

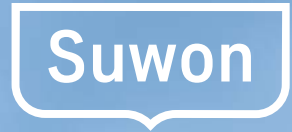


Suwon Sustainable Development Goals and the UN SDGs



Suwon SDGs Action Report in line with UN 2030 Agenda for Sustainable Development

Suwon SDGs Action Report

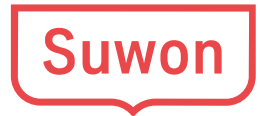


in line with UN 2030 Agenda for Sustainable Development

The Implementation of the UN 2030 Sustainable Development Goals in Suwon 2020



Suwon SDGs Action Report



in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020



Suwon Council for Sustainable Development



Suwon SDGs Action Report

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Development Goals in Suwon 2020

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Think globally, act locally!



The global fight against COVID-19 is ongoing. At the same time, nature is sending us a warning with abnormal climate conditions accompanied by heavy snow, cold waves, heat waves, and typhoons becoming increasingly common. It is undeniable that these are the results of the reckless pursuit of development and growth which we used to consider as absolute values.

The Sustainable Development Goals (SDGs), which was adopted by all United Nations Member States in 2015, emphasizes the growing role of local and regional governments around the world. In response to such a global call, Suwon has made sustainable development as an integral part of its policy in order to contribute to addressing urgent global challenges.

Suwon City has been researching each field of sustainable development since 2015 to apply the value of sustainable development to the lives of citizens while holding various forums to discuss sustainable development issues with citizens and businesses. Furthermore, Suwon City and its citizens took one step further towards a sustainable city as its public and private sectors jointly announced the 'Suwon 2030 Sustainable Development Goals(SDGs)' in 2017 and enacting the 'Basic Ordinance for Sustainable Development of Suwon.'

The Suwon 2030 Sustainable Development Goals consist of 10 goals, 57 targets, and 152 indicators which reflect the local characteris-

tics of the city. Suwon City has been moving towards a more sustainable future by establishing substantial and detailed plans for each target and conducting citizen-led indicator monitoring.

This report shows the footsteps that Suwon, a local government of South Korea, has taken with its citizens, to promote a sustainable co-existence between people and nature. I hope that Suwon's experiences, know-how, and efforts contained in each page of this report will be shared with global citizens through the UN SDGs platform, and hopefully, this report will be a catalyst for gathering the wisdom of local governments all around the world to address the global challenges of sustainable development.

Sustainable development can be achieved only when individual citizens, local governments, and countries all around the world combine their efforts together. I wish everyone to join us in the global efforts towards sustainable development so that the world that our future generations will live in can be more beautiful and prosperous than the world we live in now. Thank you.

June 2021
Yeom Tae-young,
Mayor of Suwon City,
Republic of Korea

Introduction

As Suwon City has been pushing forward with various policies for a sustainable city, the city administration and citizens worked together to adopt 10 Sustainable Development Goals of Suwon considering 17 SDGs of the UN and Suwon's economic, social, and environmental conditions.

The 10 Suwon SDGs are as follows. SDG 1: Responding to Climate Change with Good Energy for All; SDG 2: Healthy and Harmonious Biodiversity; SDG 3: City with Transparent and Clean Water Cycle; SDG 4: Healthy and Sustainable Agriculture and Food; SDG 5: Quality Jobs and Industrial Innovation; SDG 6: Sustainable Consumption and Production; SDG 7: Promoting Happiness through Welfare, Health and Education; SDG 8: Gender Equality and Multicultural Society; SDG 9: Sustainable City and Culture for All; and SDG 10: Promoting Justice, Peace and Harmony through Self-governance.

Each Sustainable Development Goal is comprised of description about its intention, targets, and indicators to facilitate implementation and monitor progress.

'Suwon's Governance and Policy for Sustainable Development' explains major sustainability policies that Suwon City has been pursuing.

'Suwon 2030 Sustainable Development Goal' present the 10 Sustainable Development Goals adopted by Suwon based on the 17 United Nations 2030 Sustainable Development Goals. It explains the contents of localized strategies which considered economical, social, environmental conditions of Suwon

'Conclusions' include the summary of all processes and suggestions for the next step.

Suwon 2030 Sustainable Development Goals



Suwon's Governance and Policy for Sustainable Development

The physical spaces and functions of a city are for citizens who live in the city, and urban policy is to design the spaces and functions for the benefits of people.

Suwon pursues a people-friendly human city.

The city puts 'people' at the centre of all policies and is committed to improving the quality of people's life. Suwon citizens are encouraged to participate in policy planning and work together with other citizens and the local government in their everyday life. This is what Suwon's sustainable development policy is about, while Suwon's sustainability policy can be defined by the two characteristics: 'participatory governance' and 'ecological environment embracing everyday life.'

Suwon believes that the sustainability of the city cannot be guaranteed without direct partici-

pation of citizens. In this regard, the city has been committed to building 'participatory governance' in which citizens directly participate in urban planning, identify issues, execute projects, monitor progress and evaluate overall policies.

Citizens' Group for Urban Policy Planning: To make basic urban plans by citizens' participation

Suwon City established its plan for citizen-led urban planning and began to review measures for its implementation in 2011, and then the city publicly recruited members to form a group of citizens for urban planning in following year. The Citizens' Group for Urban Policy Planning collected important issues among citizens and discussed such issues through a process like the Round Table



Participatory budgeting



Citizens' Group for Urban Planning

Discussion of 300. The results of discussions were documented to set the directions for the basic plans of Suwon and the city actually planned the 2030 Basic Plans of Suwon based on the results.

The Citizens' Group for Urban Policy Planning collects citizens' opinions and holds forums to discuss the city's pending issues, for example, the changes in urban planning regarding the area near Suwon Station. The Citizens' Group for Urban Policy Planning has been operated on a regular basis since the Ordinance on the Establishment and Operation of the Citizens' Group for Urban Policy Planning was enacted in March 2019.

Participatory budgeting: To allow citizens to participate in discovering projects and allocating funds

Suwon City enacted the Ordinance on the Operation of the Residents' Participation Budget System in August 2009 to encourage citizens to directly take part in the budgeting process. The participatory budgeting system started its full-fledged operation in 2011 with the ordinance being revised in December 2010 after the inauguration of the 5th term elected mayor.

The city recruited citizens to participate in the participatory budgeting process in 2011 and formed the Committee on Citizen Participatory Budget System and the Regional Conference to help citizens directly discover issues and propose/select projects.

As of 2020, a budget of 4.9 billion won is provided for 67 projects.





The Committee for Good Urban Governance

The Committee for Good Urban Governance: To evaluate policies and monitor the progress

Suwon enacted the Ordinance on the Establishment and Operation of the Committee for Good Urban Governance in April 2010 to create a venue where experts and citizens from all walks of life communicate with one another, discuss major and pending policy issues, and conduct research/investigation on policy proposals. The Committee for Good Urban Governance conducts annual monitoring and evaluations on major policies and launched the Citizens' Monitoring Group under the Committee in June 2016 to involve citizens in the monitoring of pending policy issues.

In its pursuit for the protection of the natural environment, Suwon believes that nature and life are not opposed to each other and cannot be separated and that they shall coexist in harmony. Based on such belief, the city introduced and has been realizing the concept of eco-mobility that emphasizes pedestrians, public transportation, and low-carbon eco-friendly transportation means. Suwon aims to realize a city where everyone lives in harmony with nature by pursuing 'ecological environment embracing everyday life.'

Ecological green roads of Suwon: To connect urban green space with natural forests and rivers

Suwon, with its environmental vision of 'Su-

won as an environmental capital,' established the Basic Plan for Parks and Green Areas in 2012. Under the plan, the city has gone beyond simply planting or managing trees in parks or green spaces and has been creating ecological green roads to prevent urban infrastructure from interrupting the movement of wild creatures and causing segmentation of wild habitats. In addition, the Suwon Council for Sustainable Development, a governance body, created a vision of 'Sustainable City of Suwon,' and has been drawing up habitat conservation plans while helping various stakeholders such as schools, civic groups, companies, and public institutions have better understanding of species. Especially, the organization selected Suwon's 8 flagship species as an indicator of Suwon's environmental conservation level and has been preserving their habitats. In addition, the organization carried out the project for turning parks located along the streams of Suwon such as Gwanggyo Lake Park, Manseok Park, and Seocho Park into more nature and water friendly parks.

Suwon City also joined the global efforts for pro-

moting biodiversity by signing the 2015 Durban Commitment (at the ICLEI World Congress 2015).

Eco-mobility: To promote low-carbon green transportation system

Suwon City encourages citizens to reduce the use of cars in daily life and use ecological transport modes such as walking and bicycling. In 2013, the 1st EcoMobility World Festival organized by ICLEI, had been held for one month in Suwon's downtown areas that have 1000 residents and are located inside Hwaseong Fortress, UNESCO World Cultural Heritage Site.

To promote environmental conservation through civic engagement and awareness-raising, Suwon City has been carrying out a variety of programs such as restoring streams, creating green pathways, distributing rainwater storage tanks, promoting urban agriculture, supplying eco-friendly school meals, and installing convenience facilities inside parks.



Car-free Street Event

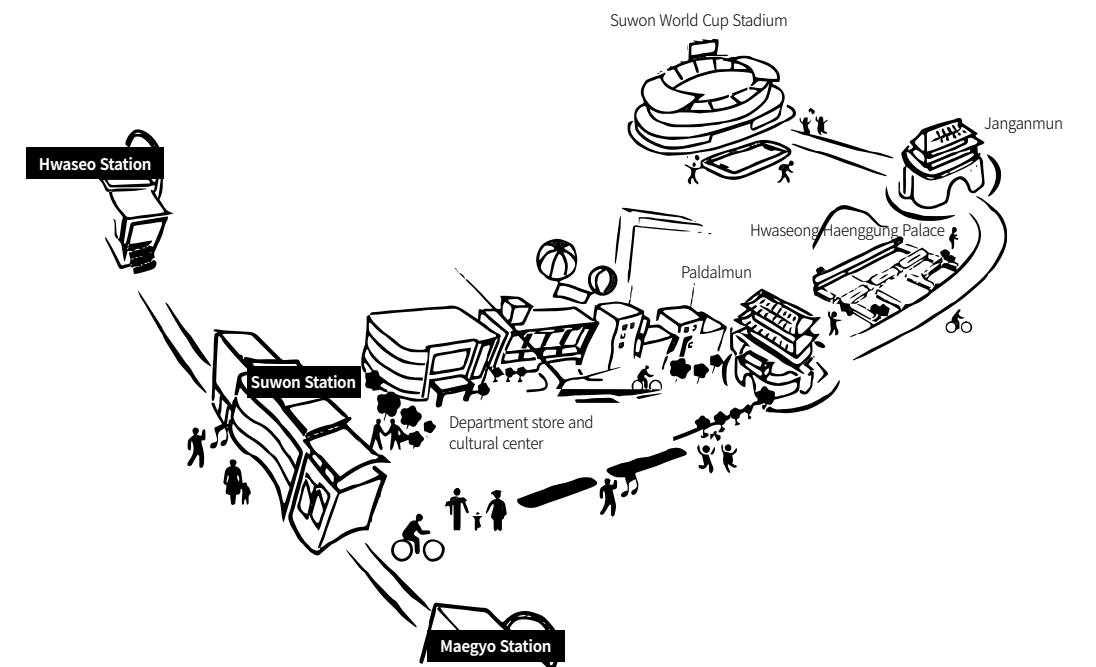


EcoMobility World Festival 2013





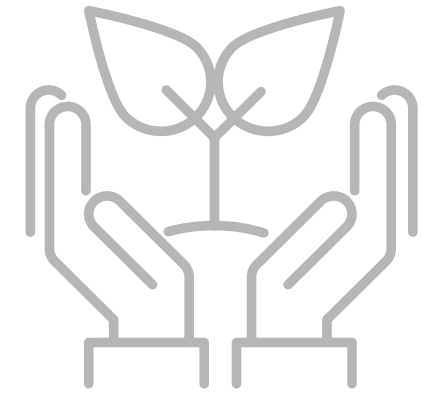
Comprehensive Plan for Park and Green Space / Source: Suwon City



Plan for Promoting Walking and Public Transportation in Original Downtown Areas of Suwon / Source: Suwon Research Institute



Suwon 2030 Sustainable Development Goals



Suwon Adopted its Own 10 SDGs Based on United Nations 17 SDGs

Suwon's 10 SDGs as a localized approach, considering the city's economic, social and environmental conditions, towards achieving 17 SDGs of the UN.

