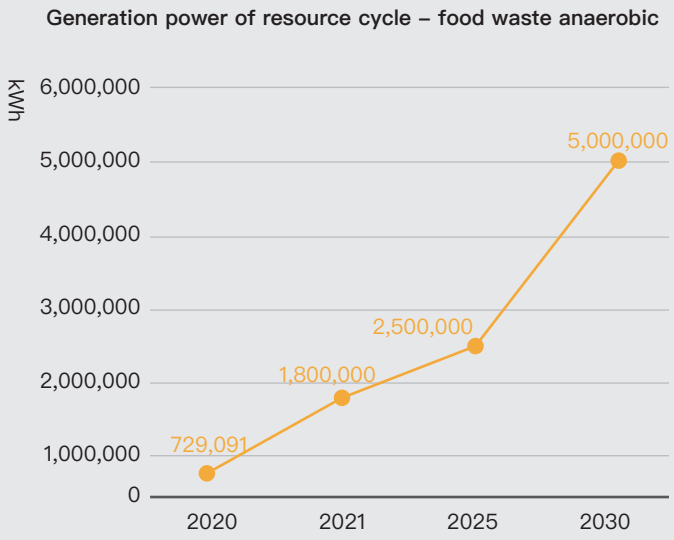



At present, in addition to the promotion of trademarks for developed industrial parks, the newly–developed industrial park will be completed. It will be added to the plan to encourage manufacturers to install solar photovoltaic equipment designed to maximize power generation and reduce construction problems subsquently.

### 3. The Project for Resource Recycling Power Generation




In addition to requiring the proper operation of the three incineration plants within the city's jurisdiction and maintaining stable output and power generation during equipment maintenance, the government continues to promote the replacement plan for the Wenshan Incineration Plant to increase the incineration volume and power generation for the Wenshan Incineration Plant which supplies more green energy caused by the problem of insufficient power. To properly remove food waste, the ROT (Reconstruction–Operation–Transfer) method will be used to promote green energy power generation, which will complete the city's food waste processing capacity, reducing the processing load of the incineration plant, and ensure to provide affordable, reliable, sustainable and modern energy for all the citizens.

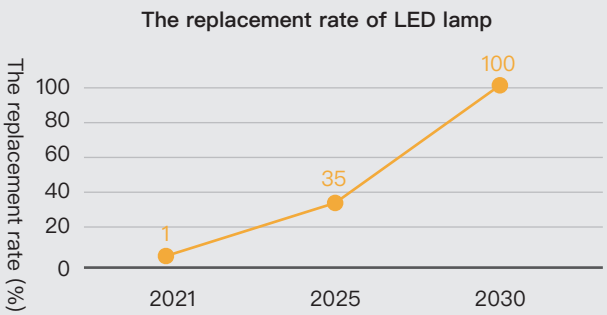





▲ Anaerobic equipment of WaiPu green energy ecological park

## 4. The Project for LED Light Installation

There are approximately 210,000 street lights in this city, in which more than 90,000 been replaced with LED energy-saving lamps executed by "the Mercury Street Lamp Sunset Project" and "various old street lamp replacement projects", which save approximately NT$ 100 million on electricity fee every year, reducing 45,272 metric tons of carbon dioxide emissions equivalent to the amount of carbon reduction of 88 Taipei Daan Park.






▲ Undergoing the replacement of the LED light




# SDG 8 Decent Work and Economic Growth

## Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

To achieve the vision of "Rich Taichung", the city actively invests in strategic industries, providing diversified employment services and entrepreneurial , hosting activities, assisting the unemployed, and the disabled to find jobs, valuing workplace safety and safety economic growth.

### Review SDG Targets of UN

- **Target 8.3** : Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-,small-and medium-sized enterprises, including through access to financial services.
- **Target 8.5** : By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
- **Target 8.6** : By 2020, substantially reduce the proportion of the youth not in employment, education or training.
- **Target 8.9** : By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

### Cooperation between the City Government and the Port, Marching Ahead Prosperity

Taichung has the advantages of owning two ports by sea and air. The City Government also continues to strengthen the cooperation between the municipal government and the port. Taiwan International Ports Corporation targets on sightseeing tours among business districts, the port service in the professional zone, and industrial service zone, etc. handling the investment promotion. The City Government establishes the partnership with Taiwan International Port Corporation, Taichung Port as a cooperation channel, exchanging investment information and helping to eliminate investment barriers.

### Two Leading Ports , Booming the Port and the City

In response to "The core of the two ports, Two-Port Gateway Strategic Zone" connecting with related resource construction, new transportation system, new urban structure policy, and environmental thinking to meet current development needs and future development trends. The region quality overall review work is executed, discussing the plan for changing land to implement the implementation and management of the urban program, booming Taichung Port and the city, livable life and sharing modern new district development.

### Develop Taichung Mitsui Outlet to Create Sea-line Economic Strength

Focus on the potential development of the Taichung Sea Line area, the City Government actively assists Mitsui to develop the "Mitsui Outlet Park Taichung Port", establishing Cross-Bureau Project Team to complete the traffic impact assessment, comprehensive review of fire safety, reviewed by the Environmental Impact Assessment Project Group.

- The first phase of the development opened on December 12, 2018, with an investment of 2.5 billion yuan and creating 2,000 job opportunities.
- The second phase of development starts on

November 25, 2020, and is expected to be the 2022 opening of the year. By then, the total number of shops will be increased to 220, significantly increasing the overall tourism momentum in the sea line area and improving the local life functions.

### Airport Gateway Project

To construct an image of a city gateway to a world-class city, considering the local cluster effect and growth trend of emerging industries in the district, moving ahead the concept of the "airport park", planning thoroughly for the airport and surrounding areas and development, reserving the airport for convenient use of land to smoothly connect the airport's mid-term and long-term construction design drawings, improving transportation logistics accessibility and the convenience of the transmission system, improving the accessibility and the transportation logistics system.

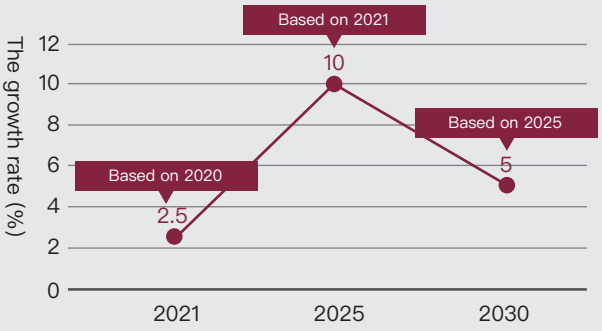
### Central Golden Technology Corridor, Boosting Industrial and Economic Growth

The Dadushan area in Taichung is a major domestic machine tools important base and a golden technology corridor, has the most intensive metal manufacturing industry in Taiwan, including offshore wind turbine tools, machine tools, bicycles, hand tools and kitchen utensils and become a dense supply chain cluster. Build Central Taiwan Science Park, Taichung Industrial Park and Taichung City Precision Machinery Innovation Technology Park. The formation of a complete industrial cluster in the 60-kilometer Golden Rift Valley will lay a solid industrial strength and drive industrial upgrading and economic growth with high added value, high technical content, and intelligence.

#### 1. Taichung Information Platform Operation Service for Living Economy

This platform combined digital services of different levels of activities to interact with people in 2020 ,linking Shopping Festival, Halloween, Taxation promotion, Industrial Tourism,The Youth's Innovation and Taichung Women Go and so on and APP downloads exceeded 360,000 times by the end of 2020. Taichung participated in " WITSA Global ICT Excellence Awards", presented "Sustainable Urban Business Solution", awarded the first prize of COVID-19 tech solutions for cities and localities.

**The growth rate of using Taichung Living Economic Information Platform App**




※This policy plan is on 2021, unable to confirm whether it can be implement continuously in the future, according to the actual situation, we must make rolling wave planning

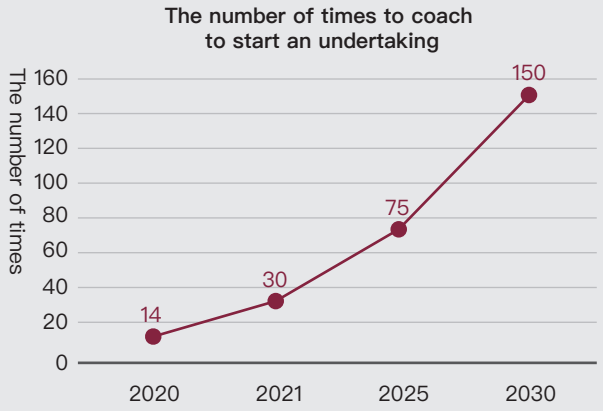
#### 2. The Project of Taichung Cross-border Experience Demonstration Base Entrusted Operation Management




▲ Taichung City participated WITSA Global ICT Excellence Awards, presented the sustainable urban business solution, awarded the first prize of COVID-19 tech solutions for cities and localities

Through the city's cross-border experience demonstration base and the city's related enterprise entrepreneurship and innovation project, we coach to start an undertaking set up registration in Taichung or obtain relevant subsidy resources, developing cross-border business.

The operation policy not only promotes the development of the demonstration innovation field zone, but also provides counseling for the youth, holding matchmaking meetings and entrepreneurship courses, counseling youth entrepreneurs to settle in, and providing common space rental to promote Taichung cross-border experience demonstration base sustainable operation.

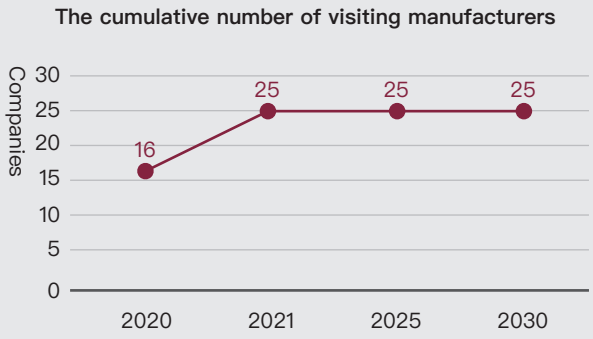



### 3. Strategic Industry Investment

For investors with innovative investment, major investment and local procurement , we provide four subsidies including rent of premises, house tax and land value tax, labor vocational training expenses and labor salary subsidy, and encourage other county manufacturers to invest in our city.



▲ Visiting and communicating with manufacturers' demands



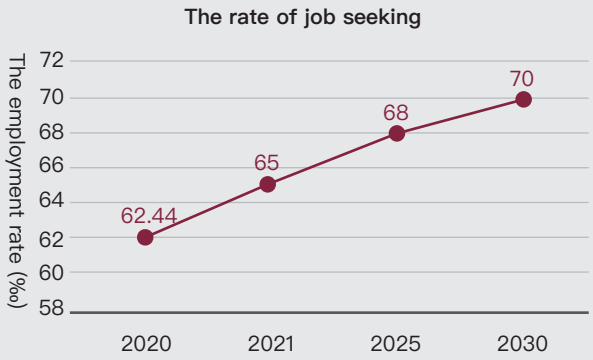

### 4. Provide Employment Service Resources and Strengthen Applicants' Preparation




▲ Taichung City Government, the cooperation with wind power company

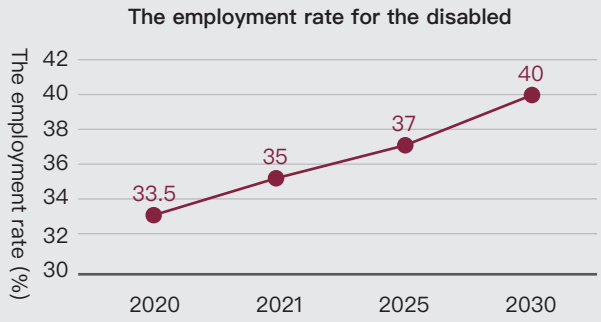
In order to assist job-seekers in this city to find employment and fill up the manpower gaps of companies, we expand the employment service bases, adding the original one from 23 to 27, increasing the capacity of employment services. Set up a one-stop customized employment service, to provide employment promotion measures and service resources to assist young people and job seekers to find jobs. Combine with the development of job opportunities and potential labor force, including manufacturers, chief of village, and people's organizations, we are committed to promoting inclusive and sustainable economic growth, strengthen applicants' preparation and assist in employment.

Since 2020, the population of Taiwan has shown negative growth. For the middle-aged and senior citizens, relevant employment promotion programs are planned to increase the labor participation of Taichung City middle-aged and promote the re-employment of the elderly.

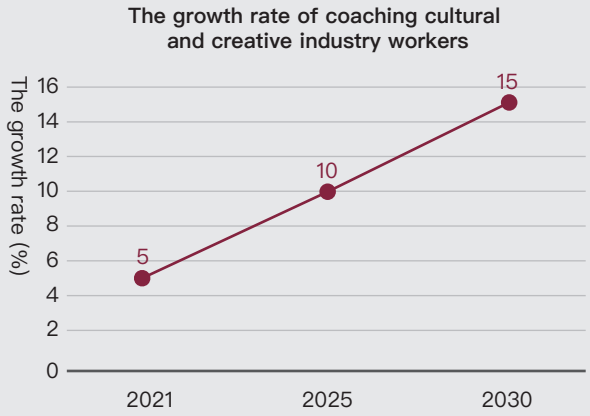


### 5. To Hold Lectures of Employment for the Disabled

To help disabled students understand the trend of the job market and to enter the labor market as soon as possible for the employment, implementing the concept of unity of study and use, and enable the disabled students and their families to fully understand employment resources by joining the lectures of employment. Allow disabled students to obtain seamless and appropriate professional services to achieve the purpose of assist the disabled students to find employment, we will implement career counseling and transfer services for the disabled students to increase the employment rate for the disabled students after the graduation.




### 6. Project for Cultural and Creative Counseling




Use cultural and creative resources and loan briefings to strengthen the promotion of the Ministry of Culture the project of loans for startup funding, and increase the opportunities for small and micro cultural and creative enterprises or individual workshops to accumulated bank credit to obtain funds. At the same time, we assist cultural and creative industry workers to establish their own brands, expanding market channels, striving for

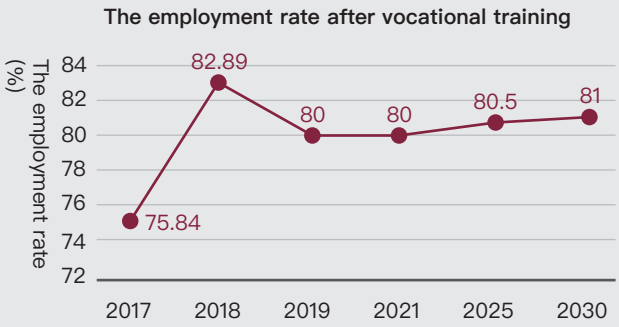


▲ The training class for making exotic food

external resources, and seeking cross-field cooperation through the integration of resources from the same industry closely linked to form a complementary supportive role, and jointly achieve synergy and create industrial value.

### 7. The Project for Job Trainings for the Unemployed

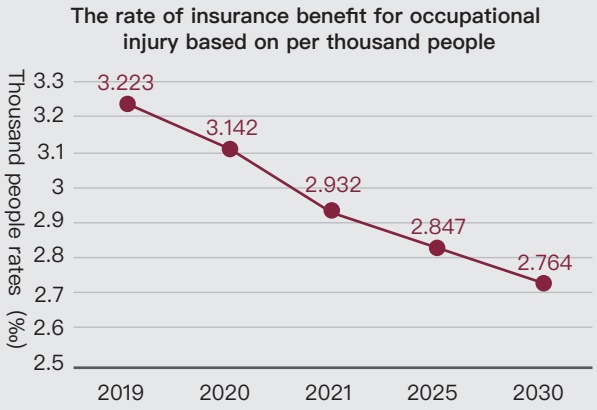
To promote the acquisition of employment skills for unemployed or unemployed people who are willing to seek for the employment and improve their vocational skills, we continue to promote "Job trainings for the unemployed", organizing vocational trainings for upgrading Taichung City's industrial, structural transformation and labor shortage, assisting them through employment counseling measures. In addition to increasing employment opportunities, combining the needs of the industries, we provide relevant technical talents, assist enterprises to root in the region as bases, promote the development of economic functions, and help to reduce the unemployment rate.




### 8. Safety Guarantee for Working Spots and Health Management Project 2.0

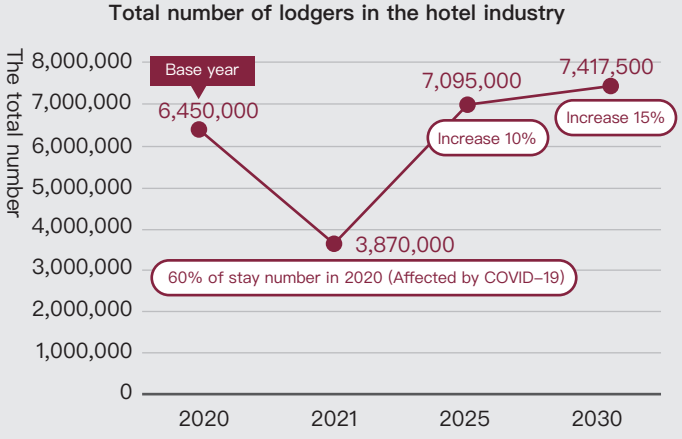
Taichung City assists public institutions in apply for relevant subsidies and improves safety and sanitation facilities, increasing the willingness of public institutions

to improve safety facilities and reducing the burden of improvement costs. In addition, we assure workplace safety to protect labor rights by four-in-one disaster reduction strategy of "propaganda, counseling, inspection, and subsidy", combining with the resources and organizational strength of employers, relevant organizations, and the government, reducing the rate of insurance benefit for occupational injury based on per thousand people to protect labor safety and health.




## 9. Promote the Tourism Industry

Organizing activities for boosting tourism, such as "Daan Sand Sculpture and Music Festival", "Taichung Hot Spring Season", "Taichung International Dance Carnival", and "Taichung International Flower Carpet Festival" held in 2020. Taichung actively promotes domestic trips to attract tourists from all over Taiwan. In 2020, the number of tourists reached 46 million. Taichung is ranked the top to offer subsidy to self-guided trip (approximately 410 million NTD). We will continue to organize large-scale tourism activities to promote related tourism marketing and strategies for bringing in more visitors.







▲ Taichung Jazz Festival in 2019

## 10. Taichung Film Festival

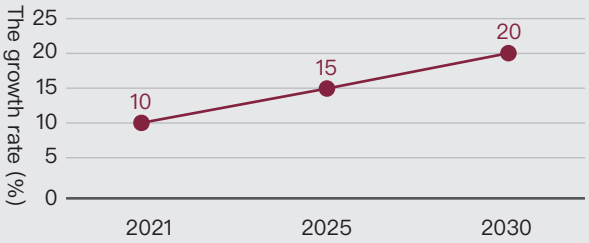



▲ 2020 Taichung International Animation Festival

To build the brand of Taichung film festival and combine the image of a young and creative city, we focus on "animation" as the theme of the film festival, taking well-known foreign film festivals as references, and organize "International Animation Short Films Competition" and "International Animation Film Observation" as the two major film festival features. In the future, the Central Taiwan Film Center will be used as the main venue of the Taichung Film Festival expected to become the "international animation capital".



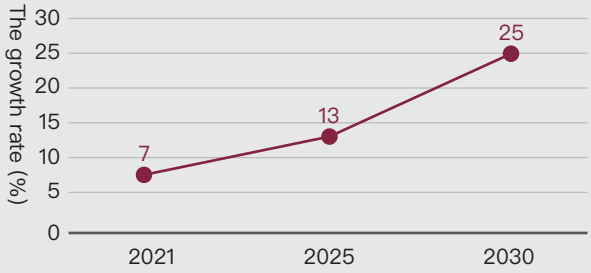

The rate of co-filming






▲ Movie “Classmates Minus” taken in Dajia Rihnan

The growth rate of attendees participating in film exhibitions




※Based on 2020, total number were 8,386 people

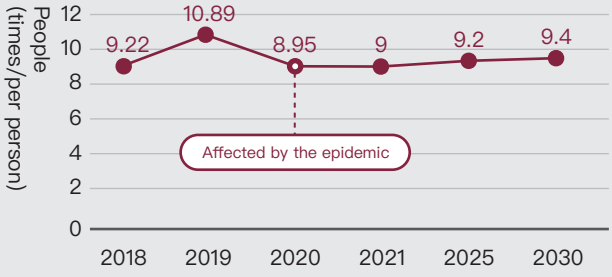
## 11. Build the Core of Film and Television Center in Taiwan

To “Build the core of film and television center in Taiwan” as the policy goal, promote the local film and television industry to root in Taichung as bases and grow stronger and related counseling policies, to provide film and television production subsidies, friendly and fully integrated co-filming services. In addition, the only public-to-private professional film and television studio in Taiwan, “The Central Taiwan Film Studios”, adopting professional field and technical to meet the different shooting needs of various film and television crews which gradually attracts domestic and foreign crews to film in Taichung.

## 12. Promotion for Art and Cultural Activities

Our arts and cultural activity include the “Taichung Jazz Festival”, through the performance of an international jazz band, booming Taichung City tourism, Taichung attracts more than 100,000 music fans every day. In addition, the Taichung Mazu International Festival combines the city’s century-old temple culture to convey local cultural values to attract millions of people to participate in each year. In response to the pandemic, we develop online performances, online exhibitions, and other forms, and continue to organize diversified arts and cultural feasts. According to statistics, by the end of May 2021, the number of arts and cultural activities organized in Taichung city was ranked the top in the country.

The number of participants for art activities



# SDG 9 Industry, Innovation and Infrastructure

## Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

To build resilient infrastructure and promote sustainable industries, the city actively constructs sidewalks, and rainwater channels with permeable functions to develop reliable infrastructure with post-disaster resilience capabilities.

