



Global Perspective · Taipei Action



2019 Taipei City Voluntary Local Review

Sep. 2019

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Mayor Ko's Preface

In 2015, the United Nations issued three global guidelines related to sustainable development and climate change. Among them, the 17 Sustainable Development Goals (SDGs) are the guiding principles for sustainable development for the next 15 years (to 2030), and the common strategies for promoting sustainable development in the world, replacing the Millennium Development Goals. The Sustainable Development Goals are based on the three major pillars of economy, society and environment, many of which are directly or indirectly related to each other. While emphasizing the promotion of social needs and pursuing the economic growth, it is necessary to incorporate the consideration of environmental protection to allow human society and the nature to continually coexist.

Under the influence of globalization of the modern world, cities often play a key role in the local areas, improving the competitiveness and sustainability of the region. The development of Taipei City lies not in the scale of urban construction, but in inclusiveness, diversity and emphasis on living standard, environmental protection and gender equality. Moreover, Taipei City aims to create a quality life and build the sustainable development foundation of “Engagement of Environmental Regeneration and Resource Circulation”, “Promotion of Social Security and Sharing Society”, and “Smart Growth of Economy and Technology”.

Taipei City follows the guidelines of the UN Sustainable Development Goals, with the vision of “Livable and Sustainable City”, obeying the principles of “From public to private sector”. The public sectors are in the vanguard of demonstrating and then expanding to the private sectors, gradually making Taipei become a friendly, healthy and livable city, and achieving the 2030 Sustainable Development Goals through self-examination. With the theme of “Global Perspective, Taipei Action”, Taipei City illustrates the link between sustainable development results and SDGs. Among the 17 SDGs announced by the United Nations, Taipei City has given priority to seven of them, and has made remarkable progress in SDG 7 (affordable energy), SDG 11 (sustainable cities) and SDG 13 (climate action), including transforming landfills into green energy parks. At the same time, we wish to connect the sustainable chain of the city with the green transportation and Taipei Clean Air Action Plan 2.0, and even take practical actions in improving urban resilience to respond to the climate change by means of effectively implementing policies such as the sponge city, the garden city, and the circular city.

In the future, we will continue to conduct assessment of our progress of implementation of the 2030 Agenda for sustainable development, adjust and revise urban governance strategies. The long-term vision is to hope that the results of sustainable development in Taipei City will continue to be shared internationally, so that Taipei City and our global partners can work together and progress on the path to achieve sustainability.



Mayor of Taipei City.

Wen-je Ko



Photo by Remi Yuan on Unsplash



Executive Summary



Executive Summary

The 2030 Agenda for Sustainable Development, which was adopted at the UN Sustainable Development Summit on September 25, 2015, came into effect on January 1, 2016. The agenda which is comprised of 17 Sustainable Development Goals (SDGs) is further broken down into 169 targets and 232 indicators will serve as a guiding principle for sustainable development for the next 15 years (until 2030).

Taipei City is the capital of Taiwan and has close contacts and exchanges in the fields of international trade, technology, and culture. The sustainable development goals of this city must therefore be brought in sync with international developments. International development trends must be reconciled with local demands to ensure realization of the 17 Sustainable Development Goals in line with the sustainable development strategies of this city. The following seven prioritized promotion goals have been identified through an assessment of the applicability of SDGs at the city level and tracking of development trends in line with sustainable development strategies and strategy map of the city :

1. SDG 3 Ensure healthy lives and promote well-being for all at all ages
2. SDG 6 Ensure availability and sustainable management of water and sanitation for all
3. SDG 7 Ensure access to affordable, reliable, sustainable and modern energy for all
4. SDG 11 Make cities and human settlements inclusive, safe, resilient and sustainable
5. SDG 12 Ensure sustainable consumption and production patterns
6. SDG 13 Take urgent action to combat climate change and its impacts
7. SDG 17 Strengthen the means of implementation and revitalize the global partnership for sustainable development

Promotion strategies and results are described below:

SDG 3

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



This city has been implementing the Healthy City Project in accordance with the World Health Organization (WHO) of the United Nations since 2002 to fulfill its mission of serving its residents and promoting urban innovation and achieve the goal of “Health for All” set by the WHO in 1986. The healthy city and safe community concepts are implemented in six administrative districts respectively with reference to international indicators and the needs

assessment of city residents. As of 2011, the city was fully committed to participation in international organizations. In addition, the 12 administrative districts of the city started to jointly promote the Age-Friendly City concepts in response to the rapidly growing ageing population in 2012.