Suwon SDGs	UN SDGs	Major Themes
1 Responding to Climate Change with Good Energy for All 		<ul style="list-style-type: none"> Increasing power self-sufficiency rate and the share of renewable energy Reducing total greenhouse gas emissions Promoting citizen's participation in responding to climate change Promoting green transportation and improving air quality
2 Healthy and Harmonious Biodiversity 		<ul style="list-style-type: none"> Expanding and managing wildlife sanctuaries Promoting biodiversity education and citizens' participation and awareness
3 City with Transparent and Clean Water Cycle 		<ul style="list-style-type: none"> Conserving the river ecosystem Improving water quality Promoting civic participation in water management and raising awareness Saving water resources
4 Responding to Climate Change with Good Energy for All 		<ul style="list-style-type: none"> Establishing a basic food plan and governance Ensuring citizens' right to food Ensuring income of local farmers and producers Policy for citizens' healthy dietary habits
5 Quality Jobs and Industrial Innovation 		<ul style="list-style-type: none"> Creating quality jobs Improving payments and working conditions Creating a good city to start a business Completing the ecosystem for social economy Creating social infrastructure for industrial innovation
6 Sustainable Consumption and Production 		<ul style="list-style-type: none"> Promoting the purchase of green products Reducing consumption and household waste Raising awareness for the circulation of resources

Suwon SDGs	UN SDGs	Major Themes
7 Promoting Citizen's Happiness through Welfare, Health and Education 		<ul style="list-style-type: none"> Promoting happiness with the citizens' happiness index Guaranteeing the minimum living standards and eradicating poverty Promotion of health services and preventive care Improving the scope and quality of universal and mandatory education
8 Gender Equality and Multicultural Society 		<ul style="list-style-type: none"> Improving quality of gender equality education Building better governance for gender equality Ending sexual violence Realizing a multicultural society
9 Sustainable City and Culture for All 		<ul style="list-style-type: none"> Guaranteeing adequate population and residential environment Adequate green spaces and eco-friendly environment Ensuring citizens' access to cultural resources and engaging citizens in cultural activities
10 Promoting Justice, Peace and Harmony through Self-governance 		<ul style="list-style-type: none"> Strengthening self-governance capacity by administrative unit(or <i>dong</i>) Ensuring access to administrative information Inclusive governance for all Promoting integrity at public offices Creating a safe city and promoting democratic citizenship



Source : imagetoday

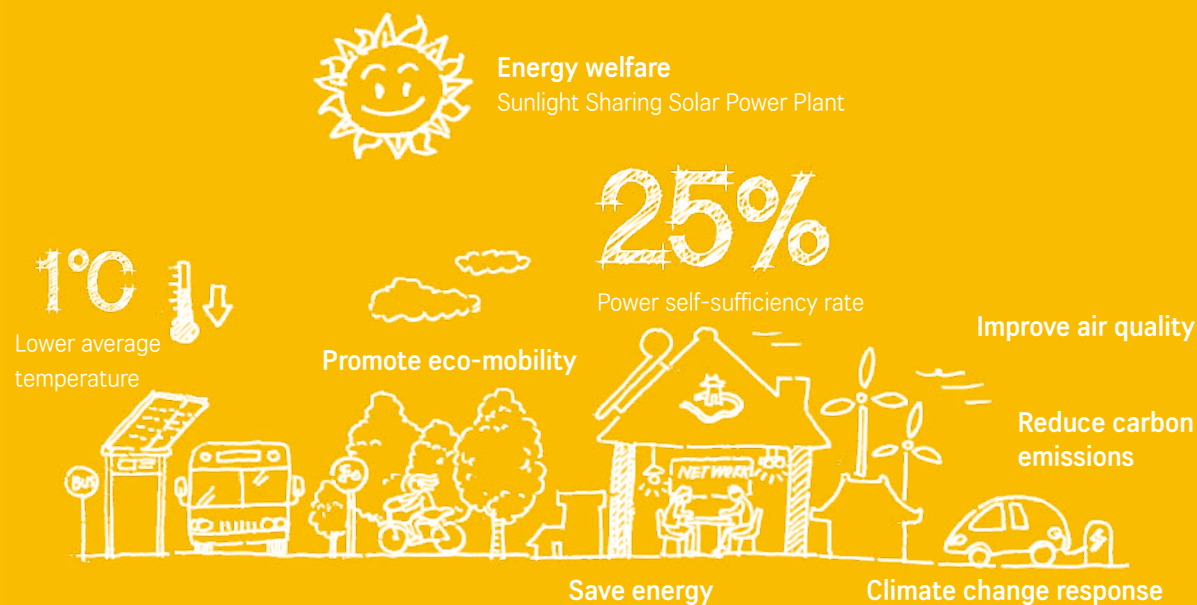


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Suwon SDGs Action Report

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Development Goals in Suwon 2020



Suwon 2030 Sustainable Development Goal 1: Responding to Climate Change with Good Energy for All

The Only Local Government to Manage Greenhouse Gas Inventory in Korea!

Suwon declared itself as an environmental capital for sustainable development and has been implementing the following policies to turn itself into a carbon neutral city since 2010. First, Suwon City has been implementing projects and policies to promote alternative energy. In the public sector, the city has been making its public institutions more energy-efficient and social welfare facilities more energy self-sufficient, promoting the use of new and renewable energy. At the same time, in the private sector, the city has been carrying out projects such as the Shared Sunlight Power Plant construction project, the solar energy housing project, the mini solar power generator project, and the photovoltaic power project using resource recovery facilities. Suwon City has been putting particular emphasis on reducing energy consumption and the management of energy demand. Such efforts are well represented by its green building construction project, the old housing energy-efficient renovation project, and the green curtains project.

Second, Suwon has been turning its transportation system into an eco-friendlier one since its international experiment of 'Car-free Street Event,' held during the EcoMobility World Festival 2013. The city, along with civil society organizations like the Climate Action Network, has been trying to promote green transportation for better air quality by supporting the supply of eco-friendly vehicles, introducing electric buses, and carrying out the fine dust-free village project and bicycle commuting challenges.

Third, Suwon is the only local government in Korea that manages greenhouse gas (GHG) inventory. The city sets annual reduction targets to cut total energy consumption and per capita carbon emissions. Suwon's per capita greenhouse gas emissions has been decreasing, although its population has been increasing since 2005. Such achievements are the results of the city's efforts to promote energy efficiency, eco-friendly transportation and buildings, efficient use of resources and the projects for promoting urban greening and renewable energy.

Forth, Suwon has been striving to strengthen its capacity for climate change adaptation. With the goal of reducing the average temperature of Suwon by 1 degree Celsius by 2030, the city has been mapping heat islands and managing its heat-prone areas. Cooling fog and water spraying are installed on roofs or rooftops of houses located in areas vulnerable to heat waves, and automatic water sprayers using reclaimed rainwater are installed on roads. The city has been working with civil society organizations for 100 million tree planting programs and to expand green spaces and reduce/control traffic volumes on the roads.

Lastly, all of Suwon City's policies and measures to respond to climate change are based on civic participation and public-private governance. Various governance and private organizations such as the Suwon Council for Sustainable Development, the Suwon Commission on Sustainable Development, the Good Governance Committee, and the Climate Action Network are working together to better respond to climate change.



The EcoMobility World Festival 2013 - A wooden doll riding a bicycle installed at Haenggung Square
/ Source: Public Affairs Office of Suwon City



Target 1-1 Energy Independence and Good Energy Production

- Power self-sufficiency rate: By 2030, increase the city's power self-sufficiency rate to 30% by reducing energy consumption and increasing the share of self-produced renewable energy in the city's response to climate change.
- Share of Renewable energy: By 2030, increase the share of renewable energy to 7% by reducing the city's electric power consumption despite its gradual increase (assuming total consumption to be 6 million Wh (MWh) in 2030).

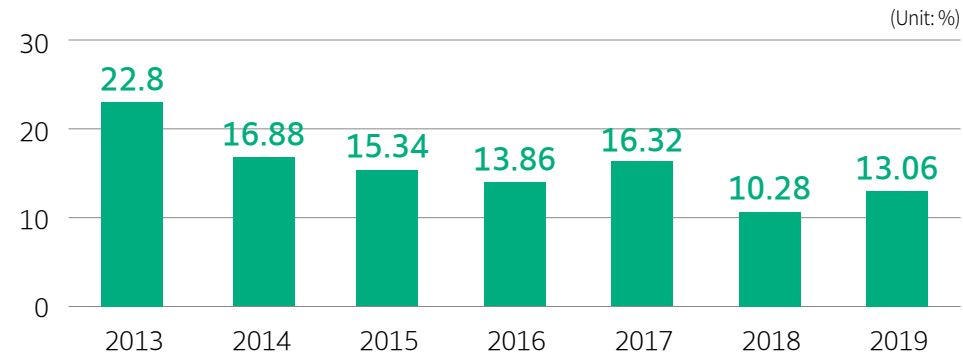
Suwon set the goal to achieve 30% power self-sufficiency rate by 2030 to better cope with climate change. However, its power self-sufficiency rate has been gradually decreasing after reaching the highest level at 22.8% in 2013. To increase its power self-sufficiency rate, the city needs to increase the amount of power generation from renewable energy sources and reduce power consumption in general.

'Cogeneration or combined heat and power (CHP)' accounts for the largest proportion in the renewable energy-based power generation in Suwon. The amount of power generation from renewable forms has been increasing, and the current amount of renewable energy generation is about six times higher than 2010. However, the power self-sufficiency rate has not shown a significant increase while the power consumption has continued to go up due to rapid population growth.

To achieve the power self-sufficiency of 30% by 2030, Suwon needs to increase the amount of renewable energy-based power generation by more than 10 times that of the current level, even assuming that the energy consumption will not be changed from the current level. All in all, the city must dramatically increase the amount of renewable energy-based power generation by using renewable energy sources such as solar and wind power. Given the goal of increasing the share of renewable energy to 7% by 2030 (0.6% as of 2019), the city needs to aggressively increase the use of renewable energy while cutting energy consumption.

However, finding the place to install a separate renewable energy facility can be especially challenging for the city since Suwon is more urbanized compared to other local governments. Therefore, the city needs to further promote renewable energy with by applying stricter standards in redevelopment areas or through urban renewal process. In addition, as citizens must agree and accept such changes, it is important to raise people's awareness of renewable energy policies and power self-sufficiency and provide education on such topics.

Indicator 1-1-1
Suwon's Power Self Sufficiency



Item	Power self sufficiency(%)	Power generation by renewable energy(MWh)	Power generation by CHP(MWh)	Power consumption(MWh)
2013	22.8	19,101	1,126,593	5,024,026
2014	16.88	22,734	829,860	5,051,926
2015	15.34	26,716	768,615	5,185,037
2016	13.86	29,910	715,605	5,378,585
2017	16.32	32,345	861,266	5,476,964
2018	10.28	33,352	553,103	5,705,082
2019	13.06	34,767	707,444	5,681,262

Source: Internal data of Suwon City

Citizen's Sunlight Power Plant Unit 1 installed at Lifelong Learning Centre in Suwon / Source: Suwon City Photo Bank, photolmaged by Kang Je Won



Target 1-2
Energy Saving and Smarter Urban Design

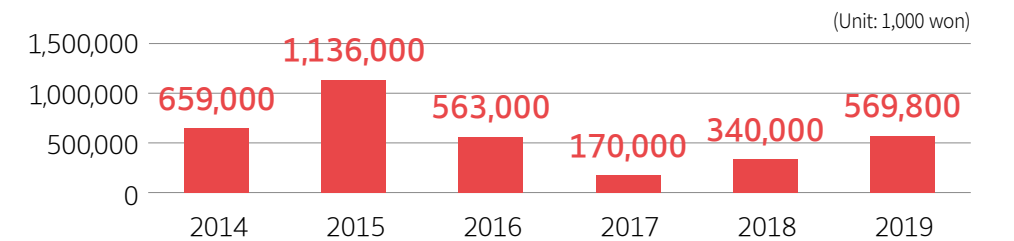
Suwon City's subsidies for energy efficiency projects started with around 660 million won in 2014 and then reached its record high of 1,130 million in 2016. However, it decreased in 2016-2017 and bounced back to around 570 million in 2019.

Given that, the city needs to reduce such fluctuations in subsidies for energy efficiency projects. In addition, in the long run, such projects will require economically more feasible private investment models rather than government subsidies.

So far, Suwon's energy efficiency projects have been focused on replacing traditional lamps with LED types. From now on, the city shall take more macroscopic and diverse approaches from the perspective of 'energy welfare' rather than simply using its subsidies for promoting general energy efficiency. This is especially important considering that most of areas with low energy efficiency are usually left behind in welfare programs.