### Review SDG Targets of UN

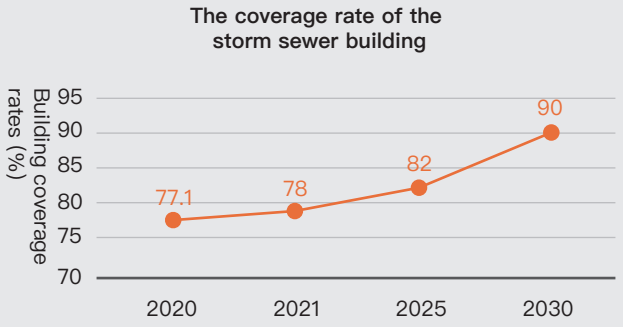
- **Target 9.1** : Develop quality, reliable, sustainable, and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

### 1. Increase the Coverage Rate of the Storm Sewer Management and Improve the City Regional Flood Discharge Capacity

The city actively plans to build the storm sewer system to improve the rainwater sewer implementation rate, strengthen flood control and drainage capacity to protect citizens' safety and property. According to the storm sewer statistics by the end of 2020, the building coverage rate reached 77.1%, and the total construction length was 685.7 kilometers. We will continue to build a sewer system to increase urban drainage and reduce flooding in low-lying areas.

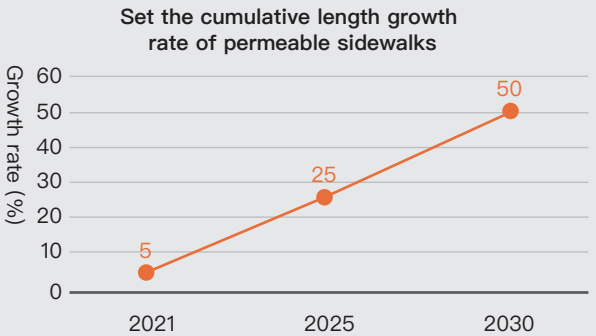


▲ Storm Sewer Project in Minsheng Street, Tanzi District




### 2. Build a Sidewalk with Permeable Function

The city builds permeable functional sidewalks and manages urban road space design of permeable pavement and rainwater permeation and catchment planning in public passage space design and review. In 2020, the total length of permeable pavement was improved 5.89 kilometers and the annual cumulative length growth rate was estimated to increase 5%, the growth rate will increase by 25% in 2025, 2030 the goal will increase the annual growth rate by 50%.




※Based on the Permeable Pavement Length of 5.89 kilometers in 2020 as the Reference Value

# SDG 10 Reduce Inequalities

## Reduce inequality within and among countries

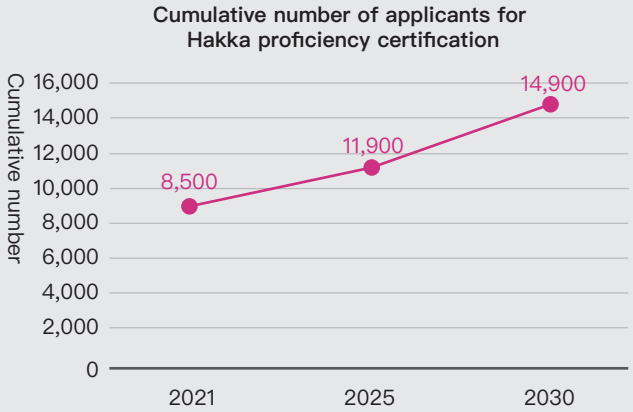
Taichung values the importance of social protection policies of all ages, genders, and races and provides health care and medical health services for people in remote areas. Reducing all forms of inequality in group society and resources is undergoing.

### Review SDG Targets of UN

- **Target 10.2** : By 2030, empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
- **Target 10.4** : Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.

### 1. Encourage the Participation in Hakka Proficiency Certification

From 2016 to 2020, the number of applicants for Hakka proficiency certification in this city reached 7,400, and the promotion of learning Hakka will continue to be cared, encouraging the public to take the Hakka proficiency certification test, creating a barrier-free environment for Hakka communication, and promoting integration and equality for ethnic groups.




※From 2016 to 2020, the number of applicants for the Hakka language proficiency certification in Taichung City will reach 7,400





▲ Presentation of Hakka certification class and promotion of Hakka as mother tongue

## 2. Public Health Care and Medical Health Services in Remote Areas



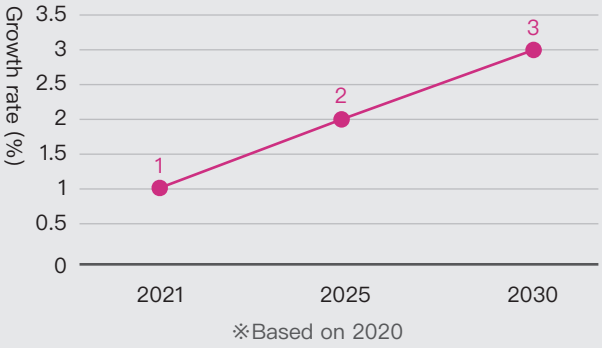
▲ Vaccination services for rural residents

To safeguard health of the people in remote areas (Heping District), provide medical services, rehabilitation treatment, chest X-ray screening, vaccination, screening for four major cancers, and medical services such as screening and adult health checks to reduce the problem of the shortage of medical resources and improve the health of people in remote areas. We will adopt public-private collaboration and combine private resources to strengthen cross-domain cooperation by merging propaganda and integration of various types of community activities. To link integrated screening and inspection activities to block community infections chain.

The total number of people in remote areas (Heping District) receiving public health care services in 2020 was 55,822 people, which included:

- Medical services: 45,519 people
- Rehabilitation treatment: 468 people
- Chest X-ray screening: 2,792 people
- Vaccination: 5,309 people
- Screening for four major cancers: 1,018 people
- Adult health check: 776 people

**Growth rate of people in remote areas receiving public health care services**




※Based on 2020

## 3. Ensuring Indigenous People's Political Participation Rights in Heping District

To give the municipalities directly under the source of law of the central government for implementing autonomy in the aboriginal areas. Legislative Yuan amended the local legislation to protect the original inhabitant's people's participation in political power actively responds to the social intentions of the aborigines, implementing ethnic equality and social protection policies.

### The Country's First Aboriginal Experimental Education Elementary School and Junior High School




▲ Inauguration Ceremony of Aboriginal Education Resource Center, passing down Aboriginal Culture

Guang-Long Elementary School in Taiping District established "Taichung City Aboriginal Education Fund Source Center" to assist in training ethnic language teachers and pass on ethnic languages culture. In addition, the country's first experimental education for indigenous peoples was established "P'uma Elementary School", aiming at the aborigines of national primary and secondary schools students offer ethnic language courses, cultural consensus camps, and experiencing activities to provide a complete learning environment for ethnic languages and culture.

# SDG 11 Sustainable Cities and Communities

## Make cities and human settlements inclusive, safe, resilient and sustainable

Taichung improves air quality actively and promotes different low-carbon and energy saving in order to implement the sustainable cities and communities. In addition to urge the city and residence with comprehension, safety, resilience, and sustainability by developing greenery and intelligent transportation, promoting council houses, and improving public facilities and social service.

### Review SDG Targets of UN

- **Target 11.1** : By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
- **Target 11.2** : By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- **Target 11.3** : By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.
- **Target 11.4** : Strengthen efforts to protect and safeguard the world's cultural and natural heritage.
- **Target 11.6** : By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
- **Target 11.7** : By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.
- **Target 11.a** : Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.

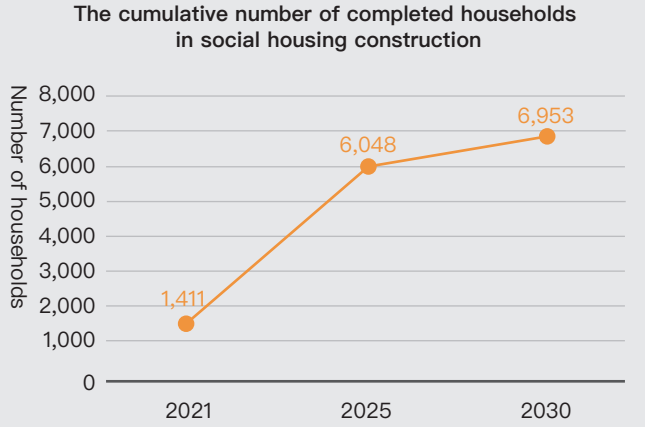
### 1. Council House

Council Houses provide the service for settlement which is an important policy of residence. There were 891 houses built in April 2021. 3,967 houses are still ongoing built.





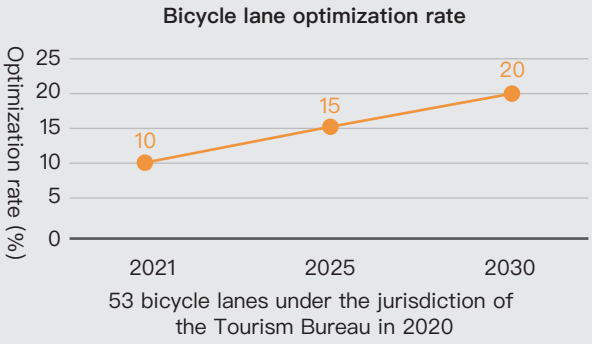
▲ Nantun District Jingke Lohas Good House, Fengyuan Ankang Phase 1 Council House, Dali Guangzheng Section Community House Phase 1




※According to statistics, a total of 891 households have been completed as of April 2021

## 2. Optimizing Recreational Bicycle Lanes

Overview Taichung's recreational bicycle lanes and optimizing the service facilities of bicycle lanes to increase the security and comfortable of riding. The facilities optimizing and reconstructed at Daja seaside bicycle lanes such as pavement, rail and so on in 2020. In the future continuously reconstruct and maintain optimizing bicycle lanes in Taichung so as to promote sightseeing service and environment quality.




53 bicycle lanes under the jurisdiction of the Tourism Bureau in 2020



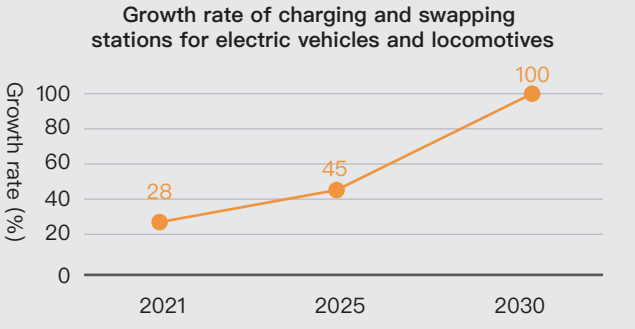
▲ Houfeng railway steel beam bridge



▲ Taichung City GoStation 300th station

## 3. Promote the Electric Motorcycles Recharging

To encourage citizens, change and purchase electric mobile and build friendly charging environment in order to reduce the exhaust of mobile source of air pollution. Taichung promotes the electric motorcycles recharging actively. Through the policy of fully charge station allowance and clean energy environment establishment to increase the motivation of using low-pollution vehicle. By 2022, electric car charge station will be up to 505, electric scooters will be up to 631 and electric scooters battery change station will be up to 289 in Taichung.



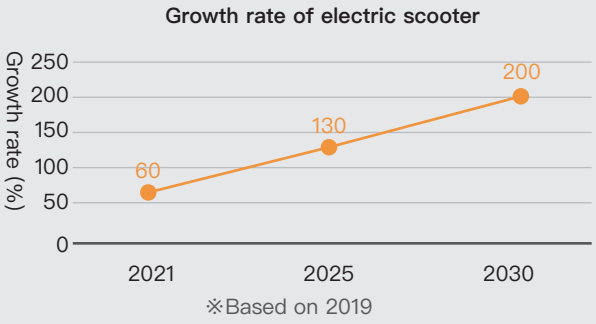

**Total number of stations in 2019 (Using this year as the base year)**

- Electric vehicle charging stations : 437 stations
- Electric locomotive charging stations : 530 stations
- Electric locomotive swap stations : 274 stations




## 4. The Subsidy Project of Replacement of Old Motorcycles with New Low Polluted Vehicle

Taichung offers subsidy replacing old motorcycles with new low-pollution vehicle and purchasing new electric scooter. By higher subsidy and non-limited quota to increase the motivation to choose low-pollution vehicle. In addition, Taichung expands charge stations continuously. Establish fully support of charge environment synchronous to attract the industry to set up the stations and maintenance continuously. Encourage organizations, schools, companies, and apartment buildings to apply for setting charge station to increase the density and breadth and establish full electric vehicles by recharging.

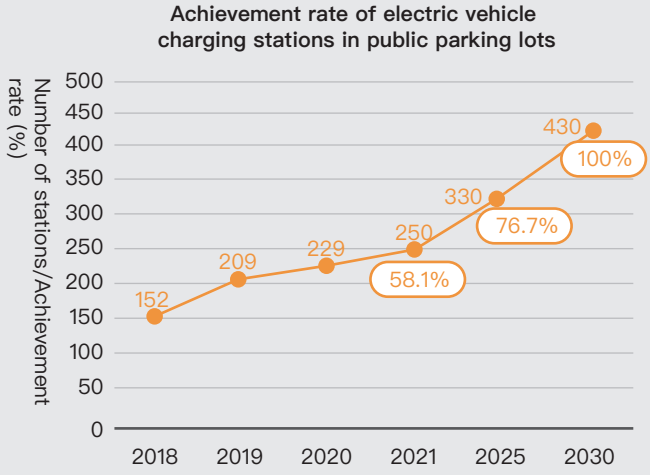



2019 : 43,649 vehicles | 2020 : 60,383 vehicles | 16,734 vehicles increased in total

- Rank the second growth in Taiwan
- The growth rate reaches 38.3%
- Rank the top among six metropolises

## 5. Application of Public Parking Lots for Electricity and Maintenance of Electric Automobile Charging Equipment

Promote public parking lot to establish electric car charge equipment to promote friendly charge environment, the parking lots providing one charging equipment for 50 cars essentially. 141 parking lots were installed 251 charging equipment in July 2021. First set up the electric car charge equipment net, and then develop supporting construction of charging equipment and finally complete the full net. By 2030, the public parking lots will reach 430 charging equipment in Taichung.







▲ Electric vehicle charging equipment in the second parking lot of Yangming building

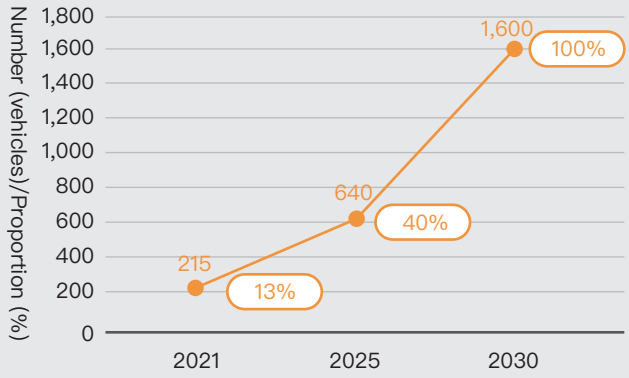
## 6. Promote the Plan for the Electric Buses by 2030 Proposed by the Central Government Central




▲ Electric bus

Taichung promotes the planning for the electric buses. We strive for the budgets from central government and encourage the industry to replace old buses for electric ones. Take Taiwan Boulevard as a demonstration line, we revise the electric bus development strategy by rolling review. Plan the whole charging station and routes for bus industries set up in Taichung. Build a low carbon and sustainable public transportation environment gradually. The numbers of electric buses were 145 in 2018, 182 in 2019 and 197 in 2020. Continue the promotion so as to reduce the pollution emitted by urban area buses.

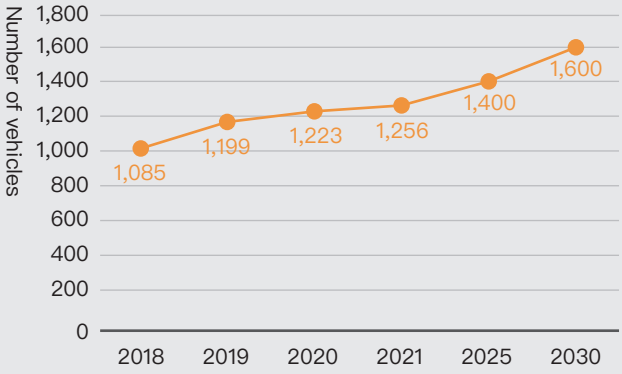
**Number of electric buses (Proportion of electric buses)**




## 7. Accessible Bus

Strive for the budgets from central government. Encourage industries purchasing accessible buses and the announcement for the routes designed for accessible buses in urban area. Accessible buses limited condition of running route. Make sure each route setting with accessible buses. And place the training of accessible buses into the assessment of service quality assessment on bus carriers. To ensure each driver to be able to operate the accessible bus. 16 accessible buses and 1,230 low floor buses are available in Taichung. The ratio of accessible bus reaches 78.36%.

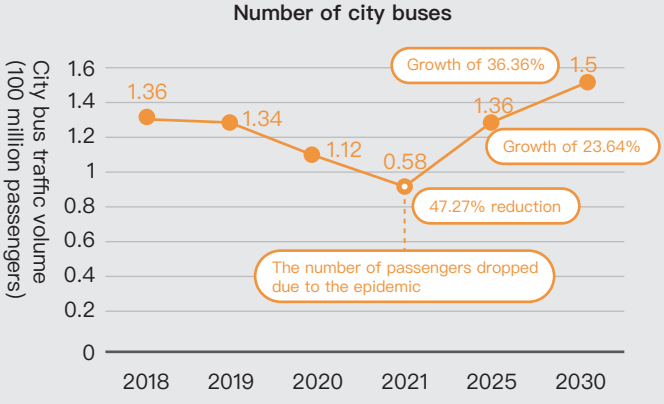
**Number of barrier-free buses**




## 8. Plan to Increase the Traffic Volume of Bus

By establishing the bus net, planning for cost-saving bus, increase the rate of on-time bus departure, promote the manners of taking bus, and award well-performed drivers regularly and so on to attract citizen to take public transport. To build an accessible and friendly modern city.

**Number of city buses**






▲ Encourage school children to take city buses

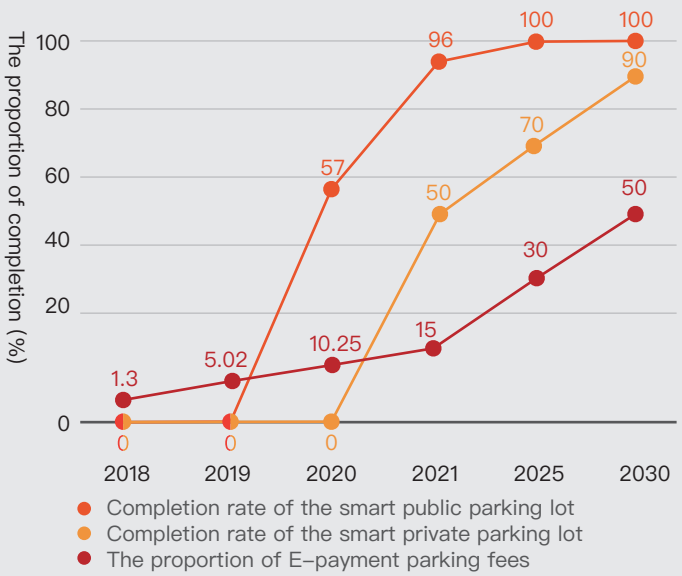


▲ iBike Re-launched 18 stations 2.0 system : more than 100 stations set

## 9. Smart Parking

Provide people to experience entering and exit the parking lot by E-payment system. Speed up the in-and-out efficiency of, actually record the time of entry and exit, create a smart parking environment. According to statistics, as of the end of July 2021, a total of 118 smart parking lots have been built, with a completion rate of 92.9% and 96.8% will be reached by the end of 2021; eTag identification department the system setting rate reaches 77.1%, a total of 98, mobile payment the formula setting rate reaches 75.6%, a total of 96; fare waiver service for the disabled the reaches 84.3% with a total of 107 parking lots.

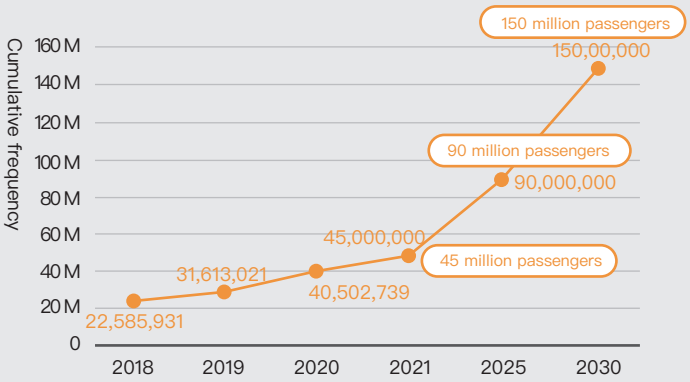
**The proportion of smart parking lot and E-payment**




In addition, a parking fee notice is issued by geomagnetism +PDA (expected to be implemented in the fourth quarter in 2021), reducing the payment by the counters of the supermarkets, encouraging people to use mobile payment to pay parking fees. Mobile payment is available and cooperate with telecommunications helping to pay parking fees with a discount plan, increasing the customer engagement and the payment rate.

## 10. Plan to Increase the Quantity of iBike

**Cumulative frequency of renting iBike**




Fully upgraded system to "YouBike2.0", plan to add 1,000 stations, promoting a complete public bicycle transportation system, and providing transportation options for commuting, commuting to school, and recreation, making it more convenient for people to rent and return bicycles, and implementing sustainable transport. On September 13, 2021, YouBike2.0 exceeded 700 stations, and accumulating 46 million renters.

## 11. The Project of Autonomous Bus

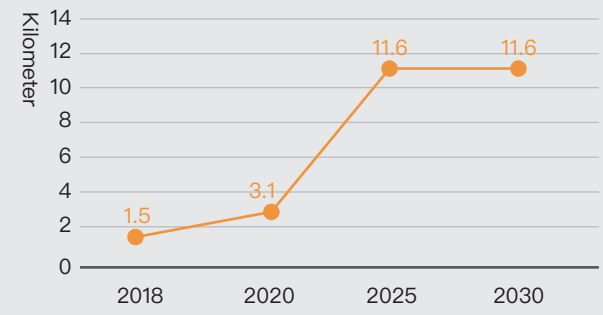



▲ Shuinan autonomous bus

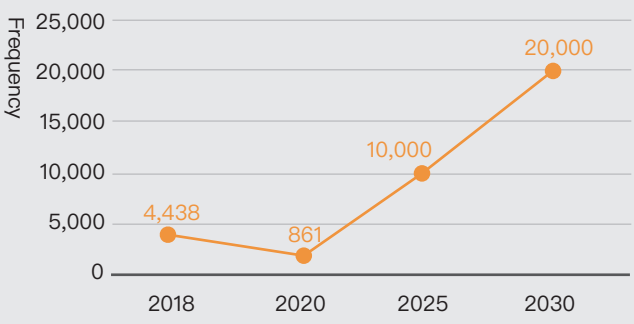
By combining domestic cross-sector players to form a self-driving bus team, build a domestic self-driving bus and vehicle-road integration system, promoting a demonstration operation plan, planning to introduce self-driving technology in the bus lanes of Taiwan Boulevard, building approximately 8.5 kilometers of field equipment, creating a friendly environment for self-driving buses, and providing shuttle buses.