Community health building has been adopted as a pioneering model for the integration of the three major concepts of healthy city, age-friendliness, and safe community to successfully deal with problems associated with urbanization and population ageing. The initiative which aims to promote the healthy city concept and align with the global agenda is divided into the five dimensions of ecological sustainability, convenience and prosperity, safety and security, friendly culture, and health and vitality.

SDG 6

Ensure availability and sustainable management of water and sanitation for all



Relevant initiatives include the establishment of a safe water resource management system for the whole process from the stable supply of safe tap water to the proper treatment of sewage as well as the enhancement of existing water supply network facilities and monitoring systems. The goal lies in the reduction of water resource losses during the water supply process, the promotion of reclaimed water use and rainwater recycling, and advocacy of a spirit of effective use and water resource circulation.

SDG 7

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

Photovoltaic systems are established and promoted through joint efforts of the public and private sector with a focus on model installations in idle spaces of the city. This includes the installation of PV systems at decommissioned landfill sites which are transformed into green energy eco-parks and public recreation areas. This initiative places equal emphasis on activation of idle landfill sites and development of renewable energy sources. In addition, subsidies are provided as an incentive for the private sector to install more PV systems and gradually increase green energy capacities year by year.

Efficient energy use is the key to sustainable energy. Social housing projects serve as a bellwether for the establishment of smart energy management systems that facilitate analysis and control of power use conditions and enhancement of energy use efficiency. In addition,



an Energy Conservation and Renovation Service Program for underprivileged families in communities has been adopted to maximize energy conservation effects and promote social welfare.



SDG 11

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

Relevant initiatives include the establishment of a fast and convenient public transportation network and improvement of the quality and convenience of mass transit services which indirectly results in better air quality and reduction of environmental burdens. Diversified and intelligent transportation and information systems reduce public transport waiting times. In addition, free and accessible transit services and transportation subsidies are provided to underprivileged groups to give them access to convenient transportation services.

Disaster resilience and environmental sustainability are strengthened to enhance preparedness for natural disasters. This contains the formulation of district disaster management plans in consideration of disaster resilience and environmental sustainability to provide comprehensive planning and guidance for disaster prevention operations and to constantly promote and strengthen disaster risk governance. For the prevention and reduction of damage and losses caused by human-caused disasters, strong emphasis is placed on disaster prevention measures and evacuation drills.

SDG 12

Ensure sustainable consumption and production patterns

Cities are centers of human and economic activity and account for 60~80% of global energy consumption, 70% of global waste generation, and the major contributor of GHG emissions. Obviously, energy and resource circulation have become the key factors for sustainable development, making advancing circular economy crucial for the planning of long-term urban development. Prioritizing economic growth, the city government has therefore taken the initiative in integrating cross-departmental capabilities of the public sector in an effort to foster long-term urban development and create a livable environment for its residents. A Circular City Promotion Program has been adopted to realize circular economy concepts and to implement pragmatic and feasible measures.

The formulation of enforcement guidelines governing the banning of single-use and melamine tableware and implementation of plastic reduction policies is coupled with



educational efforts to increase the willingness of citizens to bring their own shopping bags and tableware. The follow-up introduction of dual-use bags combine shopping bags and city designated garbage bags (a two-in-one strategy) into one and thus helps reduce the amount of plastic bags. The delivery of goods bank services, on the other hand, realizes sustainable consumption. Finally, leftover exchange platforms are promoted in public markets to encourage the donation of overproduced food to underprivileged families on the same day and thereby maximize the benefits of such food surplus.