In addition, more attention shall be paid to newly constructed public and private buildings since these buildings are usually designed to consume a lot of energy while more energy efficient options are available for them. The city shall increase the number of energy-efficient buildings, starting with buildings of public institutions, while helping citizens get more involved in energy-efficient and eco-friendly practices.

Indicator 1-2-2
Amount of Subsidy for Energy Efficiency Projects



Year	Amount of Subsidy for Energy Efficiency Projects
2014	659,000
2015	1,136,000
2016	563,000
2017	170,000
2018	340,000
2019	569,800

Source: Internal data of Suwon City





A Car-free Street Event in Celebration of the Earth Day in front of Suwon City Hall / Source: Suwon City Photo Bank, photolmaged by Kang Jewon

① Yearly distribution of eco-friendly vehicle

The annual number of registered eco-friendly vehicles was 7 before 2014 and then increased to 27 in 2015, 51 in 2016, 169 in 2017, 445 in 2018, and 605 in 2019. As of 2019, there were 1,279 registered eco-friendly vehicles.

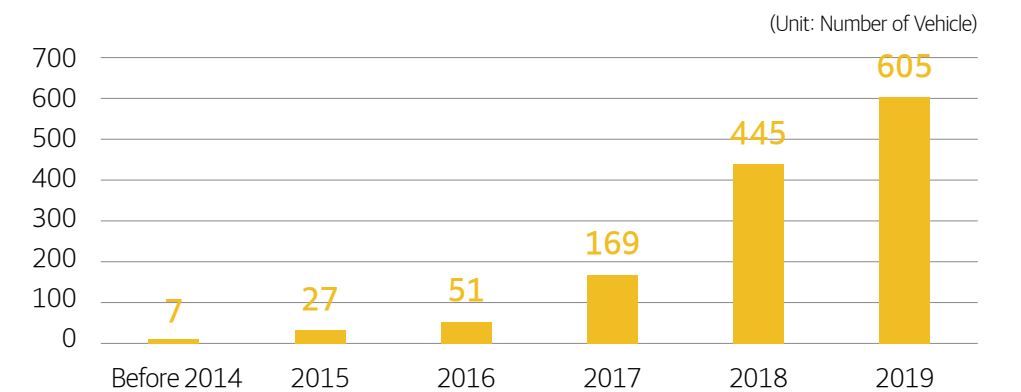
With such exponential growth in the number of registered eco-friendly vehicles, the city already reached the target of 1,000 eco-friendly vehicles, which was set to achieve by 2030. The distribution of eco-friendly vehicles was the most prominent in 2019.

Target 1-4 Promoting Green Transportation and Improving Air Quality

Indicator 1-4-1 Number of Registered Eco-friendly Vehicles

Eco-friendly vehicles include electric passenger cars, electric freight vehicles, micro EVs, electric motorcycles, electric buses/taxis, and hydrogen cars/buses/taxis.

According to the guidelines of the Ministry of Environment, the amounts of subsidies provided by the central government and the Suwon municipal government for the purchase of eco-friendly vehicles are decided depending on the vehicle's fuel economy and mileage. Looking at the maximum available subsidies by EV type, up to 13.2 million won (8.2 million from the central government and 5 million from Suwon City) are provided for the purchase of electric passenger cars; up to 27 million won (18 from the central government and 9 from Suwon) for electric freight vehicles; up to 6.5 million won (4 million from the central government and 2.5 million from Suwon) for micro EVs; up to 32.5 million won (22.5 million from the central government and 10 million from Suwon) for hydrogen vehicles; and up to 57.94 million won for electric vans carrying passengers and 160 million won for large electric buses.



Item	Total	Before 2014	2015	2016	2017	2018	2019	Note
Eco-friendly Vehicles	1,279	7	27	51	169	445	605	Including motorcycles

Source: Internal information of Suwon City

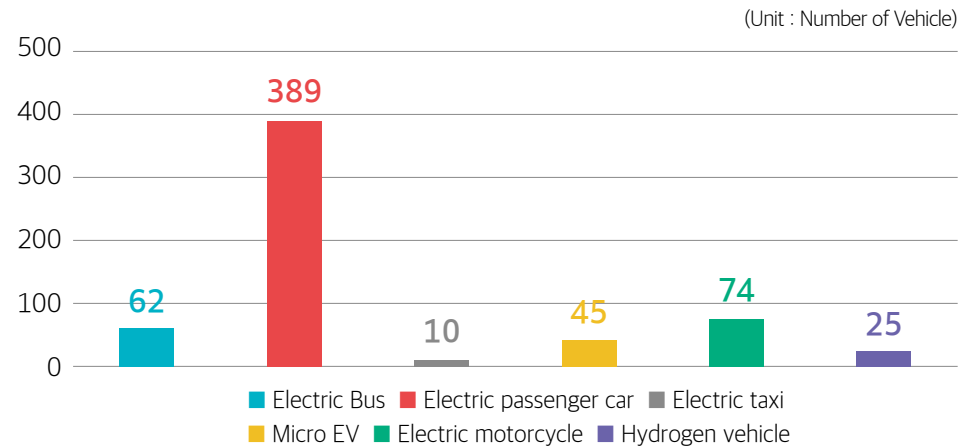


② Distribution of Eco-friendly Vehicles in 2019

A total of 605 electric vehicles, 389 electric passenger cars, 10 electric taxis, 45 micro EVs, 74 electric motorcycles and 25 hydrogen vehicles were registered in 2019.

Various types of EVs were adopted in that year, and the distribution of electric passenger cars and electric buses was particularly prominent. Actually, Suwon adopted and has been operating the largest number of electric buses across the nation.

Particularly, it is very meaningful that 25 hydrogen vehicles were registered in 2019.



Item	Total	Electric Bus	Electric passenger car	Electric taxi	Micro EV	Electric motorcycle	Hydrogen vehicle
Number of vehicles	605	62	389	10	45	74	25

Source: Internal information of Suwon City, 2019

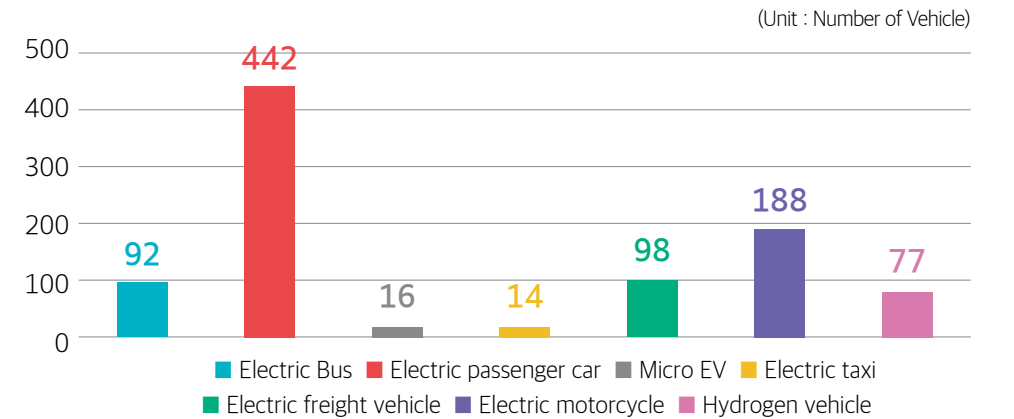
③ Distribution of eco-friendly vehicles in 2020

The distribution of eco-friendly vehicles was quite prominent in 2020. A total of 927 eco-friendly vehicles, more specifically, 92 electric buses, 442 electric passenger cars, 16 micro EVs, 14 electric taxis, 98 electric freight vehicles, 188 electric motorcycles and 77 hydrogen vehicles were distributed in 2020.

Especially, it is encouraging that many of conventional freight vehicles, which is considered as the main cause of road environmental pollution, were replaced by electric models. The gradual electrification of various transportation means shall be further promoted.

In 2020, the electric passenger vehicles, among all electric vehicles, were the most popular, followed by electric motorcycles.

To keep the momentum going, Suwon City plans to open a hydrogen charging station at Dongbu Garage in January 2021. The launch of such hydrogen charging stations is expected to further promote the supply of hydrogen vehicles.



Item	Total	Electric Bus	Electric passenger car	Micro EV	Electric taxi	Electric freight vehicle	Electric motorcycle	Hydrogen vehicle
Number of vehicles	927	92	442	16	14	98	188	77

Source: Internal information of Suwon City, 2020

Status of Railroad in Suwon

After the launch of the Suin Line on September 12, 2020, Suwon currently operates 5 lines: Gyeongbu Line, Line No. 1, Bundang Line, Sinbundang Line, and Suin-Bundang Line. The currently operated railroad lines along with newly planned lines are expected to form a grid-type railroad network, which will allow citizens to travel more conveniently across wider areas. Given that, building a new urban transport system with adjusted bus routes and shared bicycle systems in connection with the railroad network will be particularly important.

Status of Railroad Infrastructure in Suwon

Item	Gyeongbu Line	Line No. 1	Bundang Line	Sinbundang Line	Suin Line	
Section	Seoul-Busan	Seoul-Cheonan	Cheongnyangni-Suwon	Jeongja-Gwanggyo	Suwon-Incheon	
Extension(km)	398.2	103.5 (10.6km in Suwon)	55.3 (8.77km in Suwon)	12.8 (3.1km in Suwon)	52.6 (5.35km in Suwon)	
Number of stations (Number in Suwon)	9(1)	39(4)	34(7)	6(2)	24(3)	
Interval (minutes)	Rush hours	-	3.4	5	4.5~5	7
	Off-peak	-	4.6	7.3	8	15
No. of annual passengers (1,000/year)	42,681	262,467	211,391	20,043	-	



Status of Bus Operation in Suwon

Suwon has a total of 6 bus companies, 88 bus routes, and 1,117 registered buses as of November 2020. Looking at the type of buses, general buses account for the highest proportion with 66 routes, and there are 18 seat-only express bus routes and 2 intercity express bus routes.

Status of Bus Operation in Suwon

(Unit: No. of routes, Number of vehicles)

Name of company	No. of routes	Registered buses	Registered buses	
			Registered buses	No. of routes
Yongnam Express Bus Line	6	54	Intercity express bus	2
Kyungjin Passenger Transportation	5	106	General bus	66
Samkyung Transportation	2	50	Seat-only bus	2
Sungwoo Transportation	6	113	Seat-only express bus	18
Suwon Transportation	40	492	Total	88
Yongnam Express	29	302		
Total	88	1,117		

Source: Information on the status of bus routes by Gyeonggi Province (Nov 1, 2020)

Status of bicycle roads in Suwon

The total length of bicycle roads in Suwon city was 322.7km in 2018, and shared-use paths for cyclists and pedestrians accounted for 86% of all bicycle roads in Gyeonggi Province and 92% of all bicycle roads in Suwon.

Overall, the proportion of shared-use paths was significantly higher, while the proportion of exclusive bikeways was relatively low in Suwon compared to the entire Gyeonggi Province.

The shared-use paths for cyclists and pedestrians are classified into two types: segregated types and non-segregated types, however, strictly speaking, non-segregated paths cannot function as bicycle paths. In this regard, more exclusive bikeways shall be installed in addition to riding facilities given the importance of safe cycling environment in increasing the share of bicycle.