**Build an autonomous bus operation field route length, and passenger capacity**

〔 field facilities (Km) 〕



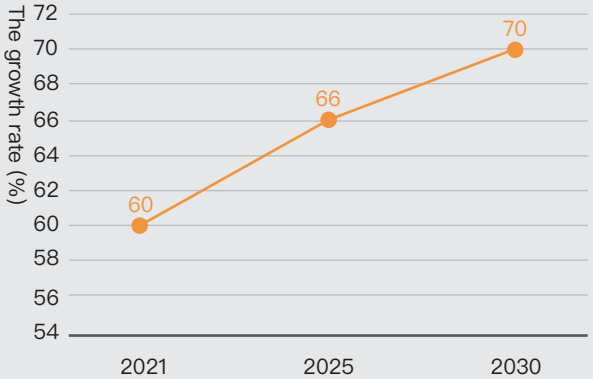

〔 Passenger capacity 〕




## 12. Plan to Integrate of Smart Dynamic Signal System and the Installation of TOPIS

To solve the urban traffic flow, promoting the plan to integrate smart dynamic signal system and installation of TOPIS since 2017, establishing an intelligent dynamic signal system at the intersections around major arterial roads and expressway interchanges. In 2018, the streets around the ramp of National Expressway No. 1 and Provincial Highway No. 74, a total of 20 intersections installed smart, dynamic signs the smart, dynamic sign system was built at eight major sign intersections on Zhongqing Road in 2019, and a smart, dynamic sign system was used at 17 major sign intersections on Wuquan West Road in 2020. Ten intelligent signal intersections will be completed on Taiwan Boulevard by the end of 2022, and the number of smart signal intersections in the city will reach 55; the system can adjust the green light time in real-time to relieve the traffic flow according to the changes in traffic volume. In the future, it will continue to seek central subsidies to build an intelligent dynamic signal system and increase traffic control facilities. Prepare maintenance budget for the operations.

**The completion growth rate of smart signs**

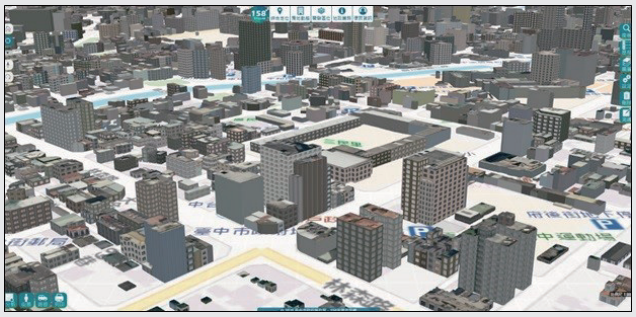



Install dynamic traffic signal control on Wuquan West Road ▶

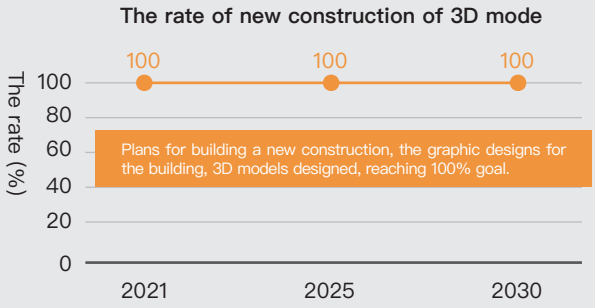


## 13. Marching Ahead 3D Smart Land Project of National Spatial Data for Infrastructure

The city cooperates with the Ministry of the Interior to build a three-dimensional cadastral space map of new construction and joins the building numbers data with the three-dimensional national base map, changing the building from the plane position to three-dimensional, making population decision-making, judgment, and planning, etc., more detailed promotion, future data analysis can be adopted by 3D; the investigation will be more accurate. At present, the establishment of a database in local government offices in this city has been implemented.



▲ 3D building browsing screen of 158 Space Information Network

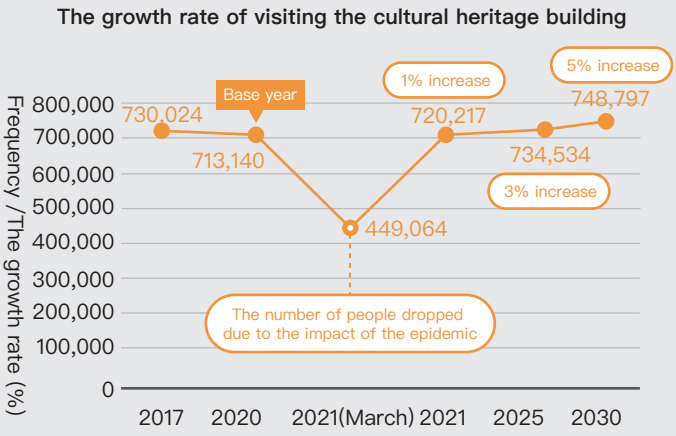



## 14. Cultural Heritage Preservation and Promotion

The city is committed to preserving the cultural heritage, from the designation and registration of cultural heritage, sparing no effort in all stages from restoration to activation and reuse to enable the continuation and inheritance of the history and humanistic value of cultural heritage. To ensure the universal and equal right to participate in the preservation of cultural assets and to promote multiculturalism, we will continue to promote and increase the number of visiting the cultural heritage building. Due to the pandemic, the digital learning zone also provides online to boost the participation of cultural heritage activities and achieve the goal of cultural heritage preservation and promotion.

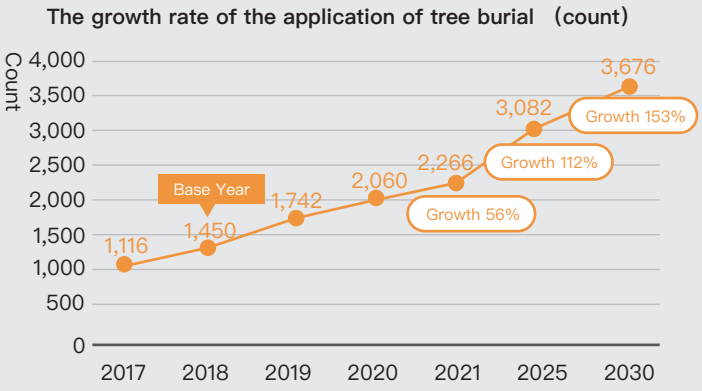



▲ Lin Maoyang's former residence holds guided tours from time




## 15. The Policy of Eco-green Burial

Promote and publicize the natural and environmentally friendly burial law through the green funeral and interment-related policies. For example, encourage people to use “tree burial” instead of traditional burial or cremation to enter the tower to reduce the occupation of precious land resources. In terms of tree burial promotion results in recent years, 253 applications in 2012 were dealt. By 2020, more than eight times the growth of 2060 applications have been dealt, and it will continue to be promoted in the future to move towards sustainable development of the environment.



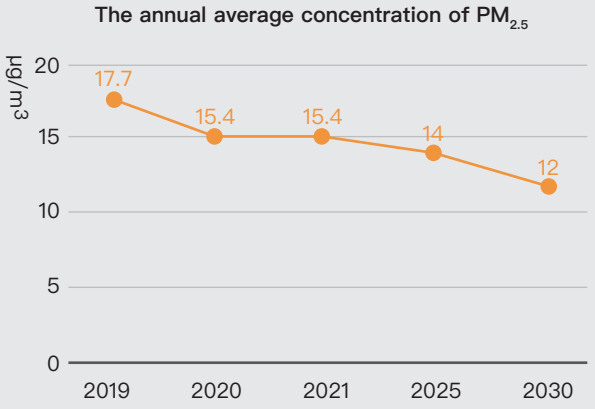
## 16. Project for Keeping Blue Sky and White Clouds

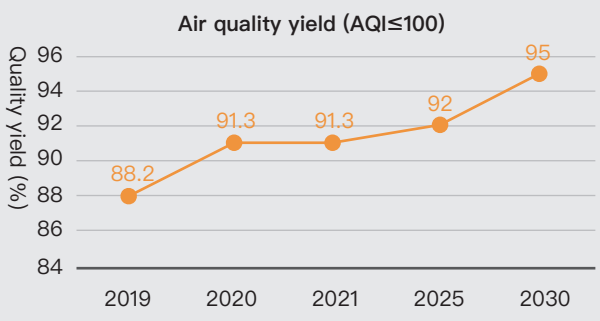
Taichung City continuously promotes “the project for keeping blue sky and white clouds”, dealing with air pollution by the principle of “public interest first, setting priority plans” to promote the improvement policy.

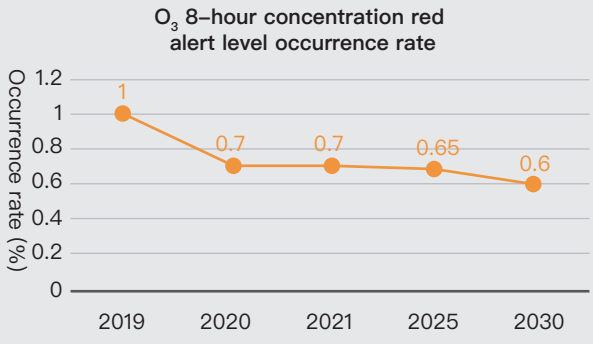
Those policies including “project of inspect the factories which discharge pollution”, “replace the air pollution preventive equipment”, “promote the withdraw of burning coal boiler”, “promote the withdraw of burning coal boiler”, subsidy the replacement of old vehicle”, “promote the low-carbon transportation”, and “develop the eco public transportation”. Respond to the above policies, we actively review all policies annually and revise each improve countermeasure of air quality, achieve the goal of short-term, middle-term, and long-term.

By the project of pollution prevention or other related control strategy, Taichung Thermal Power Plant has to be implemented the coal-reduction policy as requirements, expecting everyone to urge the Center Government to accelerate the disuse the coal-fired unit of the Taichung Thermal Power Plant. We assure the air quality and the residential safety for all citizens.





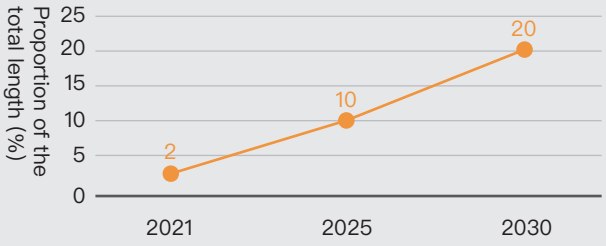





## 17. Optimize and Rebuild Existing Trails

Taichung City has finished rebuilding the 4th, 5th, 6th, 9th, and 10th trail in Da-Keng, the project including trail reconstruction, pavilion renovation, setting new platform, the government also rebuild the mountain pathways of Taiping, Wufeng, Beitun, Fengyuan, Houli and Shigang. We also promote a new and safe, and comfortable hiking environment for citizens by exchanging the old trail part, adding resting facilities and overlook platforms.

**Proportion of the total length of the completed trail optimization**



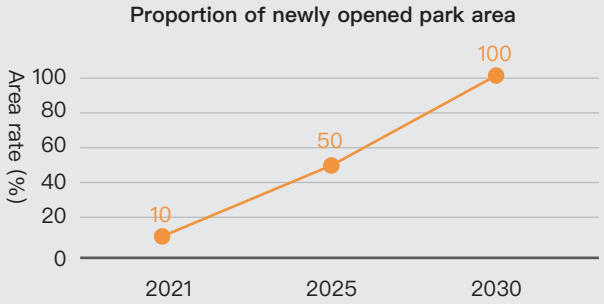

2020, base year, 103.72 kilometers of trails under the jurisdiction managed by tourism bureau



▲ Renovation for hiking trails

## 18. Project for Taichung Melody

Keep optimize the existing park ecology and barrier-free environment. Building the bright and clean public restrooms and setting qualified children playground to improve the park facilities, in order to keep the green space with inclusion, safety, toughness and sustainability of the urban park. Through the involvement of citizens and the transformation of public cemetery into green park, reaching the goal of increasing 25 hectares by 2030.




## 19. The Project of Humanity-oriented Transportation Development

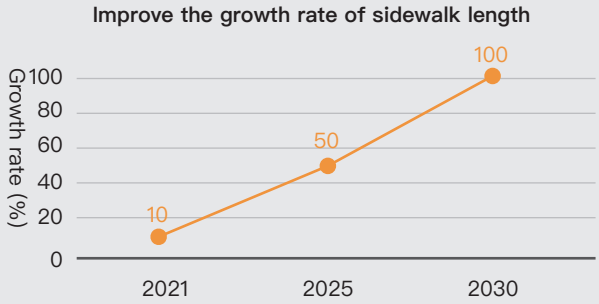
Cooperate with the "people-oriented environment construction plan and related specification" by center government, we actively improve the existing sidewalk and build people-oriented passing environment. We built and improved 11 kilometers of sidewalk in total in 2020, and plan to improve the length of sidewalk approximately 5 kilometers per year, the length growth rate reaches 10% in total. We have set the goal as the growth rate to increase 50% by 2025 and 100% by 2030, elevating the quality of sidewalk environment in Taichung City, creating the environment with humanistic, ecology and beautiful street.



▲ Improvement for sidewalk



▲ Project of Melody promoting in Wenlin Park of South District




※Based on the improvement of 11 kilometers of sidewalks in 2020

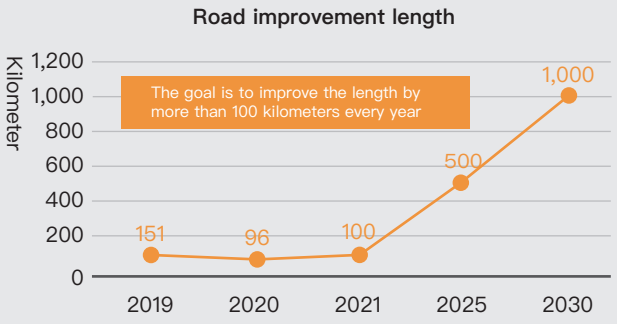
## 20. Road-smoothing Project



▲ Improve the road and move forward-successfully secured 900 million subsidies

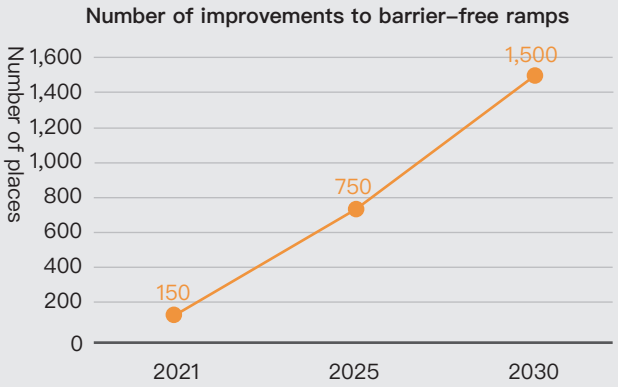


The "Road-smoothing Project" is mainly to improve the main roads, secondary roads, and sidewalks in each administrative district, improve the roads and sidewalks that's under 6 meters wide, increasing the quality of roads by improving the main roads, the secondary roads, and the sidewalks at the same time. This project set is to improve over 100 kilometers each year, using the renewable materials to promote the low-carbon circulation economy, also use the "Low Impact Development (LID)" to create a "sponge city" and increase the quality of the road in Taichung.



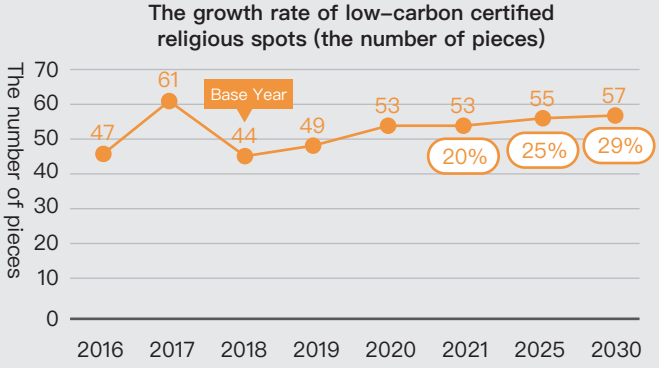

## 21. Improve the Accessible Ramp

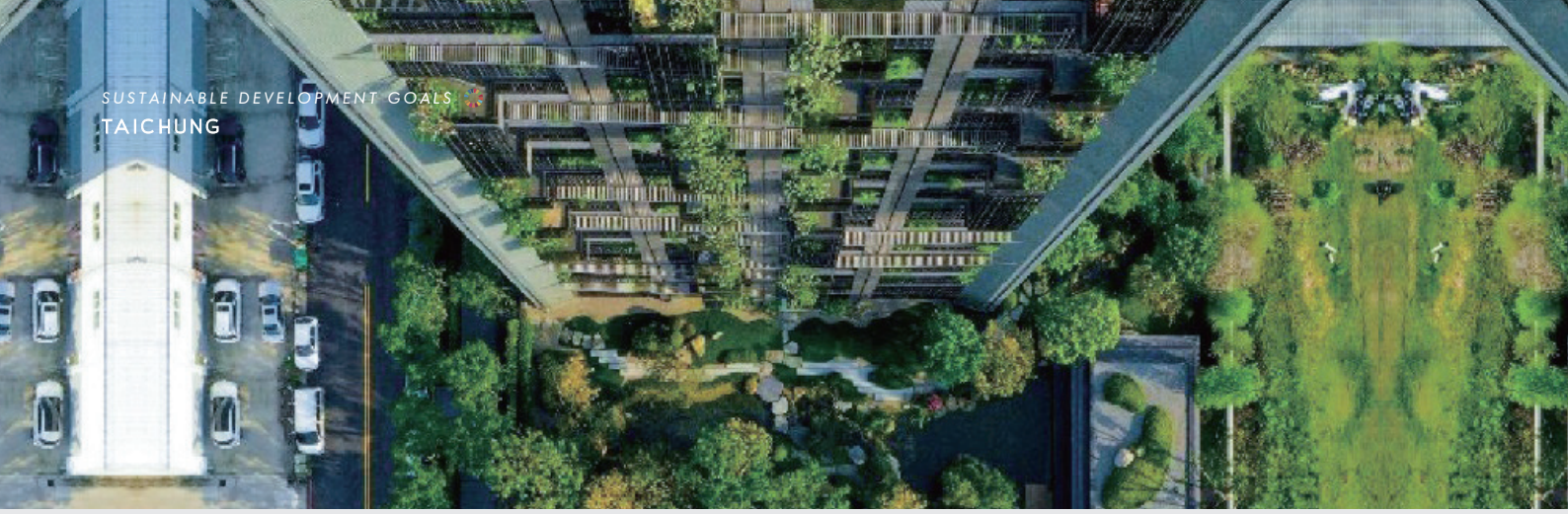
Taichung City actively improves the accessible ramp against the roads which is highly demand by pedestrian, and set the goal of improving over 150 places of accessible ramp each year, at the same time we improve the accessible environment on sidewalk (the visually impaired anchor point, remove the car barrier), provide a friendly passing way for disadvantaged groups and people with action disability, increase the quality of pass-way for citizens.




## 22. Promote Low-carbon Religious Spots

Cooperate with "Autonomous Regulations of Low-carbon City Development in Taichung City", we plan to promote various low-carbon and energy saving measure for the religious spots, in premise to respect the traditional religious when reforming. We promote to use only one incense stick when praying, the low carbon certification of religious spots, use the eco celebration firecrackers for carbon reduction, electric firecrackers, extinguish the incense burner while worshiping God, using less spirit money (joss-paper / paper money) and requiring the action of burning the spirit money all together, the contingency mechanism with the urgent deterioration of air quality, design flags for air quality promotion to improve the air quality and create better living environment. Keep promoting the "low carbon certification bandage" of the seven central counties and cities, and reach at least 56 places of low-carbon religious spots every year.

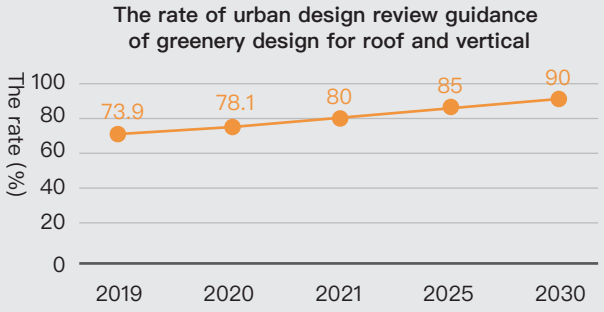




▲ Vertical greening of building facade

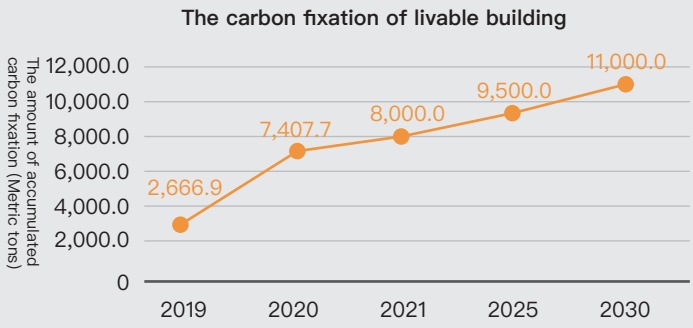
## 23. Urban Design Review

Promote the urban design review, counseling the setting of urban design projects roof and vertical greening design, promoted by an annual improvement of 1% roof and vertical green design rate, control the roofs of buildings in this city quality and quantity of greening and vertical greening (balconies, terraces, flower stands, etc.), to achieve the goal of good residential quality and urban living environment.