SDG 13

Take urgent action to combat climate change and its impacts

As a result of a high-level of urban development and the serious impacts of climate change, metropolitan areas all over the world face different risks and challenges of varying degrees associated with their aquatic environments and characterized by water scarcity or overabundance including flooding, heatwaves, torrential rains, and droughts. These extreme weather patterns not only pose a major threat to the lives and property of citizens but also have a negative influence on sustainable urban development. The creation of the sponge city helps effectively regulate the micro-climate of cities and minimize the impact of the urban heat island effect. The promotion of the garden city policy, on the other hand, reinforces food and agriculture education concepts, stimulates public participation, and helps create cities characterized by green health, education, and lifestyles. An effective management of GHG emissions is achieved through the adoption of green transportation, green power, and energy conservation strategies.

SDG 17

Strengthen the means of implementation and revitalize the global partnership for sustainable development



The creation of the Smart City Office enables policy coordination in departmental units, accelerate administrative progress and resource integration. Industry innovation and smart solutions are promoted through joint efforts of the public and private sector. Opportunities for cooperation and exchanges between cities are created through intensified links with international cities and formation of the “GO SMART” smart city alliances.

Abandoning the traditional top-down budgeting approaches, Taipei City Public Participation Committee was created with an aim to improve budget transparency, raise public awareness and increase citizen participation in public policies and affairs through the adoption of participatory budgeting, which provide citizens with a direct role in the government budget decision-making process, instead of the traditional top-down policy approaches.



臺北車站

TAIPEI STATION

車次時刻表 北上 Northbound / Eastbound Departure Time

車次	站名	發車時間	到達時間	車種	車次	站名	發車時間	到達時間	車種
1184	基隆	16:34	48	普快	221	基隆	11:05	48	普快
1182	基隆	16:44	45	普快	2178	基隆	11:34	48	普快
4374	基隆	16:54	45	普快	1182	基隆	11:47	48	普快
4376	基隆	17:04	45	普快	4374	基隆	11:55	48	普快
2114	基隆	17:08	48	普快	4376	基隆	12:05	48	普快
1184	基隆	17:18	48	普快	2114	基隆	12:11	48	普快
1182	基隆	17:28	48	普快	1182	基隆	12:18	48	普快

自動售票機

Tickets Vending Machine

The Path to Sustainability



Photo by Shupin Zeng on Unsplash

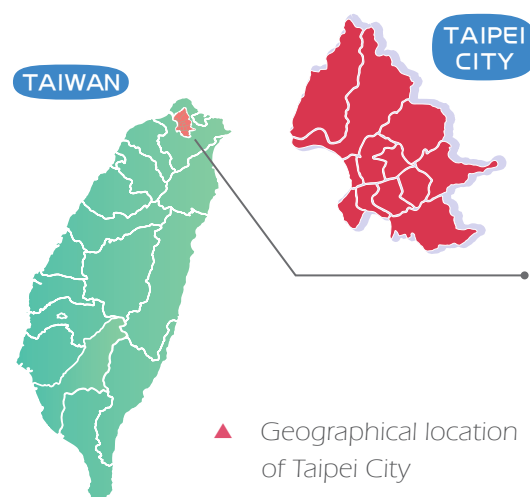


The Path to Sustainability

Taipei City is located in a basin surrounded by mountain ranges in northern Taiwan. The city covers a total area of around 271.8 km² and is divided into 12 administrative districts (As shown at right). It is one of the core metropolitan areas with a high-level of urban development in Taiwan. Taipei City has a population of roughly 2.66 million. It is not the largest city in Taiwan, but it has the highest population density. Its ethnic composition is diverse, including aborigines, Minnan, Hakka, mainlanders, new immigrants, and foreign nationals. It is therefore the epitome of a multicultural society and ethnic integration.

Due to its location near the 25 degrees north latitude, Taipei City has a monsoon-influenced subtropical climate with normal temperatures ranging from 16°C to 30°C. Annual precipitation amounts to 1,600 mm and the plum rain season from May to June tends to bring abundant rainfall. Due to the impact of climate change and global warming, Taipei City has been affected by extreme weather patterns in recent years. Summer temperatures are deeply affected by the City's basin topography and too much concrete construction, which traps the heat and causes the Urban Heat Island Effect (UHIE). Temperatures can exceed 35°C and frequently reach record highs. Short-

duration intense rainfall events are becoming more common and precipitation is extremely unevenly distributed. Climate change therefore poses a serious challenge for sustainable development and governance in the city.