Status of Bike Infrastructure in Suwon

Type of Bikeways	Gyeonggi-do		Suwon	
	Extension(km)	Share(%)	Extension(km)	Share(%)
Exclusive bikeway	446	9	5.9	2
Shared-use path	4,285	84	297.7	92
Bicycle highway	265	5	19.1	6
Total	4,996	100	322.7	100

Source : Gyeonggi Transportation Information Center, 2018

Status of Bike Infrastructure in Suwon

(Unit: Persons)

Hours	Weekday				Sum	Weekend				Sum
	Bike only		Bike-transit			Bike only		Bike-transit		
04~05	1,001	95%	48	5%	1,049	818	95%	39	5%	857
05~06	10,263	84%	1,884	16%	12,147	7,029	83%	1,403	17%	8,432
06~07	23,845	81%	5,440	19%	29,285	10,308	75%	3,393	25%	13,701
07~08	48,654	81%	11,357	19%	60,011	15,818	77%	4,709	23%	20,527
08~09	58,212	75%	19,141	25%	77,353	24,279	75%	8,287	25%	32,566
09~10	33,262	74%	11,801	26%	45,063	26,659	76%	8,393	24%	35,052
10~11	24,658	74%	8,541	26%	33,199	25,447	76%	7,865	24%	33,312
11~12	24,539	75%	8,174	25%	32,713	29,195	77%	8,647	23%	37,842
12~13	27,051	75%	8,800	25%	35,851	33,778	77%	9,955	23%	43,733
13~14	28,498	75%	9,612	25%	38,110	31,204	76%	9,788	24%	40,992
14~15	27,319	75%	8,888	25%	36,207	28,823	76%	9,024	24%	37,847
15~16	31,513	75%	10,585	25%	42,098	28,965	76%	9,132	24%	38,097
16~17	37,862	75%	12,822	25%	50,684	30,202	77%	9,264	23%	39,466
17~18	44,317	75%	14,876	25%	59,193	30,364	75%	9,901	25%	40,265
18~19	47,629	70%	20,471	30%	68,100	29,459	74%	10,371	26%	39,830
19~20	32,693	60%	21,827	40%	54,520	23,782	74%	8,441	26%	32,223
20~21	25,597	66%	13,369	34%	38,966	22,197	75%	7,229	25%	29,426
21~22	23,427	67%	11,738	33%	35,165	19,319	70%	8,394	30%	27,713
22~23	19,455	65%	10,503	35%	29,958	17,294	67%	8,488	33%	25,782
23~24	8,565	59%	6,054	41%	14,619	8,712	62%	5,335	38%	14,047
00~01	1,849	52%	1,707	48%	3,556	2,473	60%	1,644	40%	4,117
01~02	351	68%	165	32%	516	272	75%	93	25%	365
02~03	97	80%	24	20%	121	70	88%	10	13%	80
03~04	26	100%	0	0%	26	1	100%	0	0%	1

Source: Gyeonggi Transportation Information Center, totals as of June 2020

Status of Bicycle Infrastructure in Suwon

(Unit: Persons)

Hours	Weekday			Weekend		
	2020	2019	Decline(%)	2020	2019	Decline(%)
Sum	798,510	1,041,501	-23%	596,273	826,911	-28%
04~05	1,049	988	6%	857	896	-4%
05~06	12,147	13,894	-13%	8,432	10,794	-22%
06~07	29,285	35,859	-18%	13,701	19,386	-29%
07~08	60,011	77,061	-22%	20,527	27,981	-27%
08~09	77,353	103,108	-25%	32,566	45,097	-28%
09~10	45,063	65,044	-31%	35,052	50,389	-30%
10~11	33,199	45,529	-27%	33,312	46,895	-29%
11~12	32,713	43,973	-26%	37,842	51,799	-27%
12~13	35,851	46,838	-23%	43,733	59,225	-26%

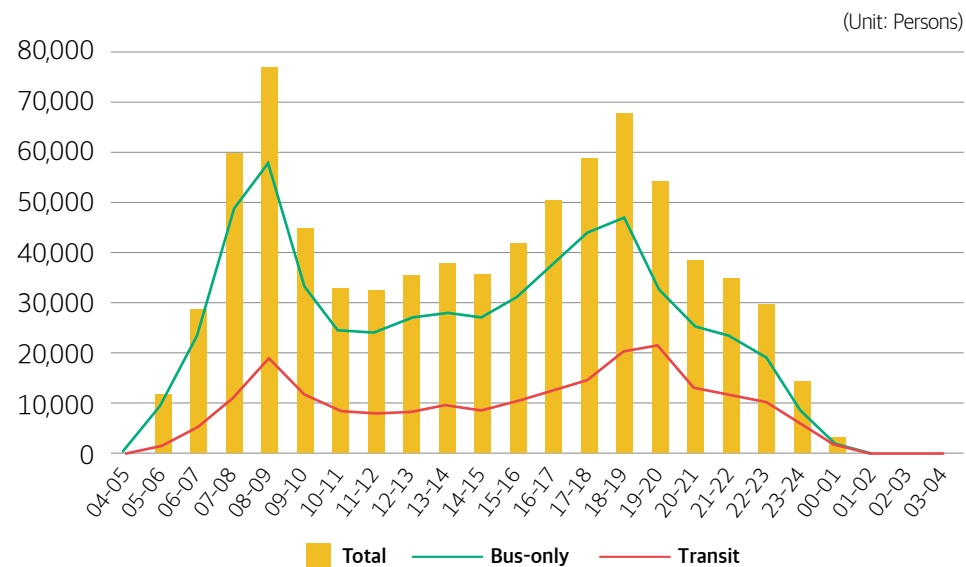


Hours	Weekday			Weekend		
	2020	2019	Decline(%)	2020	2019	Decline(%)
13~14	38,110	48,196	-21%	40,992	56,306	-27%
14~15	36,207	46,017	-21%	37,847	52,616	-28%
15~16	42,098	56,846	-26%	38,097	52,876	-28%
16~17	50,684	65,762	-23%	39,466	54,915	-28%
17~18	59,193	79,535	-26%	40,265	58,175	-31%
18~19	68,100	83,957	-19%	39,830	55,190	-28%
19~20	54,520	67,840	-20%	32,223	45,786	-30%
20~21	38,966	49,928	-22%	29,426	38,898	-24%
21~22	35,165	44,794	-21%	27,713	38,929	-29%
22~23	29,958	41,202	-27%	25,782	35,274	-27%
23~24	14,619	19,551	-25%	14,047	19,162	-27%
00~01	3,556	4,824	-26%	4,117	5,712	-28%
01~02	516	682	-24%	365	542	-33%
02~03	121	73	66%	80	68	18%
03~04	26	0	-	1	0	-

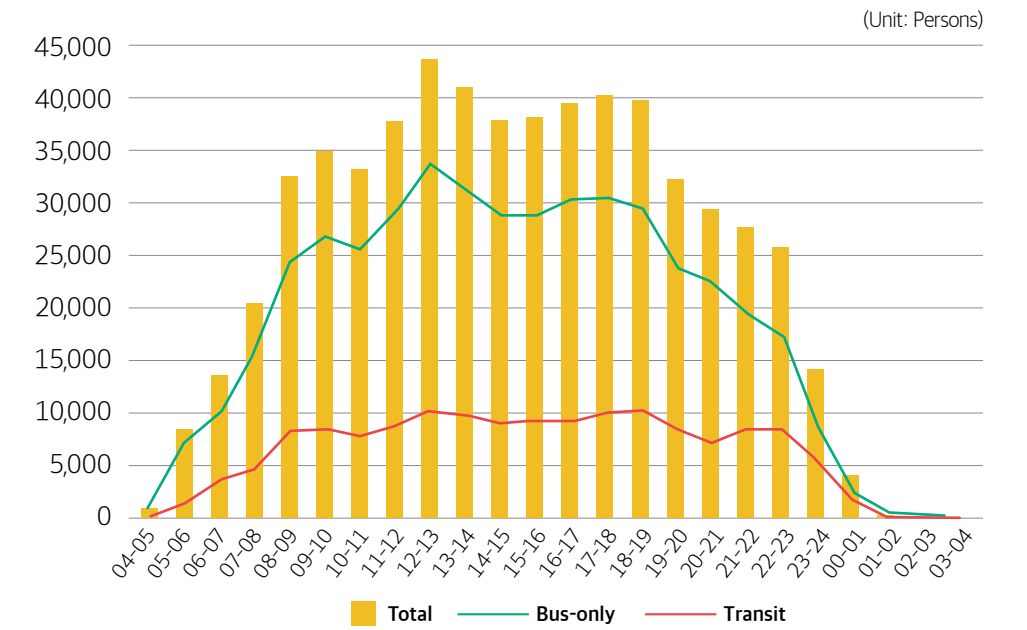
Source: The decline rate in the year-over-year comparison between June 2020 and June 2019 by Gyeonggi Transportation Information Center as of June 2020

Bus traffic in Suwon (as of June 2020)

Bus Traffic Volume in Suwon (on weekdays)

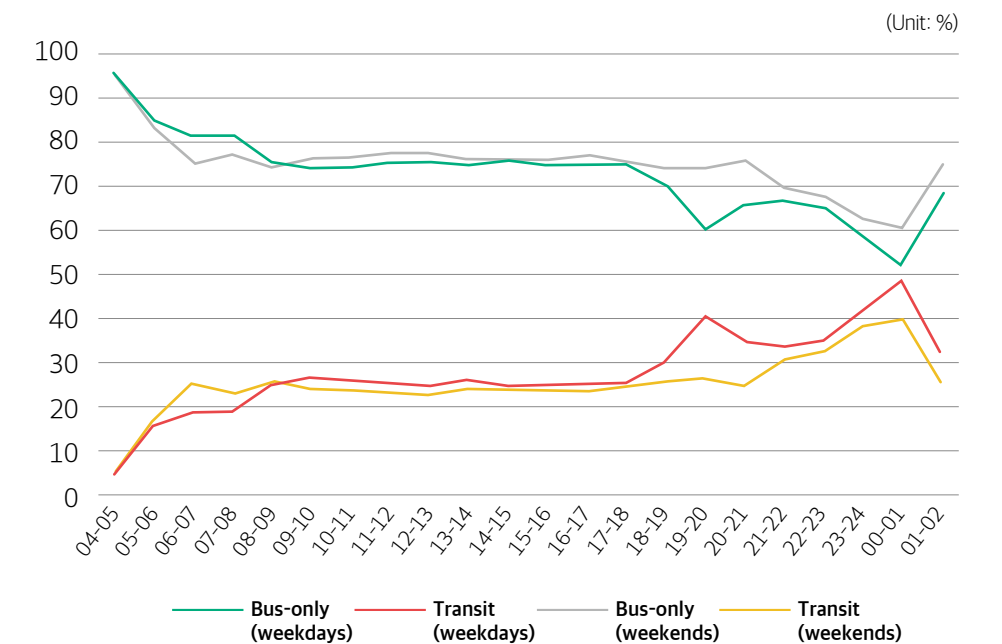


Bus Traffic Volume in Suwon (on weekends)



During weekdays, bus traffic peaks at 8-9 am and 6-7 pm, and during evening rush hours, bus-only traffic volume peak at 6 pm, while the volume of transit trips peaks at 7 pm. The bus traffic on the weekend is shaped like an upside-down U and the volume peaked between noon (12 pm) and 1 pm.

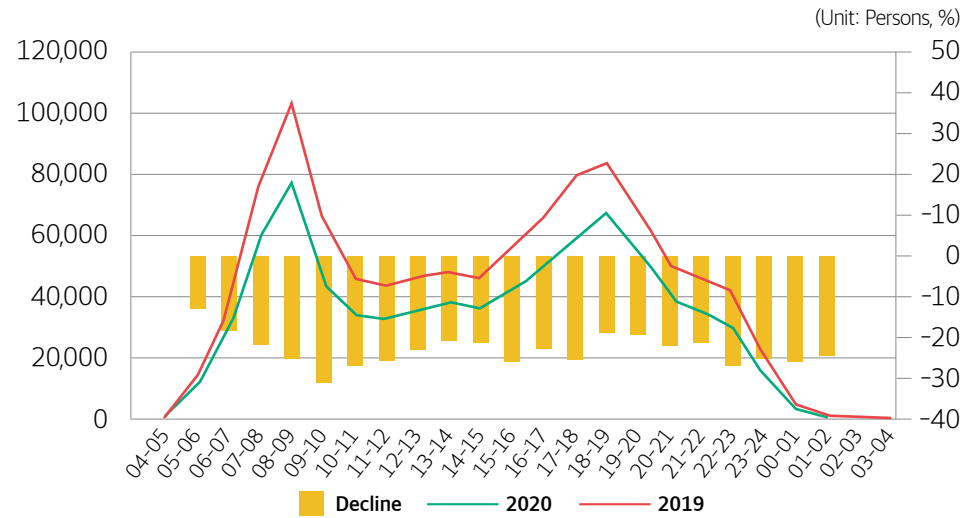
Bus Traffic Volume in Suwon (Transit)



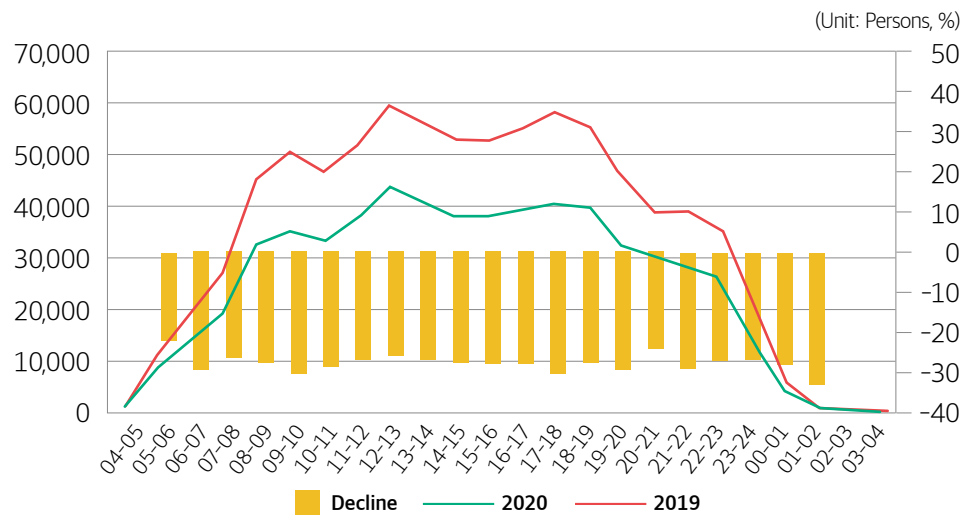
Transit traffic is relatively high in the afternoon and the volume of multi-modal transit traffic is estimated to peak on weekday afternoons. The travel patterns may change during morning/evening rush hours, depending on the levels of congestion, travel time, and convenience of transport modes.