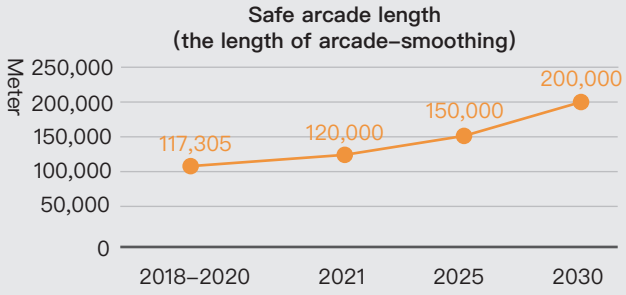

## 24. Promote the Livable Building

By encouraging developers to implement vertical greening and vertical facilities neighborhood, increasing the number of trees by three steps of point, line, and surface, turning the urban concrete jungle into a garden city, creating a new green environment in the city, creating a happy garden city and increasing the amount of accumulated carbon fixation.




## 25. To Assure Students' Safety on the Arcade and the Flat Surface of Arcade Plan

Open up the enclosed space of the arcade year by year, through communication and coordination to link community consensus and improving the traffic environment of arcades, solving the problems of the original arcade height difference and damaged pavement, and create a pedestrian space that "loves without hindrance".




## 26. The Project for Promoting Amiable Restrooms

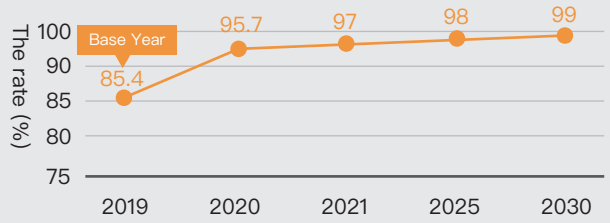
The city actively builds and renovates public toilets, 2019 to 2020 total completed the improvement of 137 public restrooms, after improving the rate of squat-toilet installments reaching the rate up to 2:3 from 2019 to 2020, the rate of well-designed public



▲ Sizhangli Park in Beitun District-Parent child toilets-Baby changing station-Children's washbasins and safety seats

restrooms will increase by 10.3%. In addition, through inspections and evaluation of high-quality public restrooms, supervising public restroom management units to implement independent cleaning and maintenance management, and gradually increase the proportion of premium-grade public restrooms in the city to 99% to meet the needs of different ethnic groups and age groups and create a safe and inclusive restroom space.

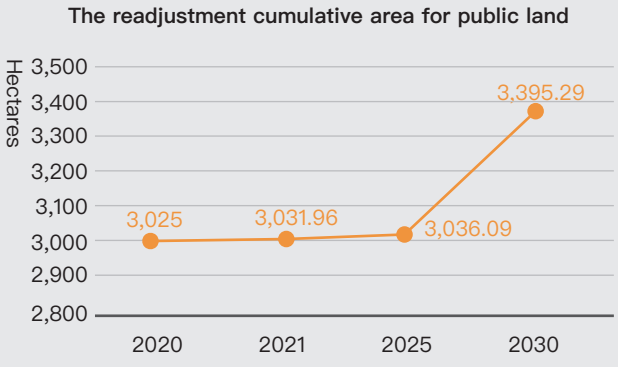
**The rate of well-designed public restroom**




## 27. Create Livable City and Land Readjustment in Taichung

Land readjustment is an important foundation for municipal construction, in the process of land exchange and division, through land allocation and construction, values such as "increased land value", "fairly affordable" and "complete urban development" are achieved. The vision of "land readjustment", introduces the concept of transparency into the rezone business to meet the needs.

**The readjustment cumulative area for public land**






▲ Taichung City South District-Nantun District phase 13 Daqing city urban land consolidation

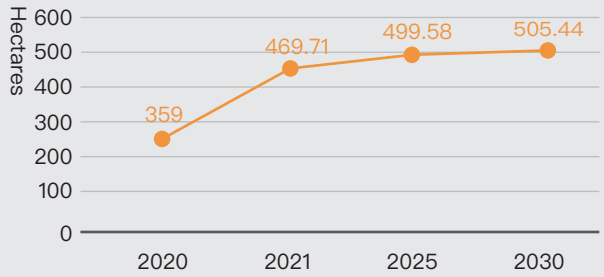
## 28. Expropriation for Regions and Rich Taichung City



▲ Aerial view of the Expropriated Zone of Taichung Sugar Factory

The "expropriation for regions" as the vision, strengthen communication and coordination when handling the plan, at the same time, eight resettlement projects are planned to properly resettle the original residents in the development zone to reduce development resistance and promote balanced development of the locality. In order to implement housing justice, Wuri Qianzhu and Wuri Jioude development projects are expected to provide 400 social housing to strengthen the positive connection between the urban and rural social and economic environments.

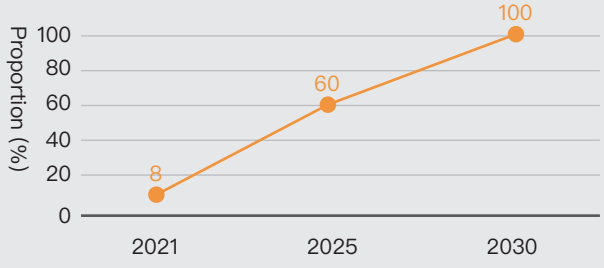
**The accumulative area of zone expropriation**




## 29. Re-measure the cadastral

Utilize the project for Taichung City outsources for re-measure and plan for executing the cadastral survey by early farmland readjustment (re-measure of numerical method) to accelerate the number of re-build cadastral maps, ensure the establishment of people's property rights through high-precision maps and avoid disputes for property right.

**The proportion of the cadastral of the number of the land**



# SDG 12 Responsible Consumption and Production

## Ensure sustainable consumption and production patterns

Taichung City promotes sustainable consumption and production patterns, we actively expand the area of organic farming, promoting waste reduction, resource recycling, reusing the bottom ash of the incineration and to attain the goal of the sustainable utilization and management.

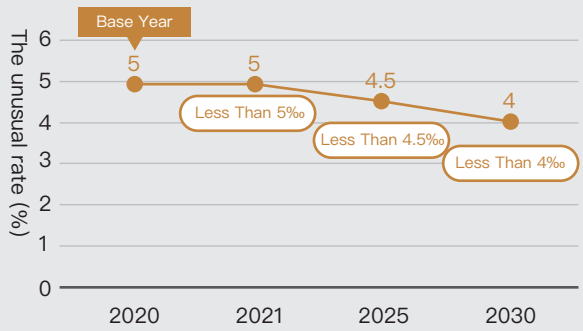
### Review SDG Targets of UN

- **Target 12.4** : By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
- **Target 12.5** : By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

### 1. The Project of Concerning about the Management of Toxic and Chemical Substances

In order to enhance toxic and concerned chemical substances operation about the safety management of the factory, preventing food supply chain from affecting chemical substances. Strengthen the management of toxic and chemical substances operation, controlling the record of manufacturers' operation from the source to reduce the unusual report rate as a goal and continue to strengthen the safety management of toxic and chemical substances.

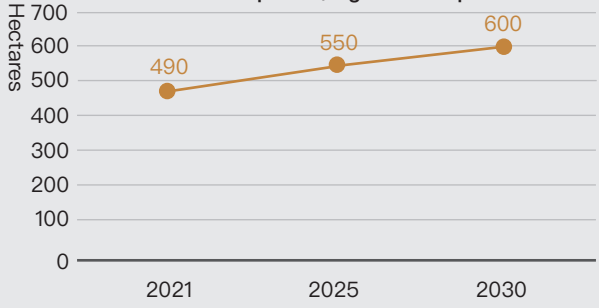
**The unusual rate of the flowing record of toxic and chemical substances operation**




### 2. Increase the Area of Organic Farming to 600 Hectares by 2030

In order to promote the development of organic agriculture in Taichung City, the government increases the subsidy for the verification fee of organic agricultural products, cooperating with the Council of Agriculture to handle organic agriculture promotion related plans to subsidize production, processing equipment and organic fertilizers, setting up the city's organic agriculture group cultivation area, handling Taichung City organic rice for campus lunch plan and organic food and educational farming activities, and promoting production and sales simultaneously to reduce farmers' production costs and stabilize marketing channels. As of August 2021, 365 hectares of organic certification was recognized. We will further plan and combine the organic promotion zone to provide guidance and reach the goal of covering 600 hectares by 2030.

**The verification area of organic (including transformation period) agricultural products**

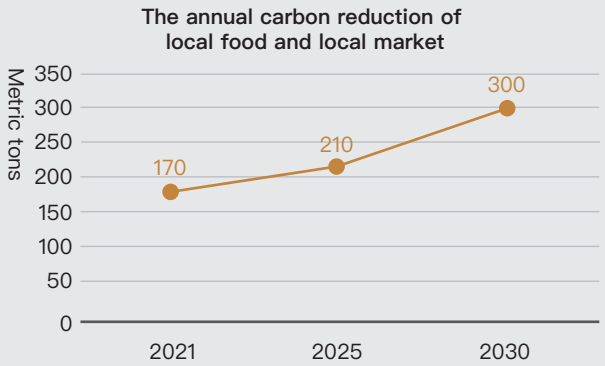


### 3. Local Production, Local Consumption – Local Farmers' Market




▲ Promote farmers' markets to reduce carbon emission

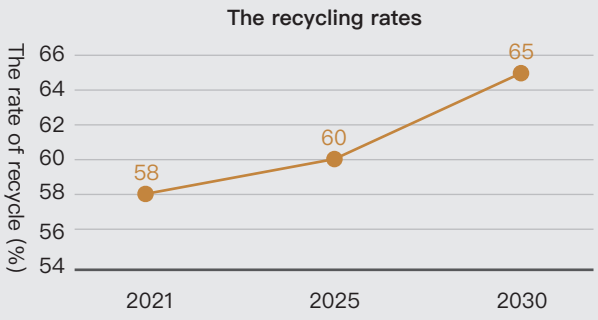
By organizing farmers' markets, promoting local production, local consumption, encouraging the concept of eating local production and food in season, reducing the transportation for the food and carbon emission to solve the problem of agricultural production and marketing adjustment for supply and demand. In addition, it also combines diversified marketing strategies to organize marketing activities for special agricultural products, increasing consumers' recognition and trust on local agricultural products, increasing farmers' income, and achieving energy-saving and carbon-reduction. As of 2020, we organized 350 farmer markets and local marketing exhibitions, which reduced 350 times for transportation and sales in the wholesale market and the total annual carbon reduction reached 219.45 metric tons. By the end of August 2021, 94 farmer markets and exhibitions were promoted, reducing carbon emissions approximately 59 metric tons. Nevertheless, we will continue to promote to reduce carbon emission.




### 4. Waste Reduction and Recycling

We actively promote waste reduction and recycling and the specific actions as shown below:

1. Set up resource recycling and categorization facilities and implement sort the waste and resource recycling in communities.
2. Promote the sorting and recycling for uncooked and cooked food waste.
3. Promote plastic reduction, cooperate with large-scale activities or sports events. Coach to rent or use repetitive cleaning tableware and reduce using disposable products.
4. Schools lead to ban disposable product expanding to enterprises and households.
5. Set up “second-hand bag recycling stations” and “reusable cup-bag recycling stations”.
6. Encourage the industry to research and develop recycling and treatment technologies, and unblock pipelines.





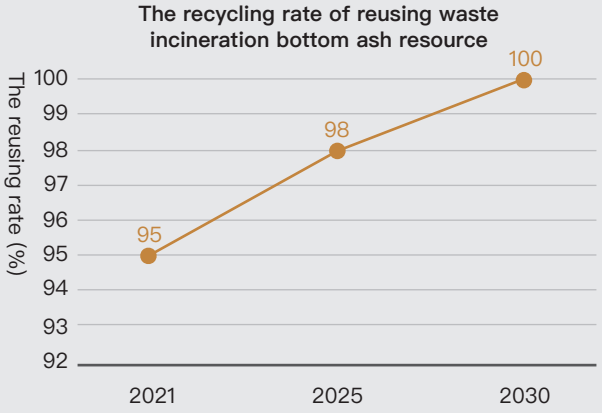


▲ Set up second-hand bag recycling stations in stores



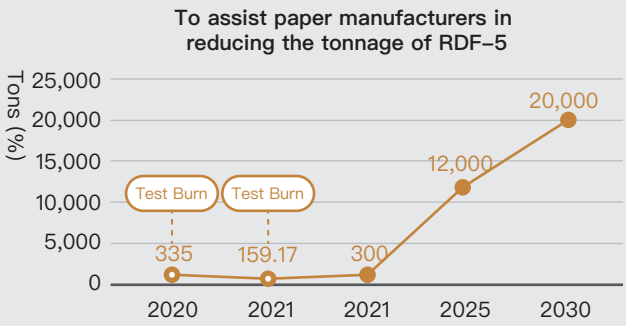
### 5. Reuse the Bottom Ash

Regulation made for "Taichung City Government Ordinance of the Resourced Products of the Bottom Ash of the Incineration" which requires at least 50% of incinerating recycled aggregates should be first used in the public offices and offices within the jurisdiction. After the bottom is reused and processed, matured, and passed inspection, it can be used as materials for soil-aggregate subbase, base and embankment filling, controlled low-strength materials, plain concrete additives, asphalt concrete and bricks additives. We expect that incineration bottom ash will be properly used in compliance with laws and regulations and the principle rather than endanger human health and the environment.




### 6. The Project for Pilot Scheme of RDF-5/SRF

To increase processes for dealing waste, setting up waste sorting and solid recovered fuel plants, the annual RDF-5 depletion reaches more than 300 tons, and coordinate with paper manufacturers to assist burn of refuse-derived fuel, confirm air pollution discharge complies with regulations and boiler operating conditions stable, and promote refuse-derived fuel to replace raw coal and establish a sustainable consumption and production model.






# SDG 13 Climate Action

## Take urgent action to combat climate change and its impacts

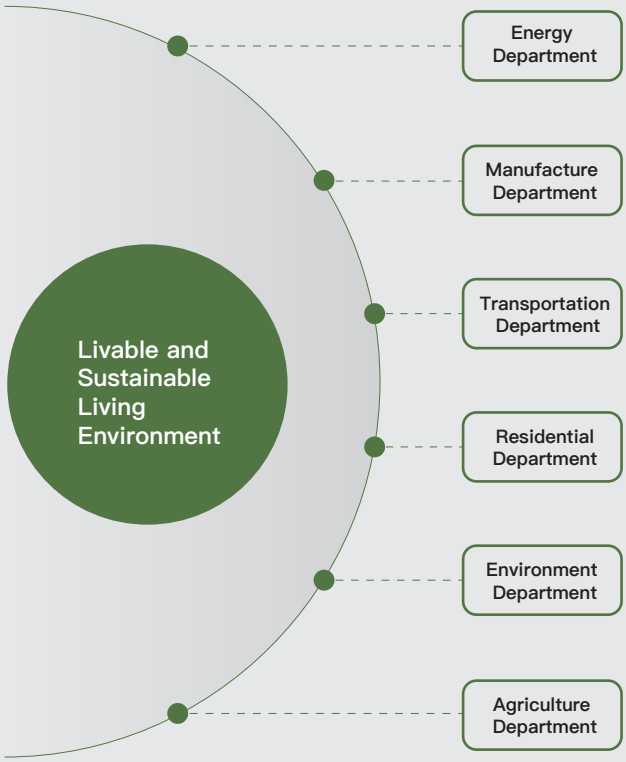
This city adopts climate change measures as its policy planning and proposes a greenhouse gas control implementation plan in response to the increasingly severe climate change. In addition, Taichung actively sets up environmental education sites and promotes ecological education to strengthen post-disaster resilience and adjustment capabilities in response to climate risks.

**Review SDG Targets of UN**

- **Target 13.2**：Integrate climate change measures into national policies, strategies, and planning.
- **Target 13.3**：Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

### 1. Adaptation Strategies in Accord with Climate Change

The city is committed to executing the promotion of low-carbon policies. "The Autonomous Regulations of Low-carbon City Development in Taichung City" was regulated in 2014 and 29 sub-laws have been promoted or planned, "Taichung City Greenhouse Gas Control Implementation Plan", sets 106 projects for 6 departments (as shown in the figure below) in response to international initiatives signed by the city on January 18, 2021. "Climate Emergency Declaration", proposing a sustainable 168 goal strategy which presents the city is marching ahead the determination to develop a sustainable low-carbon city, and plan to move towards a coal-free city by 2023, reducing greenhouse gas emissions by 30% by 2030, 2050 towards the goal of net-zero carbon emissions.




**Optoelectronic Equipment Multiplying and Giving Back to the Public Welfare**

Promote the installation of optoelectronic equipment in divisions of the companies to achieve the goal of quadrupling the capacity of optoelectronic devices and promote the green energy for charity.

**Blue Sky and White Clouds, Coal-Free Taichung**

Counseling the city's industrial boiler fuel substitution and converting all coal-fired boilers to low-pollution or circular economy.

**Smart Transportation Accessible Transfer**

Combining buses with high-speed rail, Taiwan railway, MRT, i-Bike, car, and motorcycle parking lot, to form a free transfer to any gate, and provide an intelligent transportation system to improve the city's air quality.

**Residential Energy Saving and Intelligent Management**

Promote subsidies for electricity-saving equipment in the residential and commercial sector, and build the city's micro-grid demonstration sites and the new municipal government, encourage all buildings as the city's smart energy-saving center.

**Resource Sustainability and Recycling**

Recycle and reuse resources such as bottom ash, green materials, furniture, kitchen waste, sewage, etc., and implement the recycling economy and sustainable environment.

**Tree Planting and Greening, Ecological Conservation**

Promote afforestation, friendly operation, existing ecology, and green space conservation, and green areas, etc., to increase the amount of carbon sequestration in the city.




▲ Mayor Lu signs the climate emergency declaration witnessed by Greenpeace

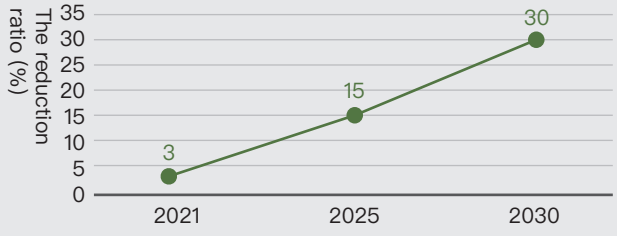
Climate change exacerbates drought, rainfall, and urban intensity of heat island effect; Mayor Lu proposes three goals after assuming the office, “Action, The Public Before The Private”, Optoelectronic Equipment Multiplying and Public Welfare Feedback, “Hydrophilic to Prevent Flood, Resiliently Cool Down The Temperature”, in response to “Ventilation”, “Greening”, “Blue” to adopt the strategy to focus on reducing the impact of a heat island effect, and strengthen the city's response to floods resilience to harm.

**Ventilation Strategy**
- Simulation of the potential ventilation
- Protect the existing ventilation
- Simulation test of ventilation for urban specific development project

**Greening Strategy**
- Build a microclimate map of the city to green and cool hotspots
- Public and private efforts for creating greening

**Blue Strategy**
- Urban water environment improvement
- Drainage infrastructure with water retention and flood detention functions
- Water resource recycling center, wastewater effluent reuse

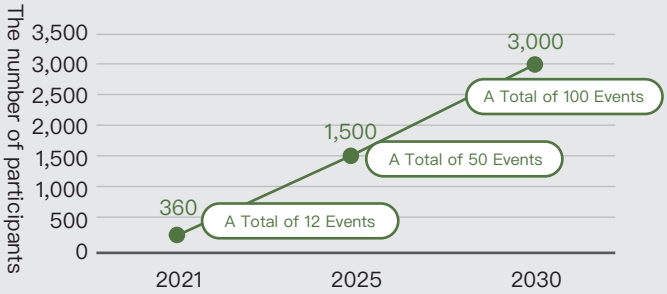
**The reduction ratio of greenhouse gas emission**




## 2. Set up Environmental Education Facilities to Promote Water-using Concept

The city has built environmental education facilities of Shigang Reservoir Water Resources Recovery Center, Green Waterway (Midorigawa) Luchuan Canal, Fazi River, and Donda River Water Culture and Environmental Education Center; from February 1, 2019, to April 2021, 18 participations in water resources environmental education reached, 904 people dedicate to seeking the common good, and sustainable spirit, we are committed to establishing water culture, emphasizing implementation, games, guided tours, and outdoor observation which help the public know more about the water environment of the city while caring for water resources.

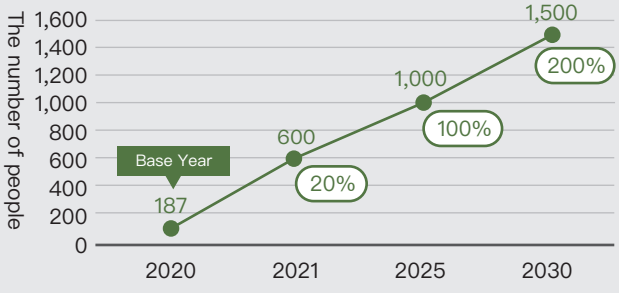
**The number of participants for the workshop of water resources and environmental education**




## 3. Promote the Training for Volunteers Work on Preventing Natural Disasters

Disaster prevention workers aim for the people to be able to help themselves and help each other, promoting disaster prevention and publicize community disaster prevention in peacetime; self-help and mutual assistance during the period and after disasters, and assist the community shelter and reconstruction work. In 2020, 187 people accepted the trainings to improve the autonomous disaster prevention capabilities of communities and people.

**The proportion of the training for members working for preventing natural disasters**




## Urban Renewal Award for Building Wind Corridor for the City

The first among the six municipals to introduce the concept of wind corridor of city to offer 2%–5% volume reward for the city update, the reward project was presented and implemented on November 3, 2020, with more diversified volume rewards, boost people's applications the urban renewal incentives accelerate the promotion of urban renewal.

# SDG 14 Life below Water

## Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

In the part of marine ecological protection, the city actively promotes the reduction of marine pollution and the recycling of discarded fishing nets and other wastes. Furthermore, it strengthens the maritime investigation of illegal fishery activities to maintain the ecology and sustainable development of the ocean and coast.

### Review SDG Targets of UN

- **Target 14.1**：By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

### 1. Reduce Marine Pollution and Recycle Discarded Fishing Nets and Waste/Strengthen the Investigation of Illegal Fisheries on the Ocean

To effectively reduce discarded fishing nets and waste in the ocean, in 2021, assist fishers to record the real-name registration of their nets and discard damaged nets and life bring things back to shore for concentration, recycling of discarded fishing nets. As to August 10, 2021, metric tons and 56 metric tons of waste was retrieved, to alleviate the marine environment the pressure of pollution, by banning illegal fisheries reasonable and sustainable utilization of ocean fishery resources.