▲ Geographical location of Taipei City

In view of the mounting evidence of climate change, economic considerations are no longer the sole focus of urban development. Effective responses to climate change have turned into a key task of urban governance. Taipei City therefore established a Council for Sustainable Development (hereinafter referred to as “This Council”) in 2004 to strengthen efforts in the fields of environmental protection, social equity, and economic development on the foundation of the global sustainable development framework. This council is

composed of government officials, experts and scholars, NGO and business representatives. It is divided into the following seven functional divisions : livable urban environment, sustainable education, sustainable society, sustainable transportation, energy and ecology, water and land resources, and sustainable development vision (As shown below). Council meetings are convened on a quarterly basis for the periodic adjustment and review of sustainable development related matters. The gradual creation of a friendly, healthy, livable, and sustainable city for following generations is achieved by dedicated performance of duties and joint efforts of the public and private sector.

In 2016, this Council approved a total of 47 sustainable development indicators (22 international and 25 local indicators) guided by the joint vision of a Sustainable and Livable

Taipei to realize various dimensions of livability and sustainability including a visionary and progressive urban development, a rich and diversified urban culture, a fair and just urban society, a safe and comfortable urban life, digital and convenient urban services, and a healthy and charming urban environment. Implementation goals and strategies adapted to local conditions are formulated. Eight strategic themes at the city government level are defined with an equal emphasis on all development dimensions based on annual administrative strategy roadmaps to make constant progress toward urban sustainability. Implementation and linkage with international SDGs are based on these indicators and themes. Finally, concrete action plans encompassing healthy city, sponge city, garden city, circular city, and clean air strategies are formulated and implemented. In addition to top-down approaches, public participation in municipal administration is encouraged through the adoption of “open government” concepts to solicit public opinions and realize the goal of public participation in sustainable development initiatives.



▲ Structure of the Taipei City Council for Sustainable Development





Implementation Process and Review Methods



Implementation Process and Review Methods

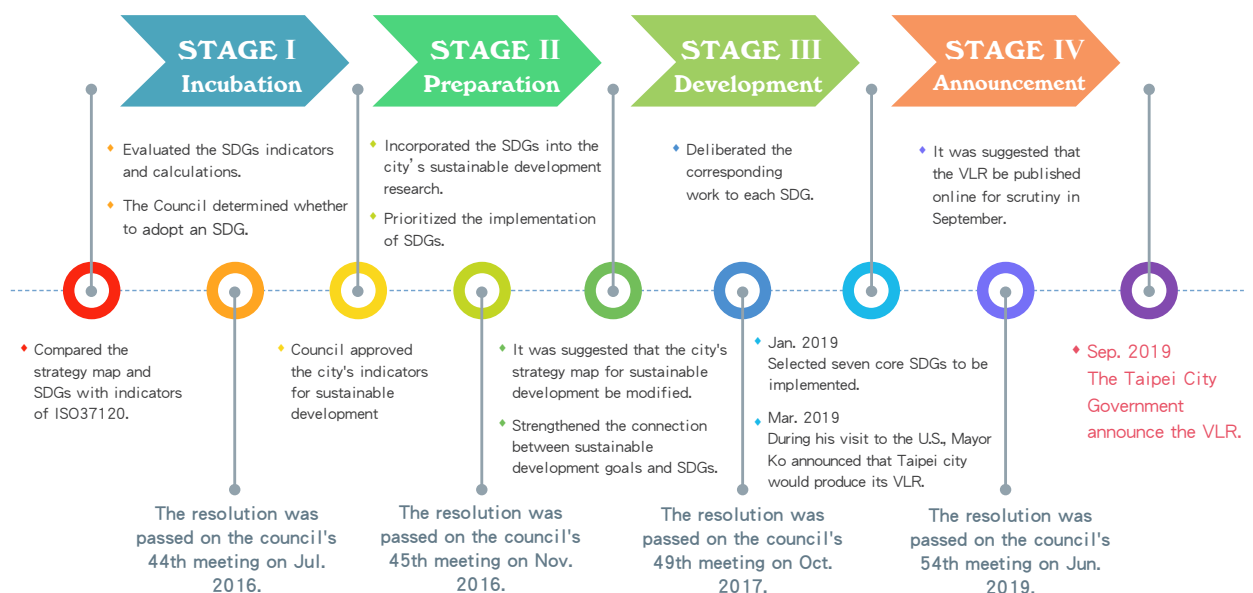
The compilation of the Voluntary Local Review (VLR) report was carried out by the Secretariat of the Council for Sustainable Development - the Department of Environmental Protection, Taipei City Government under supervision of the Council for Sustainable Development. The compilation of these reports was based on the 17 Sustainable Development Goals (SDGs) set by the UN and the existing SDGs and the strategy roadmaps of this City. The implementation process of these reports is shown in detail in the chart below.