Bus Traffic in Suwon Affected by COVID-19 (Compared with June 2019)



Bus Traffic in Suwon Affected by COVID-19 (on weekdays)



Bus Traffic in Suwon Affected by COVID-19 (on weekends)

Decline in Suwon's Bus Traffic Volume Affected by COVID-19



During weekdays, the bus traffic volume decreased by 23% and the gap is bigger in rush hours.

The volume of weekend bus traffic decreased by 28% and the levels of decrease are similar over different times of the day.

Regarding the characteristics of the decline, the total bus traffic volume on weekdays and weekends reduced by 25.3%, with a sharp decrease shown at 9 am on weekdays and 9 am and 6 pm on weekends. The traffic volume at 9 am on weekdays is interpreted as the maximum controllable volume given the characteristics of rush hours.

Analysis of characteristics of traffic in Suwon

① Share of transportation modes

- The share of personal cars in the total transport modes is 51.6% in Gyeonggi Province and 47.6% in Suwon, and the share of buses is 29.3% in Gyeonggi Province and 34.8% in Suwon. While still personal vehicles take up the largest proportion in both Gyeonggi Province and Suwon, Suwon has a lower proportion of passenger cars and higher proportion of buses compared to Gyeonggi Province, which suggests that Suwon is more urbanized than other cities and counties of Gyeonggi Province and has a relatively large number of bus routes with higher share of buses.

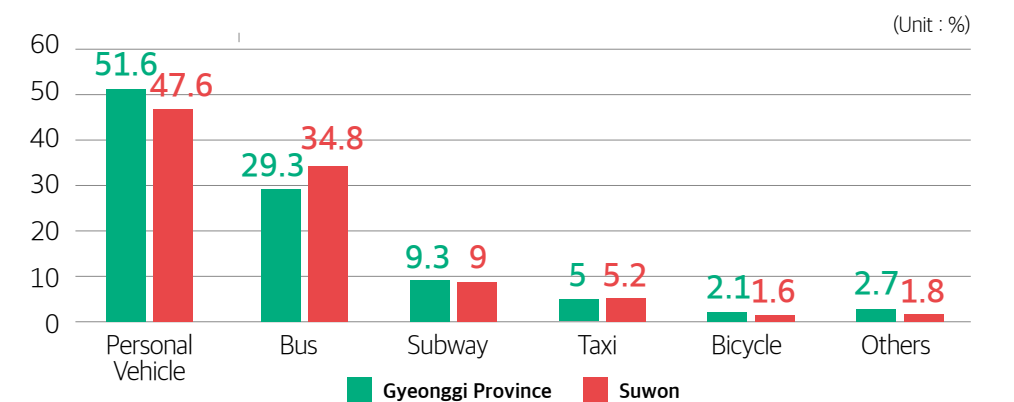
- As for the 4 districts (or gu) of Suwon, the percentage of bus use is the highest in Paldal-gu, recording 41.3%, followed by 38.3% in Jangan-gu, 31% in Yeongtong-gu, and 29.4% in Gwon-seon-gu.

- The reason can be found in Paldal-gu's well-developed bus routes connected from the city center to the Suwon Station.

- As for bicycle, its share is lower in Suwon as bicycle accounts for 1.6% of the total transportation means in Suwon and 2.1% in Gyeonggi Province. However, Suwon citizens have become more aware of the importance of eco-friendly transport since EcoMobility World Festival 2013. According to the results of data analysis, the adoption of the shared bicycle system contributed to promoting the use of bicycles to some extent but failed to bring a dramatic increase in the share of bicycles.

Indicator 1-4-2

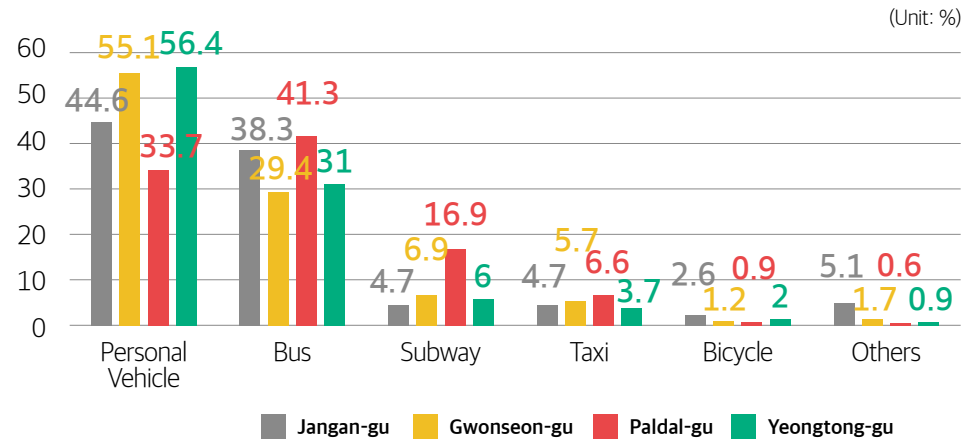
Share of Public Transportation in the Total Transport Modes(%)



Share of Transportation Means in Gyeonggi Province and Suwon(2016)



Share of Transportation Means in Suwon by District (or gu)(2016)



Share of Transportation Means in Gyeonggi Province and Suwon

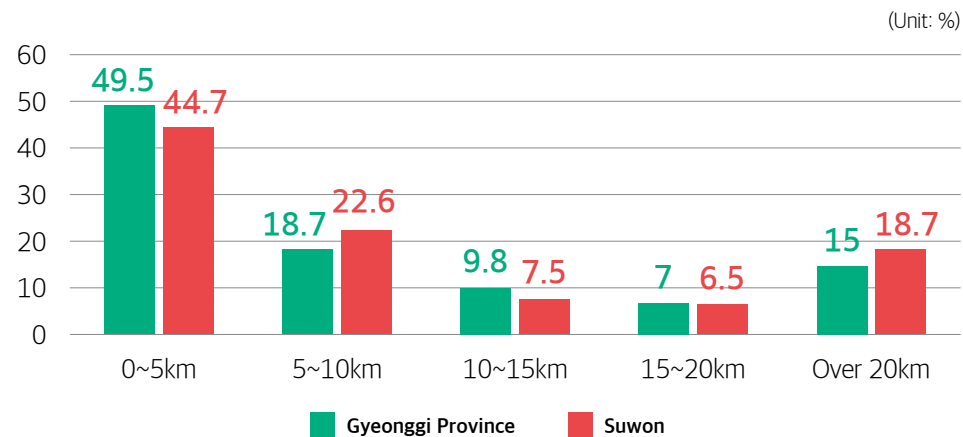
	Personal vehicle	Bus	Subway	Taxi	Bicycle	Others
Gyeonggi-do	51.6	29.3	9.3	5	2.1	2.7
Suwon	47.6	34.8	9	5.2	1.6	1.8
Jangan-gu	44.6	38.3	4.7	4.7	2.6	5.1
Gwonseon-gu	55.1	29.4	6.9	5.7	1.2	1.7
Paldal-gu	33.7	41.3	16.9	6.6	0.9	0.6
Yeongtong-gu	56.4	31	6	3.7	2	0.9

Source: Gyeonggi Transportation Information Center, 2016

② Characteristics by travel distance (for commuting)

- In both Gyeonggi-do and Suwon, short-distance trips ranging between 0km and 5km are the most common, recording 49.5% and 44.7% of all trips. Long-distance trips are more common in Suwon than Gyeonggi-do as 20-km-plus long distance trips account for 18.7% of all trips in Suwon while they account for 15% in Gyeonggi Province.
- The share of commutes with the traveling distance of 10km or less is high in both Gyeonggi-do and Suwon, recording 68.4% and 67.3% respectively.

Trips by Travel Distance (for Commuting)



Region	0~5km	5~10km	10~15km	15~20km	Over 20km
Gyeonggi-do	49.5	18.7	9.8	7	15
Suwon	44.7	22.6	7.5	6.5	18.7

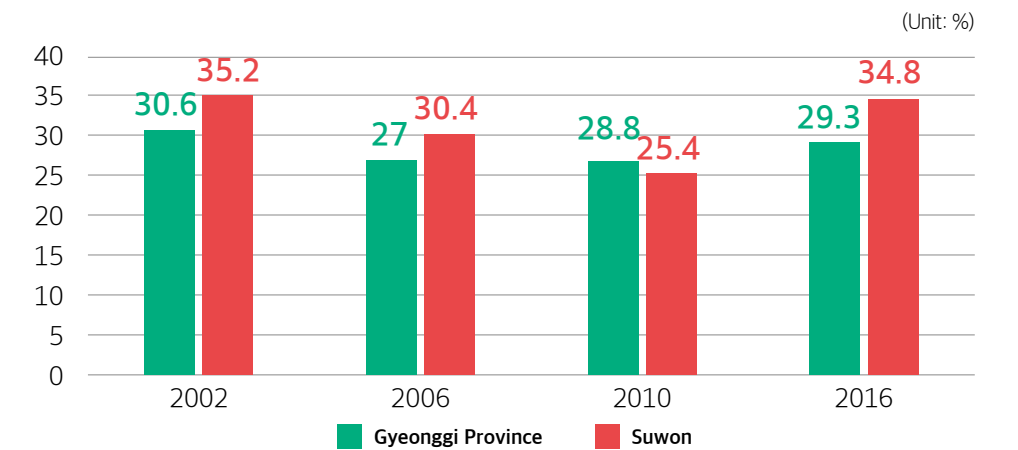
Source: Gyeonggi Transportation Information Center, 2016

③ Share of buses

- In the case of Gyeonggi-do, the share of buses decreased from 30.6% in 2002 to 27% in 2006, increased slightly in 2010, and then showed a modest increase in 2016. As for Suwon, its share of buses decreased from 35.2% in 2002 to 30.4% in 2006 and 25.4% in 2010, and then it went up to 34.8% in 2016.
- As for the 4 districts of Suwon, the share of buses was the highest in Gwonseon-gu, recording 39.7%, followed by 36.1% in Jangan-gu and 33.2% in Paldal-gu in 2002. There is no data about Yeongtong-gu because the relevant data was formed before Yeongtong area (or dong) was promoted to a district(or gu). In 2006, the share of buses was the highest in Paldal-gu, recording 35.9%, followed by 31.4% in Yeongtong-gu, 29% in Gwonseon-gu, and 28.3% in Jan-

- gan-gu. In 2010, Paldal-gu recorded 40.7% followed by 34.9% in Jangan-gu, 31.5% in Gwonseon-gu, and 30.2% in Yeongtong-gu. In 2016, the share of buses was the highest in Paldal-gu at 41.3%, followed by 38.3% in Jangan-gu, 31% in Yeongtong-gu, 29.4% in Gwonseon-gu.
- In general, the share of buses was higher in Suwon compared to that of Gyeonggi-do, while Paldal-gu has the highest share of buses among Suwon's districts. It is because Paldal-gu is located in the city center and has relatively many and easily accessible transportation routes.
- The share of buses in Suwon has been increasing, and the planned grid-type railroad network, along with new subway lines, is expected to further raise the share of public transportation means such as buses and subways.