**The number of discarded fishing nets and waste collection and the number of illegal searches at sea each month**

| The number of discarded fishing nets and waste collection and the number of illegal searches at sea each month |
|---|
| **Short-Term Goals**<br>Average annual recycling of marine waste<br>▶ More than 100 metric tons |
| **Medium-Term Goals**<br>Joint maritime investigation<br>▶ 12 times a year on average |
| **Long-Term Goals**<br>Joint maritime investigation<br>▶ More than once a month |



▲ Promote the recycling of waste nets and rewards

# SDG 15 Life on Land

## Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

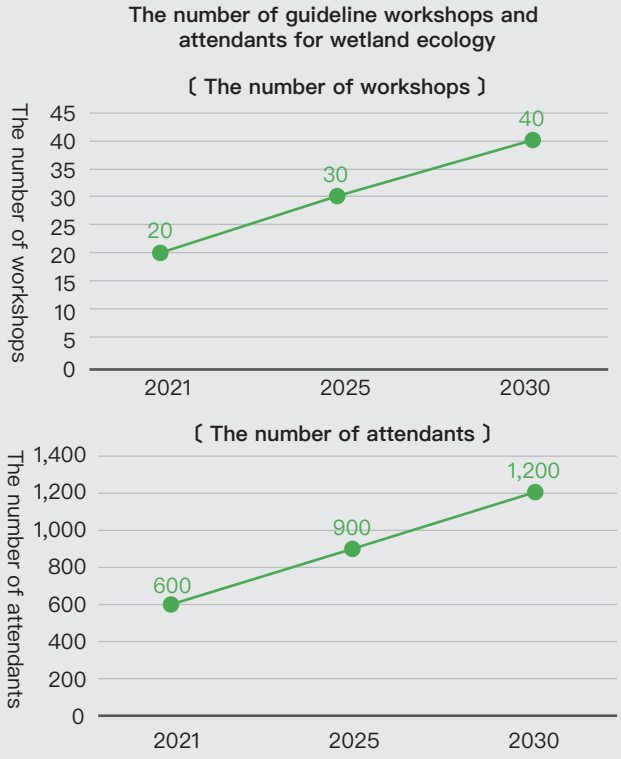
To protect and preserve the terrestrial ecology, the city retains the terrestrial ecology by wetland maintenance, wildlife protection, and afforestation to curb the loss of biodiversity.

### Review SDG Targets of UN

- **Target 15.1**：By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.
- **Target 15.5**：Take urgent and significant action to reduce the degradation of natural habitats, halting the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

### 1. Ecological Education for Wetlands and Wildlife Reserves

Gaomei Wildlife Sanctuary owns abundant natural resources, including the rare Bolboschoenus planiculmis; the local bird record is as high as 190 species are essential food supplies for migratory birds migrating south and north in the group's station and hibernating. To protect the precious wetlands, the public ecological education promotes the biodiversity to create the environmental protection education concept.




- **Gaomei biodiversity ecological experience activity**

8 events and 12 events were organized in 2019 and 2020 separately; each opened for 45 participants, featuring plants, birds, and crabs, and learned about the biodiversity by the journey of Gaomei Wetland.

- **Educational promotion on the removal of the alien invasive plants**

Organized seven indoor events and four outdoor events in 2018; a total of eleven events for 513 participants.
Six indoor and four outdoor events were organized in 2019; a total of ten events for 525 participants.
Three indoor and three outdoor events were organized in 2020; a total of six events for 327 participants.
In 2021, due to the pandemic, we adopt fewer participants while organizing more events so as not to have gatherings. The prompt management is used to guide the visitors on-site, up to 20 people will be provided with a guide and commentary to enhance tourists' understanding of the ecology of the protected area, which is expected approximately 500 participants for 25 events.



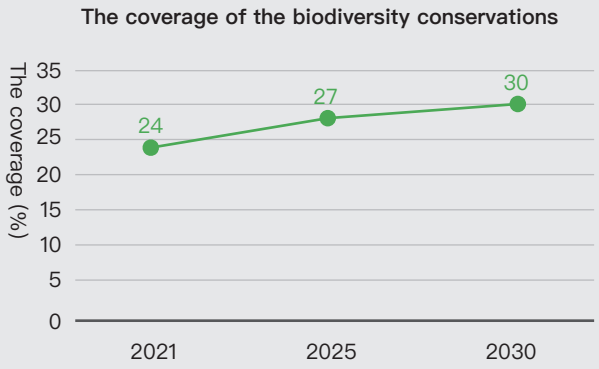
▲ Gaomei Wetland ecological guide





## 2. Ecological Conservation and Expansion of Biodiversity

The city's biodiversity reserve coverage rate in 2021 reaches 24%, promoting the expansion of ecological conservation and biodiversity areas, strictly reviewing various developments in wildlife reserves or wetlands at all levels cases to reduce the development forfeit.




### A Proposal for the Protection for Leopard Cats

The city actively promotes land ecological conservation and will continue to require Taiwan Leopard Cat Conservation Association to conduct the “Annual Taichung Area Leopard Cat Clan Ecological Research and Conservation Education Promotion Project”, which covers the new community's leopard cat habitat and range of activities surveyed, organizing 30 public educational sessions for elementary and middle schools. Meanwhile, “Taichung City's Endangered Species and Important Habitat Ecological Service Payments Launched Plan in 2021” promotes the payment of friendly farmland ecological services for leopard cats and encourages the community to participate in habitat maintenance rewards and the report for leopard cat invading, providing the compensation and encouragement of creating friendly ecological environment that peacefully to coexist with wild animals, and executing “Taichung City Leopard Cat Conservation Autonomous Ordinance” engraved with “Taichung City Leopard Cat Measures for the Establishment of the Conservation Committee (Draft)”. We will review the leopard cat conservation plan and hot spots for leopard cats hot to install the consultation and other executions.

# SDG 16 Peace, Justice and Strong Institutions

## Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels

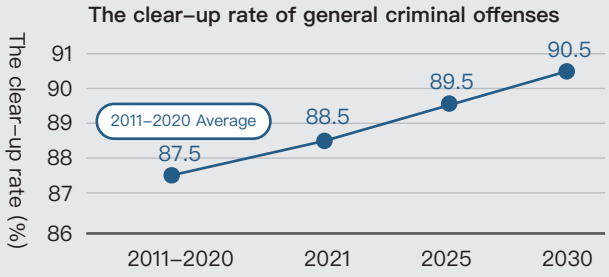
Taichung City adopts scientific and technological law enforcement mechanisms and establishes a fair and open society under the rule of the law to create an efficient, peaceful, and inclusive society.

### Review SDG Targets of UN

- **Target 16.1** : Significantly reduce all forms of violence and related death rates everywhere.
- **Target 16.2** : End abuse, exploitation, trafficking and all forms of violence against and torture of children.
- **Target 16.6** : Develop effective, accountable and transparent institutions at all levels.
- **Target 16.7** : Ensure responsive, inclusive, participatory and representative decision-making at all levels.

### 1. Strengthen the Capacity of Crime Detection and Prevention, and Increase the Detection Rate of Criminal Cases

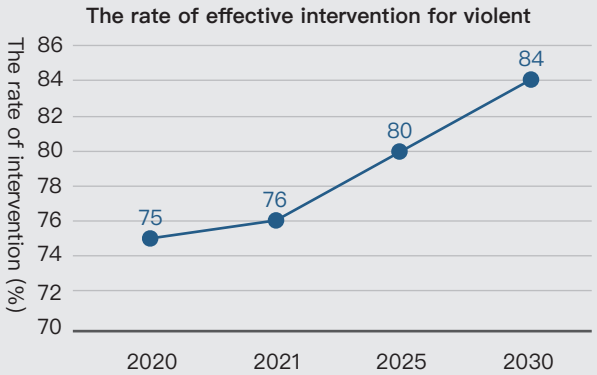
Police Department establishes "Fusion Integration Platform in Crime Investigation" to strengthen the capacity of crime detection and prevention, promoting the clear-up rate of general criminal offenses of total crime, combining with intersection monitor and license plate recognition system to collect evidence to solve the case when crimes occur and helps to greatly reduce the death rate of various forms of violence and related incidents.




※The goal is to increase the clear-up rate of general criminal offenses by 1% in the past ten years

### 2. To End Child Abuse, Provide Services on the Internet

By means of 2019 new version of the structured assessment tool of the Ministry of Health and Welfare, we enhance the quality of placement of the social workers and assist the family for service to improve the protective factor, strengthening the network cooperation mechanism to integrate services effectively. In response to cases with a high risk of crisis, the intensive treatment mode has increased the frequency of visit to at least 4 times a month to ensure the safety of children in the family and prevent child abuse cases recurring, it can contribute to end abuse, exploitation, trafficking and all forms of violence against and torture of children.

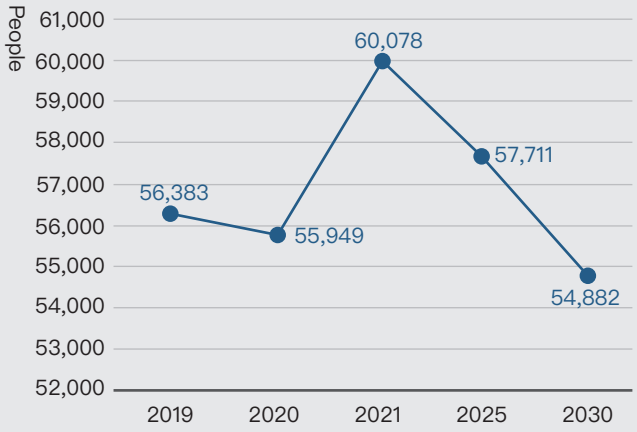



### 3. Use Smart Analysis to Improve Traffic Law Enforcement Effectiveness

Start with traffic law enforcement, publicity, and engineering improvement, and implement services such as traffic junction safety law enforcement, adopting smart technology analysis to establish (1) "Technology Enforcement Monitoring Center", (2) "Equipment of average speed enforcement", (3) "Multifunction violations detect systems", (4) "Equipment of parking violation technology enforcement" and (5) "Auto Detect

System for Large Cars Violating to Transit the Grooved Like" to improve the effectiveness of law enforcement. Deter traffic violations by 24-hour non-stop violation detection, establish the concept for obeying the law, maintain the passage space and traffic for various automobiles (motorcycles) and bicycles riders, and pedestrians to promote a peaceful and inclusive society.

**The number of casualties caused by traffic accidents**




※Calculation based on the average number of deaths and injuries of 61,917 from 2016 to 2018, and the annual basis goal declines 1%

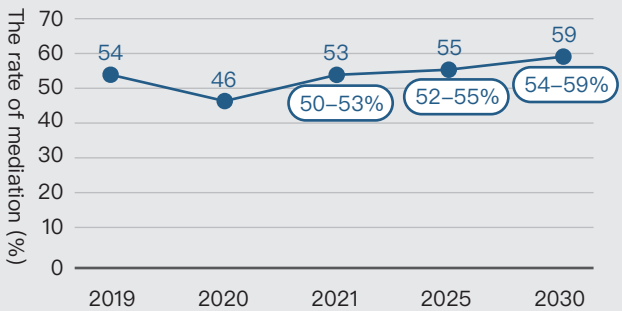


▲ Technology law enforcement system for illegal parking in bus parking areas

## 4. Enhance the Alternative Dispute Resolution

The alternative dispute resolution is conducted independently and self-determinedly by the parties and agreed by both parties to jointly resolve disputes and the system of mediation for consumption dispute cases is one of them. The mediation process is relatively non-contentious, and the parties have to resolve disputes independently. In addition, saving the time and cost of dispute resolution are not only the better ways to resolve disputes, but also help to establish an effective, responsible and inclusive system.

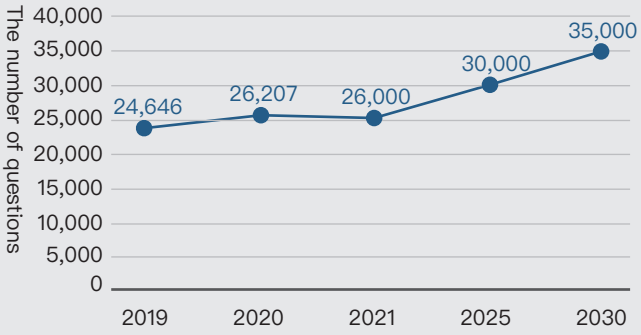
**The rate of mediating for consumption dispute case**




## 5. The "AI Customer Service" Providing Service all Year Round

Provide the service for citizens on the website of the local Tax Bureau of Taichung City Government (Web), or through the communication app LINE@ (ID: @taichungtax) inquire about various tax issues such as house tax, land value tax, vehicle license tax, land value increment tax, deed tax, amusement tax, stamp tax. AI Customer Service customer service provides 24-hour question-and-answer convenient consultation function all year round. From 2019 to 2020, the number of questions inquired by citizens increased 6.33%, which implements non-discriminatory tax laws and tax systems. Effective measures have also affirmed by the central government and we assist to establish a nationwide local tax artificial intelligence customer service instantly.

**The number of people raising questions via smart customer service**




## Alternative Dispute Resolution

Taichung City is committed to building a peaceful and inclusive society, to promote the alternative dispute resolution (for example "mediation", "complaint about procurement", "state compensation") and consumer dispute mediation case. Statistics of consumer dispute mediation cases in Taichung, 459 in 2019 and 452 in 2020 respectively. We will continue to improve the mediation rate to establish a fair and efficient judicial system.

# SDG 17 Partnerships for the Goals

## Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

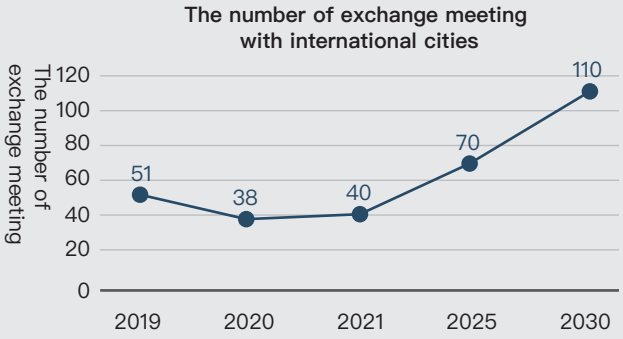
Taichung City actively joins international organizations and develops urban diplomacy, and strengthens global partnerships by international cooperation and sustainable partner volunteer services.

**Review SDG Targets of UN**

- **Target 17.16**：Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.

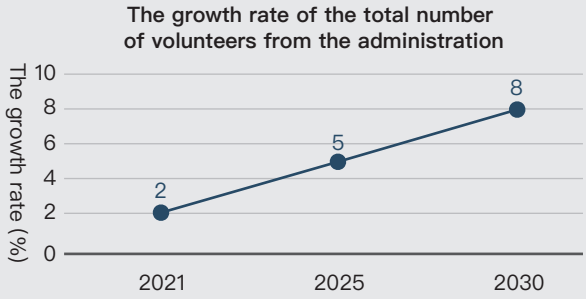
### 1. The Project of Working with International Partnership for Sustainable

The city integrates municipal resources and combines the power of enterprises, civil organizations, and expatriates such as the interchange of sister city and foreign guests' reception and deepen alliances and cooperation with international cities, and participating in the exchange platform of international organizations, actively boosting international exchanges, sharing relevant municipal experience, and promoting cooperative partnerships. “2020 Taiwan Lantern Festival in Taichung” and “The 4th International Award UCLG-Mexico City-Culture 21”, selected by the jury as the best case sharing in compliance with SDG 11, 12, 15, 17. In addition, we exchange and share the municipal experience through the video due to the pandemic and implement the sustainable development goals of multilateral cooperation. In September 2021, participate in “2021 Asia-Pacific City Summit” held in Brisbane, Australia. Delivering a keynote speech to share Taichung City's achievements of promoting sustainable and livable cities.




### 2. The Project of Voluntary Service

The city actively promotes voluntary services of four major ideas to integrate Happiness, Opportunity, Participation and Enthusiasm to formulate a volunteer service vision【HOPE 125】, advocating that every citizen is a volunteer, and every volunteer can provide 5 times the output value of civil society by engaging in 2 hours of service per month. The government continues to guide and trigger roles, encourage more citizens to participate in voluntary service, and promote social participation.




※Calculated based on the total number of volunteers of 124,739 in 2020

### Join the International Climate Organization, Declared to Reduce Carbon

Taichung City actively joins the International Climate Organization which include “Local Governments for Sustainability, ICLEI”, “Global Covenant of Mayors for Climate & Energy, GCoM”, “Powering Past Coal Alliance” and “Carbon Disclosure Project, CDP” and other organizations. Among them, we were awarded the highest (Grade A) performance in Carbon Disclosure Project appraisal for three consecutive years (2018 to 2020). In response to the international climate emergency, we sign a climate emergency declaration with the Greenpeace Foundation to declare the world that our determination to reduce carbon emissions.

### Promote International Non-governmental Organizations and Establish National Partnerships

Taichung City also actively promotes the International Non-Governmental Organization Center (INGO CENTER IN TAIWAN), through the exchange and training with domestic and foreign NGOs, attracting non-governmental organizations in the fields of democracy and human rights, disaster humanitarian relief, sustainable development, public health care and social welfare to set in Taichung. Taichung becomes an important settlement for NGO workers in the Asia-Pacific region to establish a long-term and stable global partnership.

# Ⅷ. Taichung City Case Studies



▲ Central Park and Ketan Aegean Bridge

In Response To SDGs




## 1. Sustainable, Smart, Low-carbon Demonstration Zone-ShuinanTrade and Economic Park (S.T.E.P)

In the recent years, with the rise of global sustainable development trends, countries and cities have successively incorporated SDGs into the direction of government development expecting sustainable development strategies and urban resilience. We strengthen ability to achieve the goals of social progress, economic development, and environmental protection.

In central Taiwan, “Shuinan Trade and Economic Park” has been listed by the Executive Yuan the forward-looking construction with the low-carbon as the infrastructure. Taichung is actively promoting and aiming to become the country's first comprehensive low-carbon demonstration zone as the city benchmark.

Shuinan Trade and Economic Park uses “smart, low-carbon, and innovation” as its development vision, creating the “Principles for Ecological Environment”. As a result, it has obtained the Intelligent Building Candidate Certificate and passed the competent building grading assessment meeting the expectation of “Energy Conservation Management Index” to install the Building Energy Management System (BEMS).

In addition, according to the main points of land use districts which implement the carbon disclosure inspection certification for internal buildings and promoting “Taichung City Shuinan Trade and Economic Park Networking Equipment and Information Integration Plan”, building an intelligent/connected equipment and information application management platform Taiwan to integrate diversified information.

Shuinan Trade and Economic Park integrates the management concept and mode of “life, production, and ecology” which means “Three Clean Lives” to promote “SDG 6: Clean Water and Sanitation”, “SDG 7: Affordable and Clean Energy”, “SDG 8: Decent Work and Economic Growth”, “SDG 9: Industry, Innovation, and Infrastructure”, “SDG 11: Sustainable City and Communities”, making Taichung march into a sustainable international city.



### Five Major Plannings for Shuinan Trade and Economic Park

**Trade and Economic Park**

The combination of international conventions and exhibitions, business district shopping, and public transportation.

**Eco-Community**

High-quality residential, implementing the ecological concept of the community, creating a new life model to aim at people-oriented, comfortable, healthy, and sustainable development.

**Cultural and Commercial District**

Boulevard and boutique shopping malls, cultural and creative facilities station in.

**Academic Corridor**

Research and innovation institutions, personnel training centers, international academic exchanges.

**Cultural and Educational Zone**

University town and upgrade academic environment.

## The Characteristics of Sustainable Development of Shuinan Trade and Economic Park

### Central Park

The Central Park in the Shuinan Trade and Economic Park covers an area of 67.34 km. It is the first large-scale urban ecological park in the country; it is the park with the largest solar panel area in the country as well. The size of photovoltaic energy panel reaches 10,000 square meters, and the annual power generation capacity is approximately 1.88 million kWh for self-using and generating electricity, implementing sustainable energy concept. The park is also equipped with 12-sensory locally-like amusement equipment, building five flood detention ponds in a circular shape with the functions of temporary rainwater storage and flood control. Four of the ponds are designed as wetlands by using dry way. As the public space, rainwater can be filtered and penetrate the ground during the flood season, the lower water layer is able to reach the water retention and flood dredging, constructing Taichung to move towards as "The Sponge City".

### Taichung International Convention and Exhibition Center

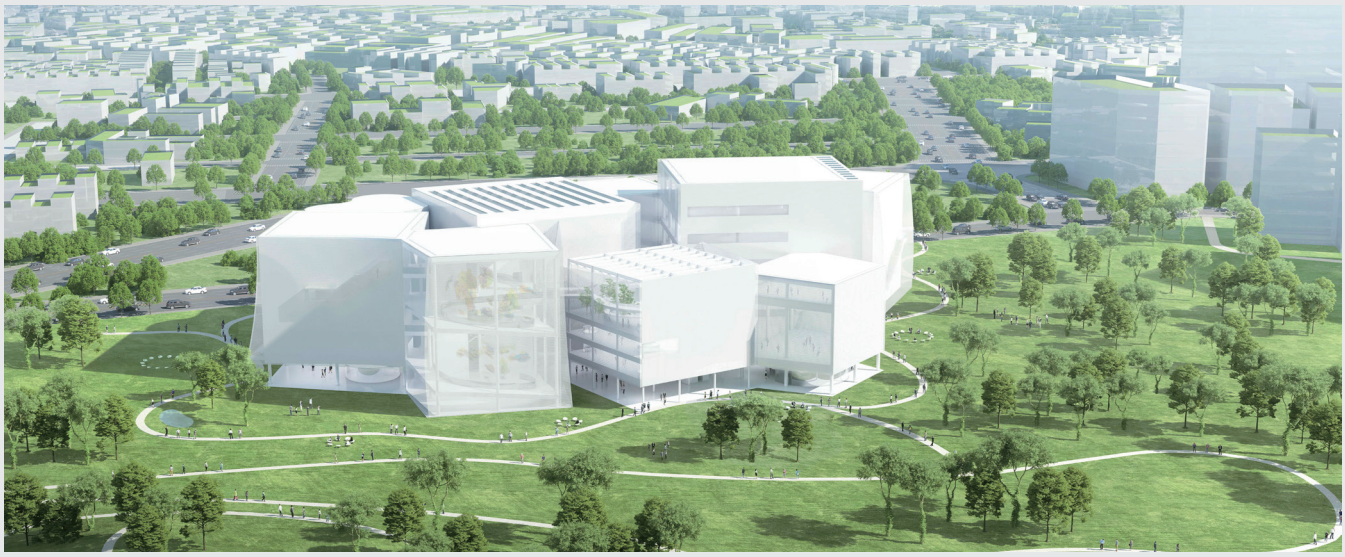
Taichung International Convention and Exhibition Center are located on the north side of the Shuinan Trade and Economic Park, combining with forward-looking, international, creative, intelligent, and sustainable professional exhibition facilities, and industrial exchange portal, which aim on "economic and trade development" as the spindle, and making "Convention and Exhibition Industry" as the primary industry, The convention and exhibition center focuses on the concept of green buildings which awarded eight gold medals. The building supplies an intelligent exhibition logistics platform, performance, living consumption, and large-scale conferences which can boost the city's economic development and so that it will lay the cornerstone for Taichung to connect with global partners.