[Implementation process]

Stage I - Incubation stage

The compilation of a VLR report was based on a resolution adopted in the 44th session of the Sustainable Development Council in July, 2016. Comparison of existing sustainable development indicators formulated in accordance with the strategy roadmaps of Taipei City with the ISO 37120 indicators of the World Council on City Data (WCCD) and the UN SDG indicators was recommended by the council. It also suggested an in-depth assessment and analysis of all UN Sustainable Development Indicators to determine whether they should be adopted as indicators by this City in the future. Adjustments of the organizational structure of the council were carried out based on the results of this analysis.

▼ Taipei City VLR Report Implementation Process



Stage II - Preparation Stage

The results of the evaluation of the 2015 sustainable development indicators for Taipei City were discussed in the 45th session of the Sustainable Development Council in November, 2016. The council recommended that it be determined whether all 232 indicators of the SDGs are quantitative indicators. It had to be deliberated on how to determine the order of priority of indicators as a reference for the adoption of said indicators by Taipei City. The Secretariat of the Sustainable Development Council therefore conducted a research project to plan sustainable development strategies of this City based on the SDGs and assess the applicability of SDG indicators and the feasibility of integrating existing sustainable development indicators of Taipei City.

The research findings indicated the correlation between the SDGs and Taipei city's development strategic planning, the indicators and action plans of the functional sections of the council, the strategy roadmaps, and Taipei city's other indicators (e.g., healthy city, gender indicators, urban indicators, and urban competitiveness indicators). Since the sustainable development strategies were applied for a period of over 13 years from 2004 to 2016, the researchers recommended that the strategies be amended to strengthen the linkage with the SDGs and facilitate the revision of relevant work contents of the council sections.

An analysis of SDG implementation by international cities shows that SDGs are usually implemented at the national level. There are only few examples of implementation at the city level. In addition, not all SDGs are applicable to the city level. Based on the research findings, it was therefore suggested that this City focus on core SDGs initiatives.

Stage III - Development Stage

Core SDGs for priority promotion were discussed and determined in the 49th session of the Sustainable Development Council in November, 2017. It was further recommended to deliberate corresponding tasks for SDG indicators and propose or revise strategies, visions, goals, and action plans with reference to the Sustainable Development Solutions Network (SDSN) and methods adopted by other international cities on the basis of existing sustainable development goals and strategy roadmaps of Taipei City. This marked the first step toward the composition of a VLR report.

During a state visit to the US in March, 2019, Mayor Ko Wen-je presented relevant progress and achievements of Taipei City in the implementation of sustainable development and the SDGs at a meeting in New York. He also officially announced that Taipei City will follow in the steps of New York City by submitting the VLR report by year's end to make strides toward the goal of creating a livable and sustainable city based on the vision of "Global Perspective, Taipei Action".

Stage IV - Announcement Stage

During the 54th session of the Sustainable Development Council in June, 2019, it was recommended to summit and officially present the completed Taipei City VLR report on the VLR platform this year. The Taipei City VLR report was made public in 2019, and it will be followed by continually revises and updates.

[Review methods]

Over 50% of the global population lives in cities. Urban areas and human settlements will therefore be crucial for the realization of SDGs. A report on how to implement SDGs in cities published by SDSN in 2016 stated that urban SDG will create strong partnerships and bring more resources to cities, Review methods for different layers of the VLR report (as shown in the chart) are introduced below.