Share of Buses in Gyeonggi Province and Suwon



Region	2002	2006	2010	2016
Gyeonggi Province	30.6	27	28.8	29.3
Suwon City	35.2	30.4	25.4	34.8
Jangan-gu	36.1	28.3	34.9	38.3
Gwonseon-gu	39.7	29	31.5	29.4
Paldal-gu	33.2	35.9	40.7	41.3
Yeongtong-gu	-	31.4	30.2	31

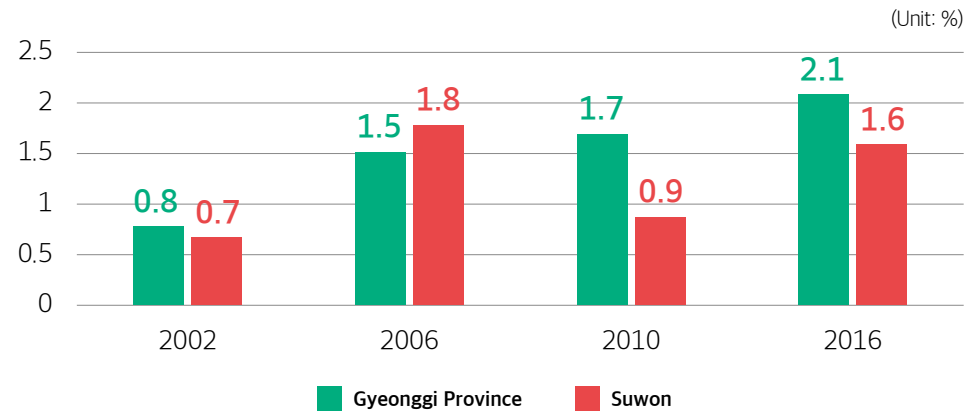
Source: Gyeonggi Transportation Information Center, 2016



④ Share of Bicycles

- The share of bicycles in Gyeonggi-do has been steadily increasing, from 0.8% in 2002 and 1.5% in 2006 to 1.7% in 2010 and 2.1% in 2016. In Suwon, its share increased from 0.7% in 2002 to 1.8% in 2006, decreased to 0.9% in 2010, and then picked up to 1.6% in 2016.
- The share of bicycles is relatively higher in Jangan-gu than other districts in Suwon and the lowest in Paldal-gu. The well-established bike infrastructure around apartment complexes of Jangan-gu seems to have contributed to such results while Paldal-gu, as an old downtown area, lacks in such infrastructure.
- As of 2016, the share of bicycles was higher in Gyeonggi-do than that of Suwon, while the share of bikes was the highest in Jangan-gu among Suwon's districts.

Share of Bicycles in Gyeonggi-do and Suwon



Region	2002	2006	2010	2016
Gyeonggi Province	0.8	1.5	1.7	2.1
Suwon City	0.7	1.8	0.9	1.6
Jangan-gu	0.6	2.3	1.9	2.6
Gwonseon-gu	0.6	1.8	1.6	1.2
Paldal-gu	0.7	1.5	0.9	0.9
Yeongtong-gu	-	1.8	1.6	2

Source: Gyeonggi Transportation Information Center, 2016



Electric Bus in Suwon / Source: Suwon Photo Bank photographed by Gang Je Won, Suwon Council for Sustainable Development



Target 1-5 Reducing carbon emissions

Suwon City is to reduce the total greenhouse gas(GHG) emissions to 4.37 million tons, which is 75% of the 2005 level, by 2030. As the South Korean government aims to reach “net-zero” greenhouse gas emissions by 2050, the city needs more tangible reduction approaches based on systematic analysis on greenhouse gas emissions.

Suwon’s GHG emissions recorded about 5.7 million tons in 2010 and then the total emissions had been on the general decline until 2015 when it started to pick up again. The volume reached 5.8 million tons as of 2018. If such trends persist, the city will not be able to achieve its 2030 target towards net-zero, so active policy interventions and big changes are required to significantly cut GHG emissions.

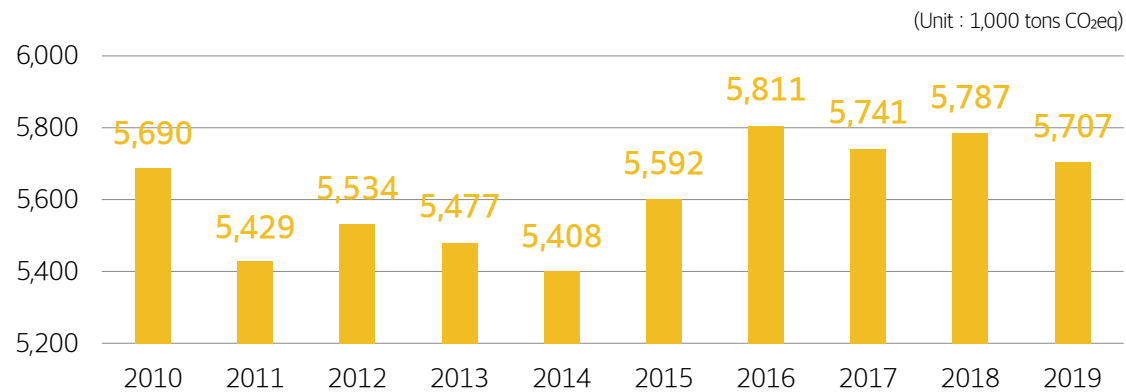
What is worth considering would be applying higher standards on GHG emissions for newly developed areas (e.g., areas for redevelopment or reconstruction), and 'climate change response' shall be put before ‘convenience’ and 'efficiency' in the transportation sector and industries. Also, citizens are required to recognize that what they enjoy now shall not be taken for granted and take part in the efforts to cut green house gas emissions.

Still, it is encouraging to see the reduction in the per capita greenhouse gas emissions compared to 2010. This gives us hope that it will be possible for Suwon to drastically reduce the total amount of greenhouse gas emissions by increasing pace of emission reduction.

Representatives of Suwon City and Other Local Governments Declaring a Climate Change Emergency
/ Source: Department of Climate and Atmosphere of Suwon City

Indicator 1-5-1

Total GHG Emissions in Suwon (1,000 tons CO₂eq)



Year	GHG emissions in Suwon
2010	5,690
2011	5,429
2012	5,534
2013	5,477
2014	5,408

Year	GHG emissions in Suwon
2015	5,592
2016	5,811
2017	5,741
2018	5,787
2019	5,707

Source: Internal data of Suwon City





The Suwon Climate Action Network, Composed of Civic Groups
/ Source: Suwon Climate Action Network

Target 1-7 Promoting Citizens' Participation in the Response to Climate Change

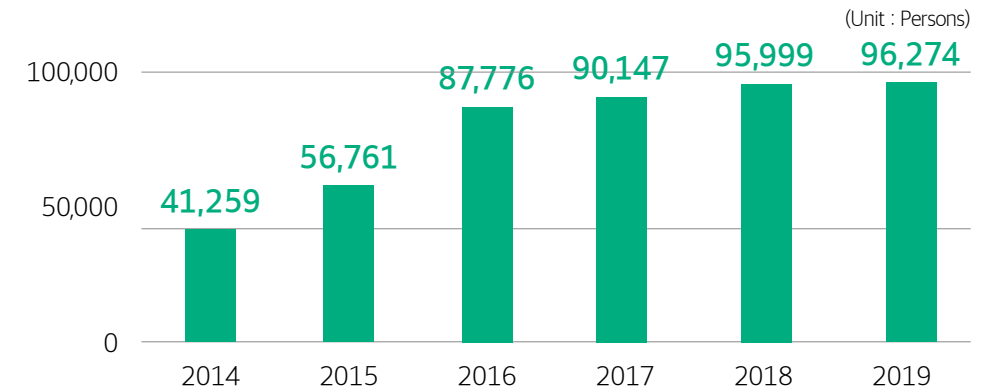
Suwon aims to increase the number of organizations participating in climate action up to 30 by 2030 to promote citizens' participation in climate change response. The Suwon Climate Action Network was established in 2017 with 10 organizations and the number of participating organizations increased to 15 in 2020.

The Suwon Climate Action Network is a group which is voluntarily formed by organizations and citizens to better respond to climate change. They carry out campaigns, educational programs, and activities to raise citizens' awareness of climate change. The Suwon Climate Action Network and 100 citizens have been creating the 'Heat Map of Suwon' since

2018, while such efforts influenced the entire Seoul metropolitan area and became the benchmark for many other cities and counties.

The Suwon Climate Action Network needs to double the number of its member organizations over the next decade to contribute to achieving the goal of increasing the number of organizations participating in climate action by 2030. To that end, the Suwon Climate Action Network is required to work together with other small groups involved in the response to climate change. The group also needs to strengthen activities to get citizens more involved for effective response to climate change in addition to increasing the number of organizations.

Indicator 1-7-2
Number of Participants in Climate Change Education Centers



Year	Number of participants in educational programs on climate change
2014	41,259
2015	56,761
2016	87,776
2017	90,147
2018	95,999
2019	96,274

Source: Internal data of Suwon City

Suwon set the goal of getting 150,000 citizens to receive education on climate change every year. While such efforts have been mainly led by the Suwon Climate Change Education Center, the number of participants rose to 96,000 in 2019, a significant increase from the initial number of 41,000 in 2014.

It means that about 8% of Suwon's total population (about 1.25 million people) received education in 2019 alone, and the number is expected to rise to 12%.

Given multiple environmental education institutions located in the city, such as Chilbo Eco Center and Gwanggyo Eco Center, the city can use such institutions to further raise public awareness of the environment and climate change. As the city was designated as an "Environmental Education City" by the state, the city needs to further promote education to help citizens better respond to climate change.



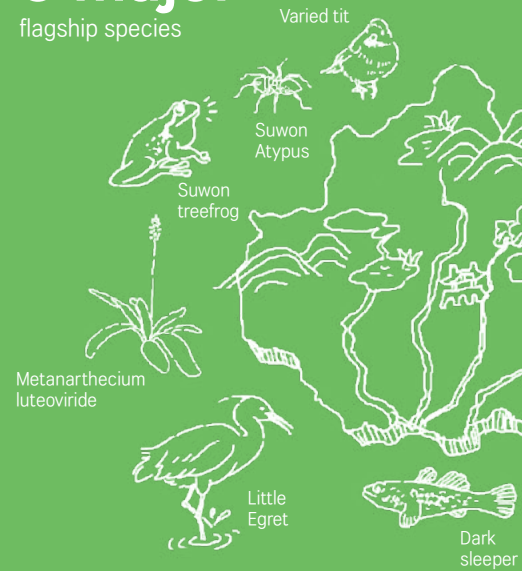
02

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020

Villages with
8 major
flagship species



Citizens' participation in habitat
conservation activities



Promoting public awareness
for biodiversity



8.5m²

Per capita urban forest area

Expansion Mangement
Of Ecological Conservation Areas



Suwon 2030 Sustainable Development Goal 2: Healthy and Harmonious Biodiversity

Civil Society of Suwon Selected 8 Flagship Species to Pro- mote Biodiversity!

Suwon City adopted 'Healthy and Harmonious Biodiversity' as one of its SDGs. The city has Mt. Gwanggyo in the north and Mt. Chilbo in the west and is home to four streams and multiple lakes in various sizes. Benefiting from such blessed natural environments, Suwon citizens have naturally become interested in wild species and they are part of institutional, physical, and technological efforts for living in harmony with nature. The city administration and civil society have worked together for public awareness campaigns and educational programs aiming to control haphazard development, protect rivers/streams and green spaces, and promote eco-friendly urban lifestyles.

Suweon Tree Frog (*Hyla suweonensis*), Class 1 Endangered Wild Species in Suwon, and Endangered Species Designated by International Union for Conservation of Nature(ICUN) / Source: Eco Suwon, an institute for environmental movement



As part of its efforts to promote healthy and harmonious biodiversity, Suwon set the following 5 targets. First, consistently monitor eight flagship species and regional indicators of climate change. Second, expand and manage wildlife sanctuaries. Third, expand natural areas. Fourth, promote education on biodiversity and raise public awareness. Lastly, promote civic engagement and governance for conservation of biological habitats. And these 5 targets have been monitored and evaluated with 11 indicators.

In its efforts to achieve the 5 targets, Suwon City has made the following achievements. First, the city administration and civil society learned many valuable lessons from the experience of monitoring the eight flagship species, and citizens became even more interested in various species living in Suwon. Second, there were attempts to expand the wildlife protection areas, and we were able to secure and manage habitats for restoring endangered species such as *Metanarthechium luteoviride* and Suweon tree frog (*Hyla suweonensis*). Third, Suwon has been making institutional, financial, and administrative efforts to prevent the reduction of natural areas and per capita urban forests. Fourth, more schools, civic groups, and various organizations tried and have been adopting educational programs on biodiversity. In the process, Suwon, despite being the second most densely populated city in Gyeonggi Province, was able to learn how to overcome its limits and has been in the ongoing process of conducting experiments to live in harmony with nature.