▲ Taichung International Convention and Exhibition Center

### Shuinan Water Resources Recycling Center

Shuinan Trade and Economic Park plans to build a Water Recycling Center, through "Water Reclamation Network System", which focus on clean water quality for reclaimed water chemical technology and complete water reclamation network system, the review of the building license, and complete planning for regulatory requirements. The center sets up and layouts a 3.5-kilometer water pipeline to Taichung Science and Technology Park-Taichung Park through the reclaimed water plant. The effluent from Shuinan Water Recycling Center can be transported to the reclaimed water plant, estimating 10,000 tons of regenerated water to be produced daily for use in Taichung Science and Technology Park-Taichung Park.



▲ Taichung Green Museumbrary Mimic Diagram

## Taichung Green Museumbrary

Taichung Green Museumbrary is located in Taichung Central Park; it is the first art gallery and library co-constructed building in the country, described as the library in a park, an art gallery in a forest which will become Taichung's brightest landmark in the future. Taichung Green Museumbrary also pioneers using seismic isolation systems that effectively protects collections and provides people with reading safety, and by water recycling and building rainwater utilization equipment to achieve the goal of water-saving.



▲ Taichung Green Museumbrary – Simulation of the Height of the Gallery Hall

## Taiwan Intelligence Operation Tower (T.I.O.T)

Taichung plans to build a "Taiwan Intelligence Operation Tower" with landmark and intelligent operation content. Hoping to build landmark buildings in Taichung City to create tourism benefits by combining innovative industries and digital technologies.



▲ Taiwan Intelligence Operation Tower Mimic Diagram

## Proof of Concept and Service

Through proof-of-concept service programs, combining with the creativity of private enterprises and localization requirement "intelligent security", "intelligent living", "intelligent economy", "intelligent transportation", using technology to stimulate new ventures and derivative industry economy. At the same time, it provides companies with commercial opportunities.



In Response to SDGs




## 2. Anti-COVID-19 Prevention Measures and Sustainable Development Actions

This year (2021), the city is facing a severe impact from the pandemic (aka COVID-19), it's a serious impact on society, economy, and environment.

Therefore, a specific discussion is organized for the pandemic prevention and bail-out plans.

According to the survey conducted by the Ministry of Health and Welfare from November 2019, the pandemic has spread to more than 120 countries and regions around the world, statistics showed till September 8, 2021. The accumulative number of confirmed cases in Taiwan reached 16,056 and the accumulative number of deaths reached 837. The accumulative number of confirmed cases in this city has reached 207. The outbreak of COVID-19 has brought unprecedented impact on society, economy and environment to the city. Scrutinizing the main affection of SDGs affected includes: "SDG 1: No Poverty", "SDG 3: Good Health and Well-being", "SDG 4: Quality Education", "SDG 8: Decent Work and Economic Growth".

### SDGs Affected by COVID-19 in Taichung City



COVID-19 has affected people's livelihoods, leading to a sharp decline in income and families falling into poverty.



People are at risk of being infected by the pandemic or falling into virus infections, and their health is seriously affected.



COVID-19 has caused schools to shut down, affecting students' learning right .



COVID-19 has affected economic activity, causing wage losses and the impact on employment.

Confronting the challenges ahead, Taichung City Government takes advanced deployment and cross-domain cooperation as the basic policy of pandemic prevention and implementing "Monitor pandemic and instant response", "Community pandemic prevention, medical preparation", "Provide various resources and bail-out plans", "Apply technology, life without hinders", "Care services, fight with the pandemic together", "Quality transportation, comprehensive pandemic prevention" adopting these six anti-pandemic policies as the main axis. In addition, our teams integrate cross-office pandemic prevention principles and lessen the impact on society, economy, and environment which has led Taichung to march ahead a sustainable city and made a crisis into a turn.

## Monitor Pandemic and Instant Response

Taichung City regularly monitors the international update news of the pandemic and the latest research, grasping the confirmed cases, locally acquired, and imported cases, continuing to work closely with the central government and adjusting various pandemic prevention measures and strategies along with rolling adjustments based on the pandemic situation, eliminating any possible gaps on the pandemic prevention. Conferences of the pandemic prevention through multi-channels organized by the central and inter-bureaus, the latest pandemic prevention information will be provided immediately; and extraordinary meetings and the advanced deployment will be organized at any time depending on the situation to prevent the spread of the pandemic. On May 15, 2021, Taichung City Government preliminarily rehearsed a simulation for the level 3 alert and summoned the first-level supervisors of the municipal government, representatives of the pandemic prevention center, military, and civil defense units, dividing into 3 stages, 17 topics for drilling. By responding to future pandemic prevention work in advance, Taichung will have more preparations for the prevention and the pandemic to soothe our citizens.

## Community Pandemic Prevention, Medical Preparation

Cooperating with the various pandemic prevention policies of the Central Pandemic Command Center, we implement to track and the manage risky cases to maintain community safety.

### Medical Preparation

According to statistics, as of September 2021, there were 25 designated inspection hospitals in Taichung which could provide about 8,000 nucleic acid tests per day, and 19 designated hospitals have 234 intensive-care beds, 27 ICUs and 69 negative pressure isolation wards, adjusting the number of isolation beds based on the pandemic situation.

### Command Post

From the beginning of May 2021 in high-risk infection areas such as Li-shan Ping Deng Elementary School, Chaoyang University of Technology, Tai'an affiliated childhood, Dakengli in Beitun District, Shijiawang Market and Meilidian Community. In the shortest period of time, the risk targets were targeted for rapid screening of the forward command post. 12 screening stations were opened in total, 7,066 people were screened, and 32 confirmed cases were proactively discovered successfully preventing the risk of cluster infections in the community.

### Rapid Test

In response to the pandemic occurred locally, Taichung has successively set up community screening stations since May 19, 2021, providing free services for residents/employers/students of the city who contact with the confirmed or overlapping cases at the same time. As of September 9, 2021, 49,730 people had been screened.

### The First Vaccination Station Established in Taiwan, to Elevate Vaccine Coverage

In order to quickly provide people with COVID-19 vaccination, the first vaccination station facilitates the elderly to receive COVID-19 vaccine shot and enhance their protection. From June 15 to August 6, 2021, a total of 31-day vaccination stations opened for 499,466 citizens.

To increase the coverage of the city's vaccine population and reduce the incidence of severe COVID-19. Starting from June 15, 2021, 67 vaccination stations opened in 29 districts of the city to speed up the city's COVID-19 vaccination rate. In addition, in copign with schools begin, the government has also launched 2.0 plan for the vaccination stations in which 45 suitable places to continue serving the citizens. As of August 12, 2021, the city supplied the first dose for 10,164 people, which officially exceeded one-million.

The vaccination coverage rate for citizens over 18 has reached 42.63%, and the city's population coverage rate has reached 35.46%.

### Preparation of Epidemic Prevention Materials

In response to the current situation of the epidemic, regular preparations of pandemic prevention materials, including N95, general medical masks, surgical masks, full-body protective clothing, general isolation gowns, maintaining the safety stock for epidemic prevention materials.

### Promoting Rotatory Market




### New Life Movement for Families for Pandemic Prevention




## Provide Resources, Bail-out Plans

### 10 Economic Relief Packages



### Bail-out Plans for Laborers

Taichung City promotes the instant employment plan, approving the work allowance, maintaining the willingness to work, and reducing the impact of salary reduction on life. In addition, the government widely assistances laborers' life affected by the pandemic and opens more job vacancies, appealing for the central government to increase the employment opportunities to stabilize the employment and labors' basic economic requirements during the epidemic.

## Apply Technology, Life Without Hinders

### "Taichung City Pandemic Prevention Zone" Website Established

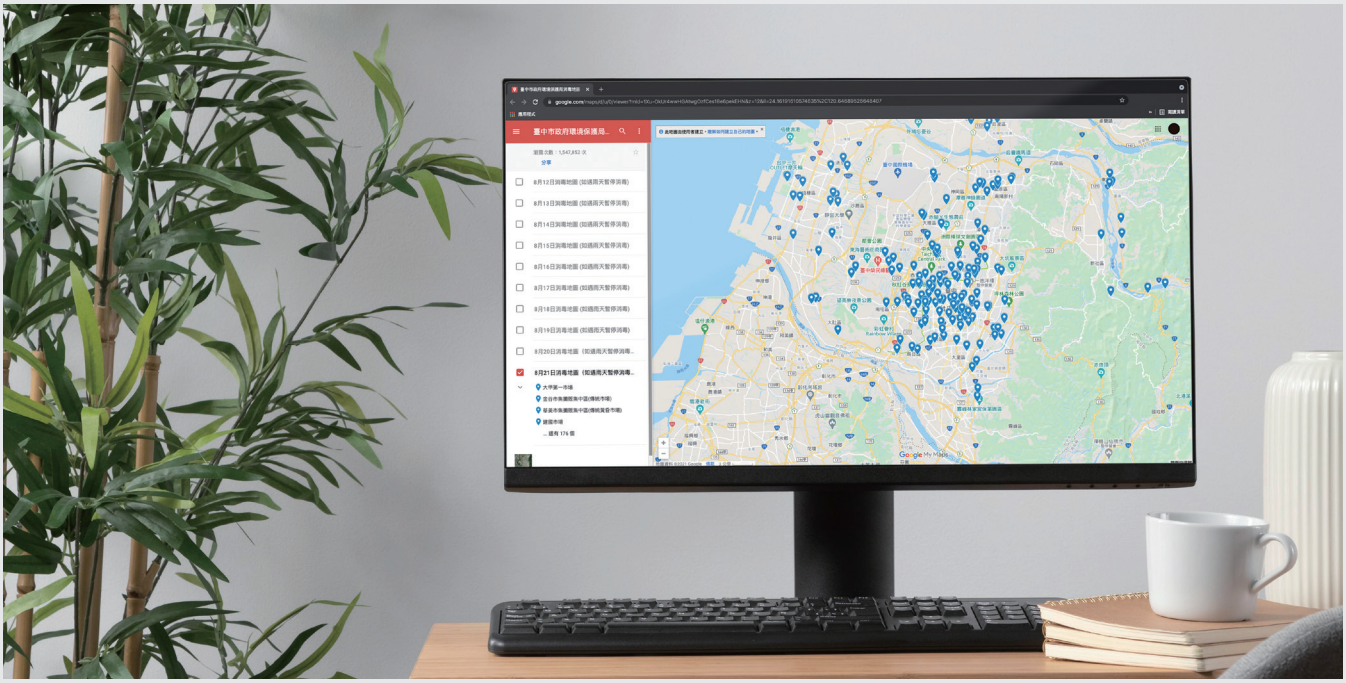
Taichung City has also established the "Taichung City Pandemic Prevention Zone" website to integrate various pandemic prevention information and measures between the Central Government and the city, such as: "Bailout Zone", "Footprint Confirmed Map", "Boosting Economy Project", "Vaccine Appointment Platform" and other related contents to help the citizens quickly obtain various pandemic prevention information.

### Taichung Confirmed Footprint Map

The Geographic Information System Research Center (GIS Center) of Feng Chia University cooperates with Taichung City Government to develop the "Taichung Confirmed Footprint Map", which can integrate the confirmed footprint information so that citizens can check the destinations for the pandemic prevention.

### The First "Environmental Protection Bureau Disinfection Map" in the Country

In response to the pandemic, the Environmental Protection Bureau sets up an epidemic prevention disinfection team, we conduct to disinfect crowded areas to reduce the risk of infection. Taichung is the first city, creating the "Disinfection Map of Environmental Protection Bureau" marking the places disinfected beforehand, and providing the information for citizens.



▲ The first "Environmental Protection Bureau Disinfection Map" in the country

### Students Online Learning and Learning Never Stops

In response to the pandemic, teachers' trainings, and students' study by E-learning. Holding online video teaching drills simultaneously of the whole city. Build "Taichung City online teaching resources center", integrated learning videos and supplementary materials for all subjects and versions. In addition, we prepare mobile vehicles and mobile network cards for free-lending for disadvantaged students to avoid the interruption of studies caused by the pandemic.

## Care Services, Fight with the Pandemic Together

### Vaccination at Home

In order to enable the disabled and bedridden people in this city to develop protection against COVID-19 as soon as possible, the "home vaccination" service was launched on June 18, 2021, the medical association and clinic associations arranged doctors to the home for the disabled over 18 years of age 7- Level 8 people have given the vaccine. As of August 2021, 93 groups of doctors and nurses have attended, and 736 people have been given the vaccine.

## Transportation, Comprehensive Epidemic Prevention

### The First APP of Zero-touch Bell in the Country

Adopting APP of zero-touch bell, reducing the risk of infection.




### Disinfect the Footwear for the Pandemic Prevention

To consider the risk of spreading the virus on shoe soles, we pioneer the installation of "shoe sole disinfection facilities" in crowded traffic stations to reduce the risk of virus transmission and prevent the spread of the pandemic.





# IX. Foresight Planning




## 1. Continue to review sustainable development goals and achievements

In 2021, through the concerted efforts of colleagues made from all bureaus and offices, the city has completed the Voluntary Local Review and will continue to promote it in the future, promoting and improving the city's sustainable development, rolling review and revising the Voluntary Local Review, timely adjusting strategic direction and additional revision indicators to cope with future social trends.

## 2. Sustainable communication with domestic and foreign cities

Taichung is committed to participating in international cooperation, and at the same time actively communicating with local governments for sustainable development. In the future, Taichung will host the meeting for “the Institute for Global Environmental Strategies (IGES)” sharign the city's Voluntary Local Review on the VLR Lab platform, continuing to participate in international organizations and sustainable development conferences and city exchanges, sharing experience and making improvements and learning.

## 3. Participation openly and education promotion

Sustainable development is a topic of concern to the global people, and it needs the participation and mobilization of all people. Therefore, the city will also integrate them in the future. Taichung City will be combined with production, officials, learning, research, and the power of the people to reach the collaborations with stakeholders. By marketing, education promotion, and sustainable development related activities, the concept of sustainable development will deeply root in the people's minds, taking into account the happiness and balanced development of all ages, nationalities, genders, and other aspects.

# X. Appendix

## Appendix 1. The Sustainable Development Project of Taichung City / Action Project (A total of 103 indicators and 106 projects)




The goal of SDGs

### SDG 1 No Poverty

Dimensions: Society

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Happy and Livable City | 1. The Coverage Rate of Vulnerable Families Participating in Supporting Community Service | 1. Deploy Family Community to Support Service Project | Social Affairs Bureau |
| Happy and Livable City | 2. The Rate of Opening Bank Account for Child Education DevelopmentThe | 2. Opening Bank Account for Children Education Development | Social Affairs Bureau |
| Happy and Livable City | 3. Coverage Rate of Low (middle and low) Income Households Participating in Poverty Reduction Measures | 3. The Project for Poverty Reduction | Social Affairs Bureau |




The goal of SDGs

### SDG 2 Zero Hunger

Dimensions: Economy, Society

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Effective Government | 4. Organic Fertilizer Application Area | 4. Strengthen the Inspections of Using Pesticide in Wholesale Markets to Keep Food Production | Agriculture Bureau |
| Effective Government | 5. The Unqualified Rate of Using Pesticide on Agricultural Products in Wholesale Markets | 5. To Ensure Sustainable Food Production System | Agriculture Bureau |
| Effective Government | 6. The Growth Rate of the Login of Food Industry | 6. Enhance Food Industry Registration on FDA Platform | Health Bureau |




The goal of SDGs

### SDG 3 Good Health and Well-being

Dimensions: Society

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Happy and Livable City | 7. Infant Mortality Rate | 7. Health Care Service for Pregnant Women and Children | Health Bureau |
| Happy and Livable City | 8. The Rate of Being Infected Tuberculosis | 8. The Project for Directly Observed Therapy Treatment of Latent Tuberculosis | Health Bureau |
| Happy and Livable City | 9. The Rate of Medicine-taken by the AIDS Infected | 9. Medicine Supply for AIDS Infected | Health Bureau |

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Happy and Livable City | 10. The Number of the Elderly Participating in Learning Centers | 10. Promoting the Project of Learning Centers for the Elderly | Social Affairs Bureau |
| Happy and Livable City | 11. Community-style Services for the Disabled (daycare center, training spots for operating facilities) | 11. The Project for the Disable to Create an Inclusive Society | Social Affairs Bureau |
| Happy and Livable City | 12. The Ratio of Adopting Long-term Care Service | 12. The Project for Ten Years of Long-term Care 2.0 | Health Bureau |
| Happy and Livable City | 13. The Coverage Rate of Instant Messaging APP for Long-term Care | 13. APP-set for Long-term Care | Health Bureau |
| Happy and Livable City | 14. The Growth Rate of Psychological Counseling Service | 14. The Psychological Counseling Home and Fixed Spots Service for the Elderly | Health Bureau |
| Happy and Livable City | 15. The Influenza Vaccination Rate for the Elderly Over 65 | 15. Influenza Vaccination Project | Health Bureau |
| Happy and Livable City | 16. The Number of Culture and Health Stations | 16. Long-term Care for Indigenous People — Plan for Setting Up Culture and Health Station | Indigenous People Commission |
| Happy and Livable City | 17. The Number of Buildings Caused by Fires Per 100,000 People | 17. Plan to Reduce the Number of Buildings Caused by Fire Effectively | Fire Bureau |
| Health and Vitality | 18. The Proportion of the Citizens Taking Exercise Regularly | 18. The Project for Building National Sports Center | Sports Bureau |
| Happy and Livable City | 19. The Number of People Recovering from OHCA Discharged from the Hospital and EMPT | 19. To Elevate the Training for Emergency Medical Paramedic | Fire Bureau |




The goal of SDGs

## SDG 4 Quality Education

Dimensions **Society**

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Happy and Livable City | 20. Increase Classes for Public Preschools | 20. The Project for Increasing Public Preschools | Education Bureau |
| Happy and Livable City | 21. The Number of Facilities Installed, Renovation and Baby Taken-care for Public Nurseries | 21. The Project for Increasing Public Nursery Centers | Social Affairs Bureau |
| Thoughtful Education | 22. The Number of Students Participating in International Education Programs | 22. Promote International Education | Education Bureau |
| Thoughtful Education | 23. The Number of Participants in Lifelong Learning and Related Courses | 23. Promote Lifelong Learning | Education Bureau |
| Imagery Aesthetics | 24. The Average Amount of Books Borrowed by Citizens | 24. The Project for the Growth of Using Libraries | Cultural Affairs Bureau |
| Thoughtful Education | 25. The Number of Teachers and Students Below High School Participating in Science and Technology Education | 25. Promote Science and Technology Education | Education Bureau |
| Thoughtful Education | 26. Managing Intensive Workshops for Teachers | 26. Intensive Workshops for Teachers | Education Bureau |




The goal of SDGs

## SDG 5 Gender Equality

Dimensions: Society

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | | Offices |
|---|---|---|---|---|
| Happy and Livable City | 27. The Number of Measures for Gender Equality with Friendly | 27. Taichung City Government Promotes Gender Mainstreaming Implementation Project<br>28. Sessions of Taichung City Government Promote the Innovative Project for Gender Equality | To promote the Mainstream of the Gender Equality | Social Affairs Bureau |




The goal of SDGs

## SDG 6 Clean Water and Sanitation

Dimensions: Environment

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Water Resources Conservation | 28. Unqualified Rate of Drinking Water | 29. To Assure the Safety of Drinking Water for Citizens | Environmental Protection Bureau |
| Water Resources Conservation | 29. The Rate of Overall Wastewater Treatment | 30. Promote the Construction Project for Connecting pipes of the Sewage Sewer Users | Water Resources Bureau |
| Water Resources Conservation | 30. The Proportion of Uncontaminated Rivers (RPI≦2.0) | 31. Protection for Maintaining Water Quality | Environmental Protection Bureau |




The goal of SDGs

## SDG 7 Affordable and Clean Energy

Dimensions: Economy

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | | Offices |
|---|---|---|---|---|
| Green Environment | 31. The Usage Rate of Renewable Energy | 32. The Project for Saving Electricity with County and City<br>33. The Project for Promoting Rooftop-type Solar<br>34. Photovoltaic Installation for Public Buildings and Public Land | Actively promote renewable energy | Economic Development Bureau |
| Green Environment | 32. Accumulation of the Generation Degree for Renewable Energy | 35. Photovoltaic Installation on the Roof of the Factory<br>36. Photovoltaic Installation for High Energy-consumption Users | | |

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Green Environment | 33. The Cumulative Capacity for Solar Power Generation | 37. To Subsidize the Installation of the Photovoltaic Generation System<br>38. Offshore Wind Power Industry Zone in Taichung Harbor | and Transition |
| Green Environment | 34. For a New Lease-purchase Case in an Industrial Zone within its Jurisdiction, Owners Must Install a Sizeable Photoelectric System on 50% of the Roof | 39. Plan for Promoting to Use Green Energy for Industry | Economic Development Bureau |
| Green Environment | 35. Generation Power of Resource Cycle | 40. The Project for Resource Recycling Power Generation | Environmental Protection Bureau |
| Green Environment | 36. The Replacement Rate of LED Smart Street Lamp | 41. The Project for Smart Street Light Installation with LED | Construction Bureau |