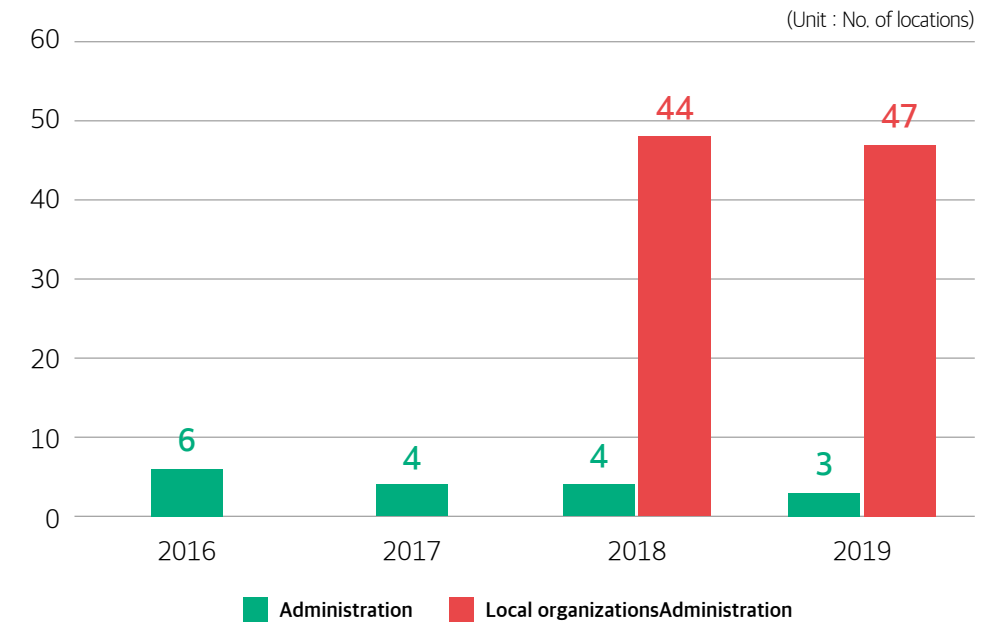
Target 2-1 Monitoring 8 Flagship Species and Regional Indicator Species of Climate Change

As Suwon City set its Sustainable Development Goal 2, the city selected eight flagship species of Suwon (i.e., Suweon-tree frog or *Hyla suweonensis*; *Luciola lateralis*; *Metanarthechium luteoviride*; narrow-mouth frog; white heron; varied tit; *Atypus suwonensis*; and Korean spotted sleeper) and adopted the 'Number of Monitoring Locations and Monitoring Frequency for 8 Flagship Species and Regional Indicator Species of Climate Change' as an indicator, hoping that regional indicator species vulnerable to climate change will appear at every corner of Suwon.

According to our survey, the city administration monitored 6 wildlife habitats, including habitats for 8 flagship species of Suwon, in 2016 and 3 habitats in 2019. Additional monitoring has also been conducted by local organizations, and there have been approximately 50 monitored habitat sites in general. The target species include Suweon-tree frog, narrow-mouth frog, *Metanarthechium luteoviride*, varied tit, white hero species, Korean spotted sleeper, 3 species of lampyridae, Korean salamander, mamushi and other amphibians.

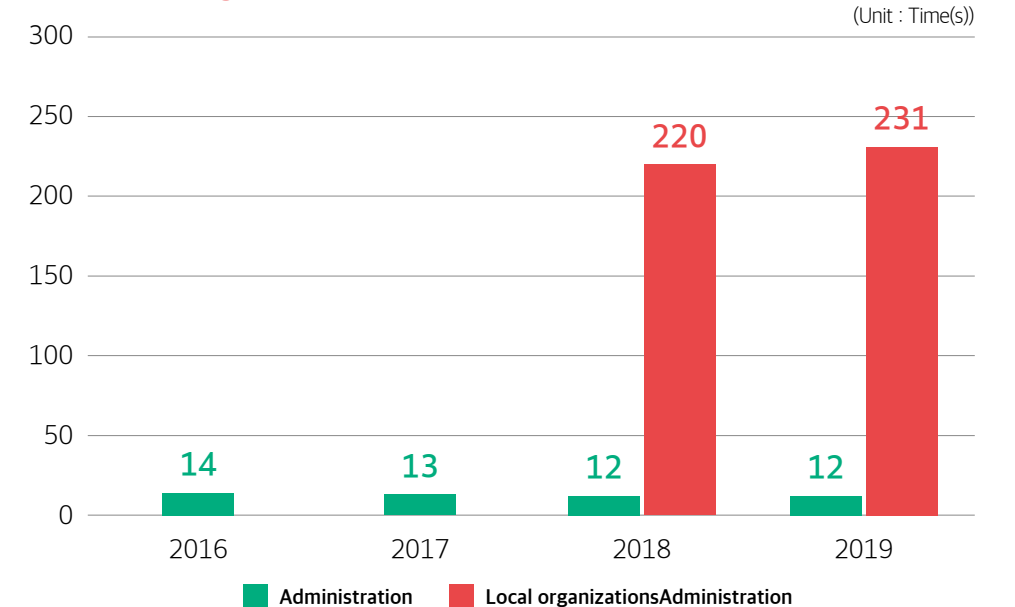
The 8 flagship species of Suwon are monitored 12-14 times a year by the city administration. Local organizations monitored them 231 times in 2019, 11 times more than the previous year. The monitored species include insects (Lampyridae, 33 times), plants (*Metanarthechium luteoviride*, 18 times), amphibians (104 times), fish (*Obontobutis interrupta*, 22 times), birds (55 times), reptiles (55 times), and mammals (4 times).

Indicator 2-1-1
Number of Monitoring Locations for 8 Flagship Species and Regional Indicator Species of Climate Change



Source: Environment Education Team and local organizations

Indicator 2-1-2
Frequency of Monitoring for 8 Flagship Species and Regional Indicator Species of Climate Change



Source: Environment Education Team and local organizations



Korean Spotted Sleeper, One of 8 Flagship Species of Suwon / Source: Eco Suwon, an institute for environmental movement



Target 2-2 Expanding and Managing Wildlife Sanctuaries

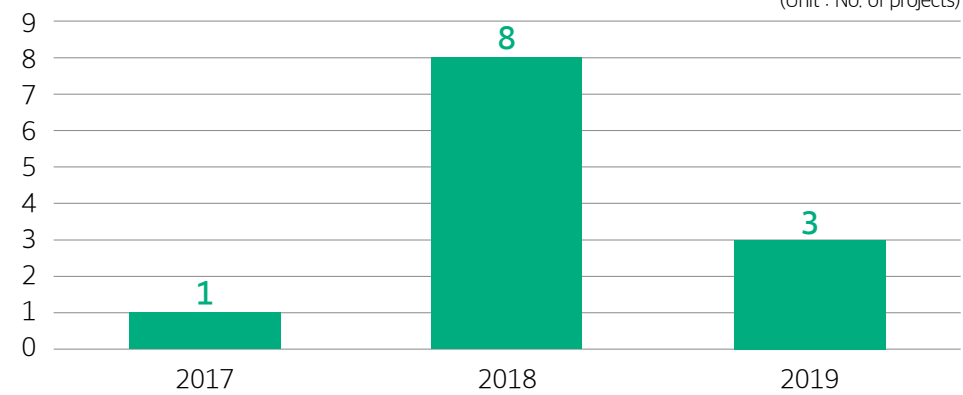
Protecting important ecological areas is as important as protecting specific species or endangered species. Currently Suwon has 1 wildlife sanctuary and adopted the 'Number of Designated Wildlife Sanctuaries in Suwon' an indicator to monitor the progress in expanding wild sanctuaries. The city also adopted the 'Number of Projects for the Reintroduction of Species including the 8 Flagship Species of Suwon and the Creation of Wildlife Habitats' and the 'Monitoring Frequency in Post-project Management,' as indicators, hoping to see the expansion of important ecological areas and habitats for diverse wildlife.



Status of the Wildlife Sanctuary around Mt. Yeogi
/ Source: Kim Eunyoung, a researcher of SRI

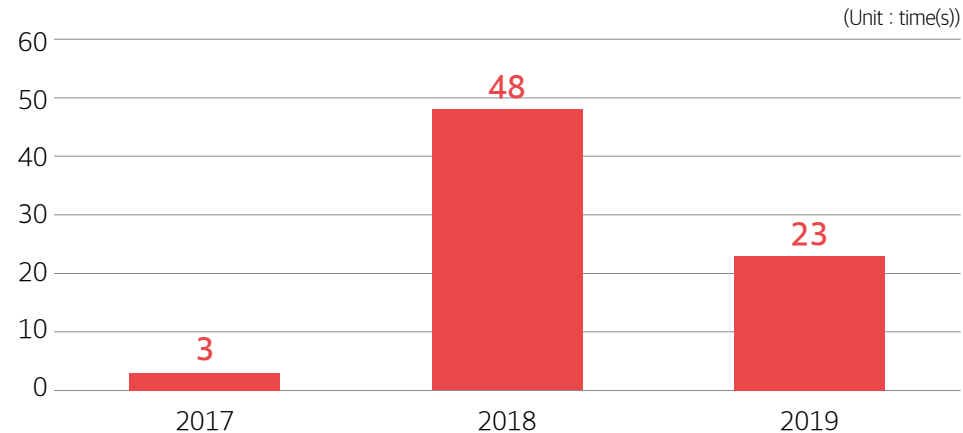
There is 1 wildlife sanctuary in Suwon as of 2018. The area located near Mt. Yeogi (Address: 256-1 Seodun-dong, Gwonseon-gu in Suwon) was designated as a protected area (or no hunting zone) for birds and wild animals by Gyeonggi Province and later re-designated as a wildlife sanctuary. The area has excellent habitat environments, evaluated as a biotope 1st grade area and is home to white herons.

Indicator 2-2-2
Number of Projects for the Reintroduction of Species including the 8 Flagship Species of Suwon and the Creation of Wildlife Habitats
 (Unit : No. of projects)



Source: Environmental Education Team

Indicator 2-2-3
Monitoring Frequency in Post-project Management for the Reintroduction of Species including 8 Flagship Species and the Creation of Wildlife Habitats
 (Unit : time(s))



Source: Environment Education Team and local organizations

In 2018, multiple projects were carried out for the reintroduction of species, including the 8 flagship species. The examples are the project for the reintroduction of *Metanarthechium luteoviride*, the project for the reintroduction of Suweon-tree frog or *Hyla suweonensis*, and the project for Suweon-tree frog or *Hyla suweonensis*. In the following year, projects for the creation of wildlife habitats were conducted three times, mainly focused on aquatic species such as narrow-mouth frogs living in moist environments and insects such as butterflies.

The yearly frequency of post-project monitoring significantly increased from 3 times in 2017 to 48 times in 2018. It was attributable to the intensive monitoring efforts for stabilizing habitats for *Metanarthechium luteoviride* in 2018. That is

why the yearly frequency of post-project monitoring fell to 23 times in 2019, 25 times less than it was in 2018.

In 2017, the municipal government of Suwon and the National Institute of Biological Resources conducted a joint project for the conservation and utilization of wild plant species. They first planted 1,000 *Metanarthechium luteoviride* at a density of 25 plants per square meter(m²) and have been conducting regular monitoring. The project is widely recognized for its contribution to the promotion of public awareness of biodiversity and the preservation of biological resources and also for raising Suwon's status as an environmental capital. Suwon has been working to designate the newly created habitat for *Metanarthechium luteoviride* as a wildlife sanctuary.