The goal of SDGs

## SDG 8 Decent Work and Economic Growth

Dimensions: Economy

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Effective Government | 37. The Growth rate of Using Taichung Living Economic Information Platform App | 42. Taichung Information Platform Operation Service for Living Economy | Economic Development Bureau |
| Creat Employment for The Youth | 38. The Number of Times to Coach to Start an Undertaking | 43. The Project of Taichung Cross-border Experience Demonstration Base Entrusted Operation Management | Economic Development Bureau |
| Innovation and Venture | 39. The Cumulative Number of Visiting Manufacturers | 44. Strategic Investment for Industry | Economic Development Bureau |
| Innovation and Venture | 40. The Rate of Job Seeking | 45. Provide Employment Service Resources and Strengthen Applicants' Preparation | Labor Affairs Bureau |
| Thoughtful Education | 41. The Employment Rate for the Disabled Students | 46. To Hold Lectures of Employment for the Disabled | Labor Affairs Bureau |
| Innovation and Venture | 42. The Growth Rate of Coaching Cultural and Creative Industry Workers | 47. Project for Cultural and Creative Counseling | Cultural Affairs Bureau |
| Thoughtful Education | 43. The Employment Rate After Vocational Training | 48. The Project for Job Trainings for the Unemployed | Labor Affairs Bureau |
| Effective Government | 44. The Rate of Insurance Benefit for Occupational Injury by Per Thousand People | 49. Safety Guarantee for Working Spots and Health Management Project 2.0 | Labor Affairs Bureau |
| Innovation and Venture | 45. Total Number of Lodgers in the Hotel Industry | 50. Promote the Tourism Industry | Tourism and Travel Bureau |
| Innovation and Venture | 46. The Growth Rate of Attendees Participating in Film Exhibitions | 51. Taichung Film Festival | Information Bureau |
| Innovation and Venture | 47. The Rate of Co-filming | 52. Build the Core of Film and Television Center in Taiwan | Information Bureau |
| Imagery Aesthetics | 48. The Number of Participants for Art Activities | 53. Promotion of Art and Cultural Activities | Cultural Affairs Bureau |




The goal of SDGs

## SDG 9 Industry, Innovation and Infrastructure

Dimensions: Economy, Environment

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Water Resources Conservation | 49. The Coverage rate of Rainwater Sewerages Built | 54. To Increase the Building Coverage Ratio of Rainwater Sewerages and Improve the Food Drainage Capacity in Downtown of the City | Water Resources Bureau |
| Water Resources Conservation | 50. The Growth Rate of the Cumulative Length of Using Permeable Pavement | 55. Build Sidewalk With Permeable Function | Construction Bureau |




The goal of SDGs

## SDG 10 Reduce Inequalities

Dimensions: Society

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Thoughtful Education | 51. The Cumulative Number of the Candidates for Hakka Language Proficiency Certification | 56. Encourage People to Participate in Obtaining the Certificate of Hakka Language Proficiency | Council for Hakka Affairs |
| Happy and Livable City | 52. The Growth Rate of the People in Remote Areas Receiving Public Health Care Services | 57. Health Care and Medical Health Services of People Living in Remote Areas | Health Bureau |




The goal of SDGs

## SDG 11 Sustainable Cities and Communities

Dimensions: Society, Environment

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Happy and Livable City | 53. The Number of the Completion of Council House | 58. Council House | Urban Development Bureau |
| Health and Vitality | 54. The Growth Rate of Bike Lane Optimization | 59. Optimizing Recreational Bicycle Lanes | Tourism and Travel Bureau |
| Green Environment | 55. The Growth Rate of Electric Motorcycles Recharging | 60. Promote the Electric Motorcycles Recharging | Environmental Protection Bureau |
| Green Environment | 56. The Growth Rate of Electric Scooters | 61. The Subsidy Project of Replacement of Old Motorcycles with New Low Polluted Vehicle | Environmental Protection Bureau |
| Accessible Transportation | 57. Achieving Rate of Electric Automobile Charging Station in Public Parking Lots | 62. Public Parking Lots Application for Electricity and Maintenance of Electric Automobile Charging Equipment | Transportation Bureau |
| Accessible Transportation | 58. The Number of Electric Buses (Proportion of electric buses) | 63. Promote the Plan for the Electric Buses in 2030 | Transportation Bureau |
| Accessible Transportation | 59. The Number of Accessible Buses | 64. Accessible Bus | Transportation Bureau |

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Accessible Transportation | 60. Transportation Volume of the Bus in the City | 65. Plan to Increase the Traffic Volume of Bus | Transportation Bureau |
| Accessible Transportation | 61. The Proportion of Smart Parking Lots<br>62. The Proportion of E-payment | 66. Smart Parking | Transportation Bureau |
| Accessible Transportation | 63. Cumulative Frequency of Renting iBike | 67. Plan to Increase the Quantity of iBike | Transportation Bureau |
| Accessible Transportation | 64. Build an Autonomous Bus Operation Field, Route Length, and Passenger Capacity | 68. The Project of Autonomous Bus | Transportation Bureau |
| Accessible Transportation | 65. The Completion Growth Rate of Smart Signs | 69. Plan to Integrate of Smart Dynamic Signal System and Installation of TOPIS | Transportation Bureau |
| Effective Government | 66. The Rate of New Construction of 3D Model | 70. Marching Forward 3D Smart Land Project of National Spatial Data for Infrastructure | Land Administration Bureau |
| Imagery aesthetics | 67. The Growth Rate of Visiting the Cultural Heritage Building | 71. Cultural Heritage Preservation and Promotion | Cultural Affairs Bureau |
| Green Environment | 68. The Growth Rate of the Application of Tree Burial (count) | 72. The Policy of Eco-green Burial | Civil Affairs Bureau |
| Green Environment | 69. The Annual Average Concentration of $PM_{2.5}$<br>70. The Ratio of Fine air Quality (AQI≦100)<br>71. $O_3$ 8-hour concentration red alert level occurrence rate | 73. The Project for Keeping Blue Sky and White clouds | Environmental Protection Bureau |
| Health and Vitality | 72. The Proportion of the Completion of the Total Length of the Optimizing Trails | 74. Optimize and Rebuild Existing Trails | Tourism and Travel Bureau |
| Happy and Livable City | 73. The Proportion of the New-built Park Area | 75. Melody Project | Construction Bureau |
| Happy and Livable City | 74. The Growth Rate of Improving Sidewalk Length | 76. The Project of Humanity-oriented Transportation Development | Construction Bureau |
| Happy and Livable City | 75. The Length of Road-smoothing | 77. Road-smoothing Project | Construction Bureau |
| Happy and Livable City | 76. The Number of Improvement for Accessible Ramp | 78. Improve the Accessible Ramp | Construction Bureau |
| Green Environment | 77. The Growth Rate of Certified Low-carbon Religious Places (count) | 79. Promote Low-carbon Religious Spots | Civil Affairs Bureau |
| Water Resources Conservation | 78. The Rate of Urban Design Review Guidance of Greenery Design for Roof and Vertical | 80. Urban Design Review | Urban Development Bureau |
| Water Resources Conservation | 79. The Carbon Fixation of Livable Building | 81. Promote the Livable Building | Urban Development Bureau |
| Happy and Livable City | 80. Safe Arcade Length (the length of arcade-smoothing) | 82. To Assure Students' Safety on the Arcade and the Flat Surface of Arcade | Urban Development Bureau |
| Happy and Livable City | 81. The Rate of Well-designed Public Restroom | 83. Promote Amiable Restrooms | Environmental Protection Bureau |
| Happy and Livable City | 82. The Readjustment Cumulative Area for Public Land | 84. Create Livable City and Land Readjustment in Taichung | Land Administration Bureau |
| International Portal | 83. The Accumulative Area of Zone Expropriation | 85. Zone Expropriation and Rich Taichung City | Land Administration Bureau |
| Effective Government | 84. The Proportion of the Cadastral of the Number of the Land | 86. The Project for Taichung City Outsources for Re-build<br>87. Plan for Making Cadastral Survey by Early Farmland Readjustment (re-measure of numerical method)<br>The Proportion of the Number of Cadastral Consolidation Land Re-build Project | Land Administration Bureau |




The goal of SDGs

## SDG 12 Responsible Consumption and Production

Dimensions: Economy, Environment

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Green Environment | 85. The Unusual Rate of Toxic and Concern for Chemical Substances Operation Record Flow Direction | 88. The Project to Implement Toxic and Concerned Chemical Substances | Environmental Protection Bureau |
| Green Environment | 86. The Verification Area of Organic (including transformation period) Agricultural Products | 89. Increase the Area of Organic Farming to 600 Hectares in 2030 | Agriculture Bureau |
| Innovation and Venture | 87. The Annul Carbon Reduction of Local Food and Local Market | 90. Local Production, Local Consumption – Local Farmers' Market | Agriculture Bureau |
| Green Environment | 88. The Rate of Recycle | 91. Reduction Reuse and Recycling | Environmental Protection Bureau |
| Green Environment | 89. The Recycling Rate of Reusing Waste Incineration Bottom ash Resource | 92. Reuse the Bottom Ash | Environmental Protection Bureau |
| Green Environment | 90. To Assist Paper Manufacturers in Reducing the Tonnage of RDF–5 | 93. Pilot Scheme of RDF–5/SRF | Environmental Protection Bureau |




The goal of SDGs

## SDG 13 Climate Action

Dimensions: Environment

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Green Environment | 91. The Reduction Ratio of Greenhouse Gas Emission | 94. Adaptation Strategies for in Accord with Climate Change | Environmental Protection Bureau |
| Imagery Aesthetics | 92. The Number of Participants for the Workshop of Water Resources and Environmental Education | 95. Set up Environmental Education Facilities to Promote Water–using Concept | Water Resources Bureau |
| Water Resources Conservation | 93. The Proportion of the Training for Members Working for Preventing Natural Disasters | 96. Promote the Training for Volunteers Work on Preventing Natural Disasters | Fire Bureau |




The goal of SDGs

## SDG 14 Life below Water

Dimensions: Environment

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Green Environment | 94. The Number of Discarded Fishing Nets and Waste and the Number of Investigations for Illegal Trade on the Sea Each Month | 97. Reduce Marine Pollution, Recycle Discarded Fishing Nets and Waste, Strengthen the Investigation and Punishment of Illegal Fisheries on the Sea | Agriculture Bureau |




The goal of SDGs

## SDG 15 Life on Land

Dimensions: Environment

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Water Resources Conservation | 95. The Number of Guideline Workshops and Attendants for Wetland Ecology | 98. Ecological Education in Wetlands and Wildlife Reserves | Agriculture Bureau |
| Water Resources Conservation | 96. The Coverage of the Biodiversity Conservations | 99. Ecological Conservation and Expansion of Biodiversity | Agriculture Bureau |




The goal of SDGs

## SDG 16 Peace, Justice and Strong Institutions

Dimensions: Society

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Effective Government | 97. The Clear-up rate of General Criminal Offenses | 100. Strengthen the Capacity of Crime Detection and Prevention, and Increase the Detection Rate of Criminal Cases | Police Department |
| Effective Government | 98. The Rate of Effective Intervention for Violent Abuse | 101. To End Child Abuse and Provide Services on the Internet | Social Affairs Bureau |
| Effective Government | 99. The Number of Casualties Caused by Traffic Accidents | 102. Use Smart Analysis to Improve Traffic Law Enforcement Effectiveness | Police Department |
| Effective Government | 100. The Rate of Mediating for Consumption Dispute Case | 103. Enhance the Alternative Dispute Resolution | Legal Affairs Bureau |
| Effective Government | 101. The Number of People Raising Questions Via Smart Customer Service | 104. The "AI Customer Service" Served all Year R ound | Local Tax Bureau |




The goal of SDGs

## SDG 17 Partnerships for the Goals

Dimensions: Economy, Environment, Society

| Development of 12 strategic policies | Indicators of sustainable development of Taichung City | Projects of sustainable development of Taichung City | Offices |
|---|---|---|---|
| Creat Employment for The Young | 102. The Number of Exchange Meeting with International Cities | 105. The Project of Working with International Partnership for Sustainable | Secretariat |
| Thoughtful Education | 103. The Growth Rate of the Total Number of Volunteers from the Administration | 106. The Project of Voluntary Service | Social Affairs Bureau |

# Appendix 2. Taichung City Sustainable Development Project/Action Project (A total of 103 indicators, 106 projects)




The goal of SDGs

## SDG 1 No Poverty

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 12% | 13% | 14% |

**Target 1.2**

**Indicator**

**1. The coverage rate of vulnerable families participating in supporting community service**

Calculation : The number of people participating in family community support services / Total number of vulnerable family cases opened x 100%

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 55% | 60% | 65% |

**Target 1.4**

**Indicator**

**2. The rate of opening bank account for child education development**

Definition : Children and the adolescent born after January 1, 2016, at 18 years old, including low- and middle-income (low) income families or long-term dependents.

Calculation : The actual number of people who apply for opening an account each year / The number of people qualified for the project per year x 100%

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 6% | 7% | 8% |

**Target 1.4**

**Indicator**

**3. The coverage rate of low (middle and low) income households participating in poverty reduction measures**

Calculation : The number of participants in poverty reduction measures / The number of family (low-and middle) incomes x 100%




The goal of SDGs

## SDG 2 Zero Hunger

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 10% | 8% | 6% |

**Target 2.1**

**Indicator**

**4. The unqualified rate of using pesticide on agricultural products in wholesale markets**

Definition : Unqualified rate of use pesticide on agricultural products inspected randomly on wholesale.

Target 2.4

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 7,600 hectares | 8,500 hectares | 10,000 hectares |

**Indicator**

**5. Organic fertilizer application area**

Definition : The amount of organic ferterlize using on qualified area applied by farmers.

Target 2.c

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 15% | 55% | 80% |

**Indicator**

**6. The growth rate of the login of food industry**

Definition : Based on the number of registered food companies in 2020 (27,412 companies).
Calculation : (The number of food industry logined per year − the number of food operators registered in 2020) / The number of registrations by 2020 x 100%

The goal of SDGs

## SDG 3 Good Health and Well-being

Target 3.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 2.5‰ | 2.49‰ | 2.45‰ |

**Indicator**

**7. Infant mortality rate**

Calculation : ( The infant mortality rate for the year / The infant mortality rate for 2019) x 1,000

Target 3.3

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 28.4% | 24.4% | 19.4% |

**Indicator**

**8. The rate of being infected tuberculosis**

Calculation : (The number of new tuberculosis cases / Mid-year population) x 100,000

Target 3.3

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 93% | 94% | 95% |

**Indicator**

**9. The rate of medicine-taken by the AIDS infected**

Calculation : (The city's native HIV-infected at least one medication record being cured and without leaving the town / The city's native HIV-infected being cured and without leaving the country) x 100%

Target 3.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 51,000 person-times | 55,000 person-times | 60,000 person-times |

**Indicator**

**10. The number of the elderly participating in learning centers**

Definition : The average annual benefits 50,000 elderly based on the date of learing center.
Calculation : Learning centers benefits elderly increasing 1,000 person-time per year (beneficiaries in the current year – beneficiaries in the previous year)

Target 3.8

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 40 places | 50 places | 60 places |

**Indicator**

**11. Community-style services for the disabled (daycare center, training spots for operating facilities)**

Definition : The number of service bases for the disabled.

Target 3.8

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 50% | 60% | 65% |

**Indicator**

**12. The ratio of adopting long-term care service**

Calculation : Adopting long-term care services / Estimate the the number of long-term demands.

Target 3.8

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 25% | 50% | 80% |

**Indicator**

**13. The coverage rate of instant messaging APP for long-term care**

Calculation : Long-term care APP download rate for the year / The number of users for long-term care services in the current year x 100%

Target 3.8

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 5% | 10% | 15% |

**Indicator**

**14. The growth rate of psychological counseling service**

Definition : Citizens suffering from emotional distress and high-risk people consulted by professional psychologists. Based on the number of psychological counseling services in 2020 (3,600 person-times).
Calculation : (Current year's psychological counseling service volume – 2020 service volume) / 2020 service volume x 100%

## Target 3.8

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 50% | 52% | 54% |

### Indicator

**15. The influenza vaccination rate for the elderly over 65**

Definition : The elderly over 65 years of age in this city. (Including those in nursing homes, senior care, Long-term care, institutional staff not included).

Calculation : The number of injections / The number of the mid-aged population over 65 years of age in this city x 100%

## Target 3.8

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 24 stops | 26 stops | 28 stops |

### Indicator

**16. The number of culture and health stations**

Calculation : According to the number of cultural health stations set up in Taichung City.

## Target 3.9

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 28 | 25 | 22 |

### Indicator

**17. The number of buildings caused by fires per 100,000 people**

Calculation : The number of buildings caused byfires/population (100,000)

## Target 3.d

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 33.6% | 34% | 34.5% |

### Indicator

**18. The proportion of the citizens taking exercise regularly**

Definition : Citizens at 18 or older exercise three times a week 30 minutes each.

## Target 3.d

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 1.Number of OHCA cases recovered and discharged: 100 | 1.Number of OHCA cases recovered and discharged: 110 | 1.Number of OHCA cases recovered and discharged: 120 |
| 2.Number of EMTP: 116 | 2.Number of EMTP: 150 | 2.Number of EMTP: 200 |

### Indicator

**19. The number of people recovering from OHCA discharged from the hospital and EMPT**

Definition : The calculation method for the number of people discharged from the rehabilitation, the number of people discharged from the hospital with a neurological status of CPC1 or CPC2 diagnosed by the hospital.




The goal of SDGs

# SDG 4 Quality Education

## Target 4.2

### Indicator

**20. Increase classes for public preschools**

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 25 classes | 90 classes in total | 130 classes in total |

Definition : Calculated based on the number of additional courses in public kindergartens and non-profit kindergartens in this city.

## Target 4.2

### Indicator

**21. The number of facilities installed, renovation and baby taken-care for public nurseries**

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Number of public nursery facilities installed and renovated: 28<br>Total number of recipients: 750 | Number of public nursery facilities installed and renovated: 50<br>Total number of recipients: 1,400 | Number of public nursery facilities installed and renovated: 60<br>Total number of recipients: 1,700 |

Definition : The number of public nursery facilities set up and renovated = the number of public trustees and homes in this city; the number of consignees = the total number of students registrated in public care centers.

## Target 4.7

### Indicator

**22. The number of students participating in international education programs**

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 8,000 person-times | 9,000 person-times | 10,000 person-times |

Definition : The number of students participating in the Cloud English Teaching System, the dual school program, bilingual and international experimental classes.

## Target 4.a

### Indicator

**23. The number of participants in lifelong learning and related courses**

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 180,000 person-times | 190,000 person-times | 200,000 person-times |

Definition : Attendees participating in various lifelong learning and related courses offered by community colleges and the Active Aging Learning Center in this city.

## Target 4.a

### Indicator

**24. The average amount of books borrowed by citizens**

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 4.99 books/ person-times | 5.13 books/ person-times | 5.29books/ person-times |

Definition : To assess library collections' utilization rate and reflect the quality collections and the library's ability to promote reading.

Calculation Borrowing volume person-times = total annual borrowing volume / times of services

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 15,000 person-times | 25,000 person-times | 50,000 person-times |

**Target 4.b**

**Indicator**

**25. The number of teachers and students below high school participating in science and technology education**

Definition : The total number of teachers and students participating in the relevant courses and activities of the project, including DIY education and technology center courses, activities, camps and DIY education competitions, science exhibitions, and science parks.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Processed 1,300 training sessions | A total of 1,500 training sessions have been handled | A total of 1,800 training sessions have been handled |

**Target 4.c**

**Indicator**

**26. Managing intensive workshops for teachers**

Definition : The quality education comes from the professionalism and dedication of teachers, who are professional workers and need to continue to develop professionally to support students' learning.

Calculation : The number of sessions to improve teachers' teaching-related research and promote teachers' professional learning community as a reference for the index




The goal of SDGs

## SDG 5 Gender Equality

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 60 policies | 70 policies | 80 policies |

**Target 5.c**

**Indicator**

**27. The number of measures for gender equality with friendly**

Definition : Gender equality policy measures include measures to remove gender stereotypes, measures to create a gender-friendly environment, and make efforts to improve women's performance on economy, such as an inclusive playground, breastfeeding room, and improved gender ratios for toilets.




The goal of SDGs

## SDG 6 Clean Water and Sanitation

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Below 3‰ | Below 2‰ | Below 1‰ |

**Target 6.1**

**Indicator**

**28. Unqualified rate of drinking water**

Definition : According to the city's tap water purification processes, the number of water quality sampling pieces was calculated.

Calculation : The number of non-conforming pieces / The number of sampling pieces

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 68.94% | 78% | 90% |

**Target 6.3**

**Indicator**

**29. The rate of overall wastewater treatment**

Calculation : The penetration rate of public sewage sewers, the prevalence rate of dedicated sewage sewers, and the setting rate of sewage facilities in buildings

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 80% | 85% | 90% |

**Target 6.3**

**Indicator**

**30. The proportion of uncontaminated rivers(RPI≦2.0)**

Calculation : The length of three major river (Wuchi, Dajia, Da-An) within the jurisdiction of the city not (slightly) contaminated / The length of the three major river (Wuchi, Dajia, Da-An ) within the jurisdiction of the city




The goal of SDGs

## SDG 7 Affordable and Clean Energy

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 11% | 13% | 20% |

**Target 7.a**

**Indicator**

**31. The usage rate of renewable energy**

Definition : The city's renewable energy supply accounts for the city's electricity consumption.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 3.5 billion degrees | 3.8 billion degrees | 6 billion degrees |

**Target 7.a**

**Indicator**

**32. Accumulation of the generation degree for renewable energy**

Definition : Renewable energy power generation will reach 6 billion kWh in 2030.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Solar photovoltaic device capacity up to 400MW | Solar photovoltaic device capacity up to 600MW | Solar photovoltaic device capacity up to 1GW |

**Target 7.a**

**Indicator**

**33. The cumulative capacity for solar power generation**

Definition : The cumulative installed capacity of solar power generation in this city will reach 1GW by 2030.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 1,026.74m² | 6,718.12m² | 12,034m² |

**Target 7.a**

**Indicator**

**34. For a new lease-purchase case in an industrial zone within its jurisdiction, owners must install a sizeable photoelectric system on 50% of the roof**

Definition : After deducting the non-set area, the remaining area of more than 50% is set up solar photovoltaic power generation facilities (the so-called roof non-set area referring to the space occupied by roof miscellaneous work objects, roof greening facilities, and roof permeable frame projection, audited shade area, the installation of solar photovoltaic power generation facilities and other areas).

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| The combined heat and power system generates 442 million kWh | The symbiotic power generation capacity of the steam power project is 442 million degrees | The cogeneration of steam and electricity generates 500 million kWh |
| Food waste anaerobic power generation 180 million kWh | Food waste anaerobic power generation 250 million kWh | Food waste anaerobic power generation 500 million kWh |

**Target 7.a**

**Indicator**

**35. Generation power of resource cycle**

Calculation : 1. The power generation capacity of the incinerator project is the actual power generation measure of the Combined Heat and Power resource cycle after the waste is burned
2. Anaerobic production of Food waste anaerobic power generation: based on the actual power generation in 2020 as the base year, after the existing power generation stabilized in September of the same year

※ NOTE
1. Depending on the actual operating conditions of the Wai-Pu Green Energy Ecological Park, rolling adjustment is required.
2. For the city's incinerator project has not improved its power generation equipment except for the replacement project and still aims to generate electricity in 2021.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 1% | 35% | 100% |

**Target 7.b**

**Indicator**

**36. The replacement rate of LED smart street lamp**

Definition : LED smart street lights account for the proportion of the total number of pipeline lights in Taichung City.




The goal of SDGs

## SDG 8 Decent Work and Economic Growth

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 2.5% (Based on 2020) | 10% (Based on 2021) | 5% (Based on 2025) |

**Target 8.3**

**Indicator**

**37. The growth rate of using Taichung living economic Information platform App**

Definition : Use the accumulated service times (the number of times of using) of the Taichung Life Economic Information Platform as the basis for quantitative evaluation.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Accumulated 30 times | Accumulated 75 times | Accumulated 150 times |

**Target 8.3**

**Indicator**

**38. The number of times to coach to start an undertaking**

Definition : To coach to start an untaking and set up registrations or obtain relevant subsidy resources to develop cross-border business.

Note: The calculation base period is based on the 14 companies reaching Industries based on cooperatives in 2020.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 25 companies | 25 companies | 25 companies |

**Target 8.3**

**Indicator**

**39. The cumulative number of visiting manufacturers**

Definition : Assist manufacturers in promoting economic development through one-stop investment promotion services, operating headquarters incentives and subsidies, meetings for eliminating investment barriers, etc.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 65% | 68% | 70% |

**Target 8.5**

**Indicator**

**40. The rate of job seeking**

Definition : According to the Workforce Development Agency, Ministry of Labor employment service information integration system indicator calculation method, the job-seeking rate is the number of practical job-seeking recommendations in this city divided by the number of newly registered job-seekers in this city (The employment rate of job hunting in this city in the past ten years is 62.44%).

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 35% | 37% | 40% |

**Target 8.5**

**Indicator**

**41. The employment rate for the disabled students**

Definition : The proportion of employing the disabled transferred to be employed through a unique education transfer network.

Calculation : Employment rate of disabled students = In the school year, the transfer information will be reported to the social, administrative department, and the number of labor-disabled employees / The total number of students with disabilities who reported the transfer service information to the colonial administration and labor in the academic year. (The employment rate of disabled students is 33.5% in 2020)

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 5% | 10% | 15% |

**Target 8.5**

**Indicator**

**42. The growth rate of coaching cultural and creative industry workers**

Definition : Coaching Entrepreneurs to apply for registrations in Taichung or obtained relevant subsidy resources to develop cross-border business.

Calculation : The calculation base period is based on the cooperation between 14 Alliance across Industries In 2020

Target 8.6

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 80% | 80.5% | 81% |

Indicator

**43. The employment rate after vocational training**

Definition : The ratio of employment to the number of trained persons within three months after training (The employment rate after accepting trainings in the past three years is 79.5%).

Target 8.6

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Decrease to 2.932‰ | Decrease to 2.847‰ | Decrease to 2.764‰ |

Indicator

**44. The rate of insurance benefit for occupational injury by per thousand people**

Calculation : Occupational Accident Thousand people rate (‰) = number of people receiving work-related injury insurance benefits throughout the year / Average number of people insured by labor insurance per year × 1,000 (The annual occupational accident rate of 3.142 per thousand in 2020)

Target 8.9

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 60% of accommodation by 2020 | 10% growth | 15% growth |

Indicator

**45. Total number of lodgers in the hotel industry**

Definition : Increase the accommodation rate.
Calculation : According to the total number of lodgers in the hotel industry in 2020 (6.45 million person-times)

Target 8.9

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 7% | 13% | 25% |

Indicator

**46. The growth rate of attendees participating in film exhibitions**

Calculation : "Taichung International Animation Festival" 2020 comprehensive screening of moviegoers and the total number of surrounding activities as the growth rate calculation base

Target 8.9

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 10% | 15% | 20% |

Indicator

**47. The rate of co-filming**

Calculation : The annual growth rate is calculated based on the average number of the filming crew demand from 2018 to 2020 in Taichung

Target 8.9

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 9.0 times/per person | 9.2 times/per person | 9.4 times/per person |

Indicator

**48. The number of participaants for art activities**

Calculation : The number of participants in arts and cultural activities in this city / Population of registered residence in Taichung City




The goal of SDGs

## SDG 9 Industry, Innovation and Infrastructure

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 78% | 82% | 90% |

**Target 9.1**

### Indicator

**49. The coverage rate of rainwater sewerages built**

Definition : Increase the rainwater sewer built coverage ratio by year to build flood drainage capacity in all city areas.
Calculation : Length of annual rainwater sewer construction / length of projectning of rainwater sewer in the city

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 5% | 25% | 50% |

**Target 9.1**

### Indicator

**50. The growth rate of the cumulative length of using permeable pavement**

Definition : Based on the length of permeable pavement in 2020 as the fiducial value (5.89 km).
Calculation : (The annual cumulative permeable paving length – 5.89) / 5.89 x 100%




The goal of SDGs

## SDG 10 Reduce Inequalities

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 8,500 People | 11,900 People | 14,900 People |

**Target 10.2**

### Indicator

**51. The cumulative number of the candidates for Hakka language proficiency certification**

Calculation : The cumulative number of applicants for the Hakka language proficiency certification

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 1% | 2% | 3% |

**Target 10.4**

### Indicator

**52. The growth rate of the people in remote areas receiving public health care services**

Calculation : (Total number of services in the current year – Total number of benefits in 2020 / Total number of services in 2020) x 100%




The goal of SDGs

# SDG 11 Sustainable Cities and Communities

## Target 11.1

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 1,411 households | 6,048 households | 6,953 households |

### Indicator

**53. The cumulative number of the completion of council houses**

Definition : The number of council houses completed is counted by the declaration of completion of council houses.

## Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 10% | 15% | 20% |

### Indicator

**54. The growth rate of bicycle lane optimization**

Definition : Optimize the 53 recreational bicycle lanes wihtin the jurisdiction (new construction, renovation, construction).

## Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 28% | 45% | 100% |

### Indicator

**55. The growth rate of electric vehicles and electric motorcycles charging stations and replacing battery station**

Definition : 2019, as the base year, in 2030, the target set for various charging and replace the battery station will be set at a growth rate of 100% compared to the base year.
In 2019, 437 electric vehicle charging stations, 530 electric motorcycle charging stations, and 274 electric motorcycles replacing the battery stations.

## Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 60% | 130% | 200% |

### Indicator

**56. The growth rate of electric scooters**

Definition : The number of electric motorcycles in 2019 fiducial value (43,649).

## Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 58.1% (250 stations) | 76.7% (330 stations) | 100% (430 stations) |

### Indicator

**57. The achieving rate of electric automobile charging station in public parking lots**

Definition : Starting from 2022, the estimated number of stations installed each year will be the minimum number of newly installed stations from 2018 to 2020 (20 stations).
Calculation : (Current target–previous target/previous target) x 100%

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 215 vehicles (15%) | 640 vehicles (40%) | 1,600 vehicles (100%) |

**Indicator**

**58. The number of electric buses (proportion of electric buses)**

Definition : The total number of urban buses in this city = the ratio of electric buses in this city.

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 1,256 vehicles | 1,400 vehicles | 1,600 vehicles |

**Indicator**

**59. The number of accessible buses**

Definition : The number of accessible buses is the sum of the number of low-floor buses and the number of general-accessible buses.

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 58 million | 136 million | 150 million |

**Indicator**

**60. The traffic volume of city buses**

Definition : The traffic volume in 2020 foundation (110 million).

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| The completion rate of intelligent public parking lots reached 96%; the completion rate of private parking lots advanced 50% | The completion rate of brilliant public parking lots reached 100%; the completion rate of private parking lots reached 70% | The completion rate of private parking lots reaches 90% |

**Indicator**

**61. The proportion of smart parking lots**

Definition : Combining technology and introducing license plate recognition technology to provide people with no ticket required technology service experience when entering and exiting the parking lot, accelerating the efficiency of vehicle entry and exit, and accurately recording the time of entry and exit to create an smart parking environment.

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 15% | 30% | 50% |

**Indicator**

**62. The proportion of E-payment**

Definition : Cashless payment includes mobile payment and financial telecommunications withholding. Using geomagnetism + PDA to release a mobile parking billing system can reduce super commercial counters and encourage people to use mobile payment to pay parking fees. In addition, payment through mobile payment enjoys discount scheme, increasing stickiness capacity and payment ratio.

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 45 million peoson-times | 90 million peoson-times | 150 million peoson-times |

**Indicator**

**63. The cumulative number of iBike leases**

Definition : Calculate the cumulative number of rentals per year.

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Complete the project of autonomous bus route and seek funding | 11.6 km 10,000 peoson-times | 11.6 km 20,000 peoson-times |

### Indicator

**64. Build the route length of autonomous bus operating area and the number of passengers**

Definition : The route kilometers of the autonomous bus operating field facilities and the number of passengers in the target year.

Target 11.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 60% | 66% | 70% |

### Indicator

**65. The growth rate of the number of completion for smart traffic signs**

Definition : Smart traffic flow can be collected through the deployment of detectors at intersections with smart signs, and the optimal control strategy can be calculated in proper time and transmitted to the intersections with smart signs to adjust to the most timely system, which can improve the efficiency of traffic flow and reduce congestion occuring.

Calculation : (Current target – previous target / previous target) x 100%

Target 11.3

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 100% | 100% | 100% |

### Indicator

**66. Setting 3D model scales for new- built houses**

Definition : Currently projects mere for new-built houses. When a new home is drawn on the floor project of the building, the linkage achievement rate will be reached 100% by 3D model.

Target 11.4

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 1% increase | 3% increase | 5% increase |

### Indicator

**67. The growth rate of visitors to the cultural relics and historical sites**

Definition : The calculation of the ratio of the cumulative number of visiting the tangible cultural heritage premises operated and managed by the Municipal Bureau of Culture and the cumulative number of visitors in 2020 (the number of visitors in 2020 is 713,140).

Target 11.6

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 56% | 112% | 153% |

### Indicator

**68. The growth rate of the application of tree burial (the number of pieces)**

Definition : The number of tree burial applications in 2018 fiducial value (1,450).

Calculation : (The number of applications in the current year – the number of applications in 2018) / The number of applications in 2018 x 100%

Target 11.6

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 15.4μg/m³ | 14μg/m³ | 12μg/m³ |

**Indicator**

**69. The annual average concentration of $PM_{2.5}$**

Definition : Calculated based on the arithmetic average of the annual average $PM_{2.5}$ of the (automatic) monitoring station of the Environmental Protection Administration in Taichung City.

Target 11.6

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 91.3% | 92% | 95% |

**Indicator**

**70. The ratio of fine air quality (AQI≦100)**

Definition : Calculated by dividing AQI≦100 station days by the total effective station days of the Environmental Protection Administration (automatic) station in Taichung City.

Target 11.6

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 0.7% | 0.65% | 0.6% |

**Indicator**

**71. The occurrence rate of $O_3$ 8 hour concentration red alert level**

Definition : Calculated by dividing the number of station days with the maximum continuous 8-hour moving average of $O_3$ (automatic) station $O_3$ ≧86ppb by the total number of valid station days in Taichung City.

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 2% | 10% | 20% |

**Indicator**

**72. The proportion of the completion of the total length of the optimizing trails**

Definition : To optimize and rebuild the existing walking trails for the maintenance and management under the supervision.

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 10% | 50% | 100% |

**Indicator**

**73. The proportion of the new-built park area**

Definition : Aims to increase 25 hectares of green park space by 2030.

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 10% | 50% | 100% |

**Indicator**

**74. The growth rate of improving the length of the sidewalk**

Definition : Improved sidewalk by 2020 benchmark (11km).
Calculation : (Cumulative length of sidewalks constructed and improved in the current year – 11) / 11 x 100%

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| More than 100 kilometers | 500 kilometers | 1,000 kilometers |

**Indicator**

**75. The length of smooth roads**

Definition : Take the primary and secondary roads and sidewalks of each district as the central improvement axis, and improve the roadways nearby and sidewalks below 6 meters in width at the same time.

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 150 places | 750 places | 1,500 places |

**Indicator**

**76. The number of improvements for accessible ramp**

Definition : Actively increase the number of barrier-free ramps to improve the number of road sections meeting pedestrians high demand in this city.

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 20% | 25% | 29% |

**Indicator**

**77. The growth rate of low-carbon certified religious spots ( the number of pieces)**

Definition : Based on the number of tree burial applications in 2018, fiducial value (1,450).
Calculation : (The number of applications in the current year – the number of applications in 2018) / The number of applications in 2018 x 100%

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 80% | 85% | 90% |

**Indicator**

**78. The ration of urban design review counseling set on the roof and vertical greenery design**

Definition : 2% annual improvement in the top and vertical greening design ratio (78.1% by 2020).

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 8,000 metric tons | 9,500 metric tons | 11,000 metric tons |

**Indicator**

**79. The carbon fixation for livable buildings**

Definition : Target 2021–2025: 660 metric tons of selected carbon content per year, and 2026–2030 target: 990 metric tons of fixed carbon content per year.

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 120,000 meters | 150,000 meters | 200,000 meters |

**Indicator**

**80. Safe arcade length (the length of smooth arcade)**

Definition : 2,000 meters are expected to be completed every year, based on the report.

Target 11.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 97% | 98% | 99% |

**Indicator**

**81. The ratio of well-designed public restrooms**

Definition : The number of well-designed public restrooms ex / The number of public toilets listed in the town.

Target 11.a

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 3,031.96 hectares | 3,036.09 hectares | 3,395.29 hectares |

**Indicator**

**82. The readjustment cumulative area for public land**

Definition : Cumulatively completed readjustment of urban land (3,025 hectares by 2020).

Target 11.a

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 469.71 hectares | 499.58 hectares | 505.44 hectares |

**Indicator**

**83. The cumulative area of zone expropriation**

Definition : The levied size for the section.

Target 11.a

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 8% | 60% | 100% |

**Indicator**

**84. The proportion of the cadastral of the number of the land**

Definition : Cadastral consolidation land completed staring from 2021 / Number of emergency cadastral arrangements.




The goal of SDGs

# SDG 12 Responsible Consumption and Production

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| Less than 5‰ | Less than 4.5‰ | Less than 4‰ |

**Target 12.4**

### Indicator

**85. The unusual rate of toxic and concern for chemical substances operation record flow direction**

Definition : The total number of 50,143 base number declarations made by toxic chemical manufacturers in this city in 2020, the unusual rate of articulation of operational records in 2020 reaches 5‰, and is expected that the rate of unusual articulation of active forms in 2030 will be less than 4‰.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 490 hectares | 550 hectares | 600 hectares |

**Target 12.4**

### Indicator

**86. The verification area of organic (including transformation period) agricultural products**

Definition : A certified certification subject to the Organic Agriculture Promotion Act to verify that the production, processing, dispensing, and circulation of a particular agricultural product of the applicant complying with the provisions of the Organic Agriculture Promotion Act to obtain certification and provide proved-document of carbon reduction and safe ingredients to consumers.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 170 metric tons | 210 metric tons | 300 metric tons |

**Target 12.5**

### Indicator

**87. The annul carbon reduction of local food and local market**

Definition : Estimated reduction in carbon emissions based on a reduced number of vehicles shipped to wholesale markets in Taipei and Taichung.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 58% | 60% | 65% |

**Target 12.5**

### Indicator

**88. The rate of recycle**

Definition :
1. The city's resource recovery rate will increase year by year to 58% in 2021.
2. Referring to Taipei City's implementation of a designated trash bag recovery rate of about 65%, so the city's 2030 resource recovery rate target value is set at 65%.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 95% | 98% | 100% |

**Target 12.5**

### Indicator

**89. The recycling rate of reusing waste incineration bottom ash resource**

Definition : Reusing waste incineration bottom ash / 3 incinerators total slag production x 100%.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 300 tons | 12,000 tons | 20,000 tons |

Target 12.5

Indicator

**90. To assist paper manufacturers in reducing the tonnage of RDF-5**

Definition : The number of RDF tons assisted in the combustion and decontamination by incinerators.




The goal of SDGs

## SDG 13 Climate Action

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 3% | 15% | 30% |

Target 13.2

Indicator

**91. The reduction ratio of greenhouse gas emission**

Definition : The reduction in greenhouse gases compared to the base year (2005).

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 360 people | 1,500 people | 3,000 people |

Target 13.3

Indicator

**92. The number of participants for the workshop of water resources and environmental education**

Definition : To execute ecological education and teaching activities in environmental education facilities and places, each accommodating about 30–40 people.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 20% | 100% | 200% |

Target 13.3

Indicator

**93. The proportion of the training for members working for preventing natural disasters**

Definition : The annual growth rate is calculated based on the average annual growth rate of 20% of the number of disaster prevention workers (200) in 2020.




The goal of SDGs

## SDG 14 Life below Water

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| More than 100 tons, maritime joint investigation and seizure more than once a month | More than 100 tons, maritime joint investigation and seizure more than once a month | More than 100 tons, maritime joint investigation and seizure more than once a month |

### Target 14.1

**Indicator**

**94. The number of discarded fishing nets and waste and the number of investigations for illegal trade on the sea each month**

Number of discarded fishing nets and waste recycling

Definition : The goal is to drastically reduce the discarded fishing nets and waste in the ocean.

Calculation : Based on the weight of abandoned nets and drift waste collected by fishing vessels and collected by fishermen themselves, it is set to target more than 100 tons per year.

The number of banning illegal trade at sea per month

Definition : To prohibit illegal fishing at sea, reduce illegal and indiscriminate fisheries so that the city's fishery resources can be used sustainably.

Calculation : Joint sea seizure shall be carried out at least once a month.




The goal of SDGs

## SDG 15 Life on Land

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 20 places<br>600 person-times | 30 places<br>900 person-times | 40 places<br>1,200 person-times |

### Target 15.1

**Indicator**

**95. The number of guideline workshops and attendants for wetland ecology**

Definition : Calculated based on the number of events managed for promotion and publicity activities and the total number of participants in each event.

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 24% | 27% | 30% |

### Target 15.5

**Indicator**

**96. The coverage of the biodiversity conservations**

Calculation : Land in sensitive locations managed by the central and local governments / Total land area of the city (%)




The goal of SDGs

## SDG 16 Peace, Justice and Strong Institutions

### Target 16.1

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 88.5% | 89.5% | 90.5% |

**Indicator**

**97. The clear-up rate of general criminal offenses**

Definition : The goal is to increase the average breakthrough rate of general criminal cases by 1% in the last ten years.
Calculation : The number of general criminal / The number of clear-up cases for criminal

### Target 16.2

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 76% | 80% | 84% |

**Indicator**

**98. The rate of effective intervention for violent abuse**

Calculation : The number of cases in which the violence has slowed down, the cause of abuse disappeared, or the treatment target has been achieved / The number of domestic violence and child protection cases concluded in the current year x 100%

### Target 16.6

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 60,078 people | 57,711 people | 54,882 people |

**Indicator**

**99. The number of casualties caused by traffic accidents**

Calculation : The number of casualties caused by traffic accidents A1 + A2.

### Target 16.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 50~53% | 52~55% | 54~59% |

**Indicator**

**100. The rate of mediating for consumption dispute case**

Calculation : The number of consumer dispute mediation cases established by mediation in the current year / The number of mediation meetings held in the current year

### Target 16.7

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 26,000 times | 30,000 times | 35,000 times |

**Indicator**

**101. The number of people raising questions via smart customer service**

Definition : The number of people raising questions via smart customer service each year.




The goal of SDGs

# SDG 17 Partnerships for the Goals

**Target 17.16**

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 40 times | 70 times | 110 times |

### Indicator

**102. The number of exchange meeting with international cities**

Calculation : Sister City / Friendly City Exchange + Foreign Guests Reception and Visit + International Organization and Conference Participation

**Target 17.16**

| Short-term goal 2021 | Medium-term goal 2025 | Long-term goal 2030 |
|---|---|---|
| 2% | 5% | 8% |

### Indicator

**103. The growth rate of the total number of volunteers from the administration**

Calculation : 2030 number of volunteers–2020 Number of volunteers / 2020 number of volunteers x 100%



TAICHUNG CITY GOVERNMENT

| | |
|---|---|
| Advised by | Taichung City Government, Taichung City Government Sustainable Development and Low-carbon Promoting Office |
| Organized by | Research, Development and Evaluation Commission, Urban Development Bureau, Environmental Protection Bureau, Economic Development Bureau, Water Resources Bureau, Transportation Bureau, Construction Bureau, Health Bureau, Social Affairs Bureau, Education Bureau, Agriculture Bureau, Labor Affairs Bureau, Cultural Affairs Bureau, Information Bureau, Civil Affairs Bureau, Tourism and Travel Bureau, Fire Bureau, Legal Affairs Bureau, Police Department, Secretariat, Land Administration Bureau, Sports Bureau, Local Tax Bureau, Indigenous People Commission, Council for Hakka Affairs |
| Co-organized by | Green Ideas Synergy Inc. |

# TAICHUNG CITY

## VOLUNTARY LOCAL REVIEW

*SUSTAINABLE DEVELOPMENT GOALS*

SUSTAINABLE HAPPINESS / RICH TAICHUNG