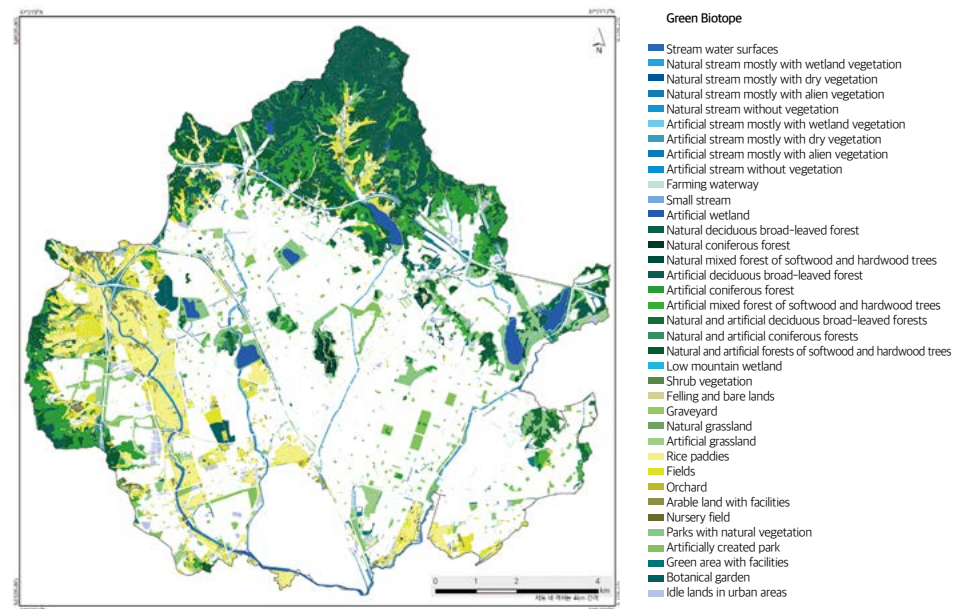
The Project of Planting and Restoring *Metanarthechium luteoviride*
 / Source: Ryu HyonSang



Target 2-3 Expansion of Natural Areas

While Suwon has a high rate of urbanized areas, natural areas of Suwon consist of forest areas such as Mt. Gwanggyo, Mt. Chilbo, and Mt. Paldal and streams such as Suwon Stream, Woncheonri Stream, Seoho Stream, and Hwangguji Stream. Preserving natural areas and creating more urban green areas have become even more important missions for Suwon City as some forests have been damaged by development projects. In this regard, Suwon City adopted the 'Percentage of Natural Area (%)' and the 'Per Capita Urban Forest Area' as indicators to monitor the progress in expanding natural areas of Suwon, hoping that citizens can enjoy more benefits of nature and green spaces through the conservation of nature and the expansion of urban forest areas.

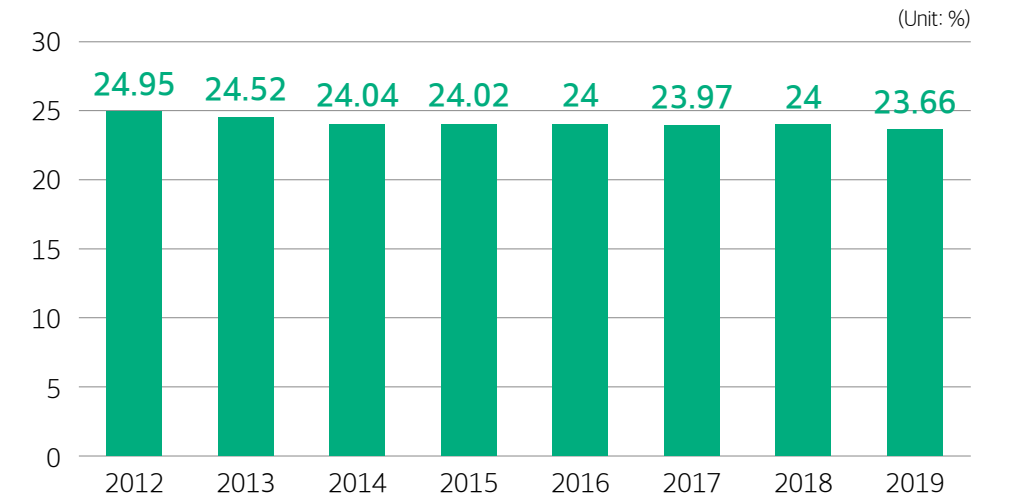
Status of Green Infrastructure in Suwon



Survey on the Natural Environment of Suwon City and Map Updates on the City's Ecological Status (2019)
Source: Kim Eunyoung, a researcher of SRI

In a broad sense, natural areas can be seen as green infrastructure. Green infrastructure not only includes natural areas such as forests and rivers but also areas having the potential of being developed into natural areas such as parks and green areas. As for Suwon's green infrastructure, forest areas like Mt. Gwanggyo and Mt. Chilbo are critical natural assets being located at the center of the city. Suwon's 4 streams and reservoirs are ecologically very important, functioning as habitats for various species, while parks and green areas serve as small habitats for species. Also, agricultural lands located around Hwangguji Stream is part of Suwon's green infrastructure as habitats for species like the endangered Suweon-tree frog or *Hyla suweonensis*.

Indicator 2-3-1 Percentage of Natural Area in Suwon (%)

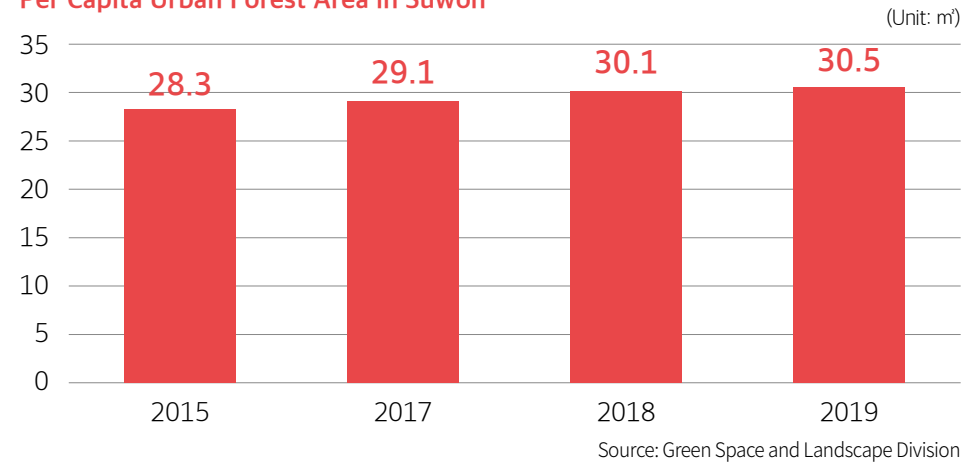


Source: Urban Planning Division

As of 2019, Suwon's natural areas accounted for 23.66% of its total municipal territory, while forest areas accounted for 21.08%, grasslands for 0.41%, and streams for 2.17%. Compared to 2018, the percentage of forests decreased by 0.39%, and grasslands and rivers increased by 0.02% and 0.03%, respectively. Overall, the percentage of natural areas in Suwon decreased by 0.34% compared to 2018.



Indicator 2-3-2
Per Capita Urban Forest Area in Suwon



In 2019, the per capita urban forest area of Suwon marked a 0.4m² increase from 2018, and Suwon's urban forest area also increased by 342,712m².

Suwon City has been carrying greening projects to create urban forests in areas that lack green spaces. There are ongoing projects for creating roadside trees, green belts, and urban forests for the prevention of fine dust.



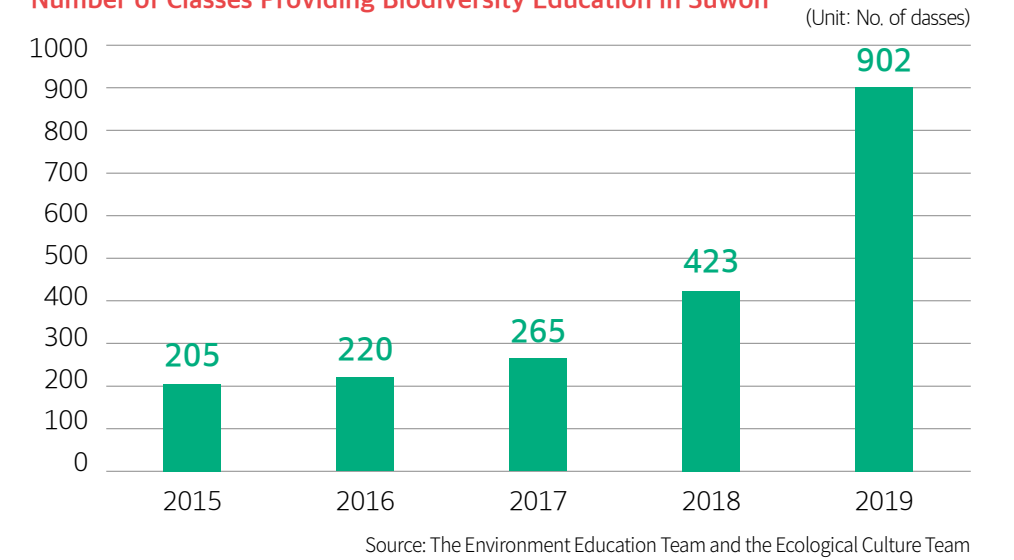
An Example of Small-scale Urban Greening / Source: Kim Eunyoung, a researcher of SRI

Target 2-4

Education on Biodiversity and Promotion of Citizens' Awareness

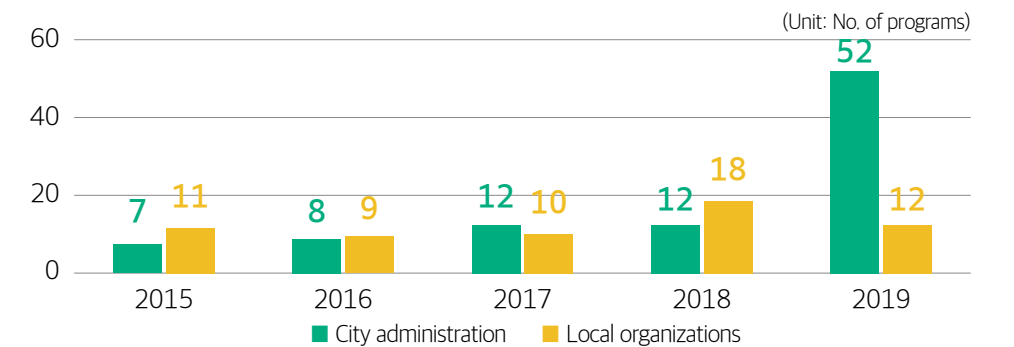
Education plays an important role in helping people recognize the need and importance of biodiversity conservation. Especially educating children and adolescents, who will lead the future of biodiversity, is critical part of raising public awareness. In this regard, Suwon adopted the two indicators of the 'Number of Classes Providing Biodiversity Education' and the 'Number of Educational Programs on Biodiversity', to find out how many schools or classes provide education on biodiversity and the scope of such programs.

Indicator 2-4-1
Number of Classes Providing Biodiversity Education in Suwon



The number of school classes providing biodiversity education has been on an upward trend in Suwon, recording 205 in 2015, 220 in 2016, 265 in 2017, and 423 in 2018. In 2019, more learning opportunities were provided with various programs conducted by institutions like the Chilbo Eco Center, the Gwanggyo Eco Center, the Visiting Suwon Environment Class, and the Office for Parks and Green Spaces. As a result, the number of classes providing biodiversity education increased to 902 classes in 2019, which can be classified into 862 classes of the Environment Education Team and 40 classes of the Ecological Culture Team.

Indicator 2-4-2
Number of Educational Programs on Biodiversity Supported by Suwon City



Item	Base year (2015)	2016	2017	2018	2019	Notes
Number of programs	7	8	12	12	52	City administration
	11	9	10	18	12	Local organizations

The number of educational programs on biodiversity also increased from 12 in 2018 to 53 in 2019, and Suwon City has been making efforts to develop more programs. In 2019, a total of 52 programs were conducted, which can be classified into 52 programs of the Ecological Culture Team and 32 programs of the Ecological Culture Team.

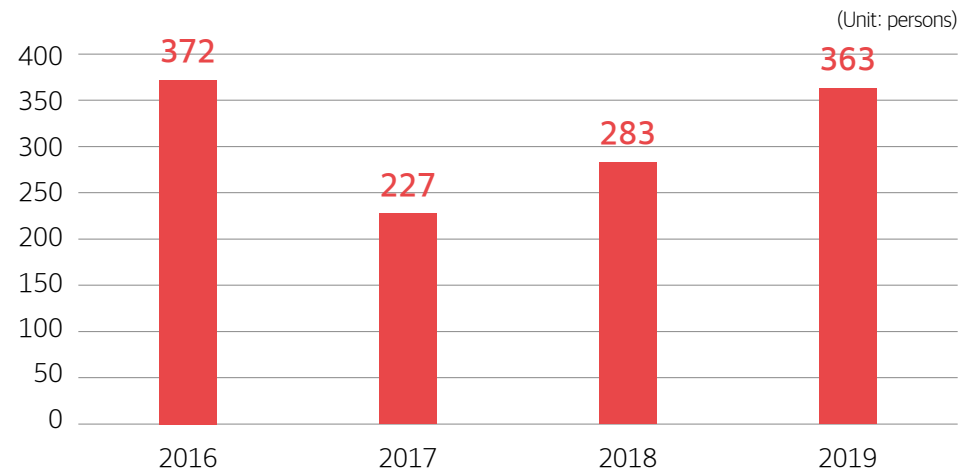


Target 2-5

Civic Engagement and Governance for Conservation of Biological Habitats

Raising citizens' awareness is especially important to promote biodiversity. Voluntary civic participation is key to all habitat conservation efforts, much more critical than any biodiversity goal set by the city administration. In this regard, Suwon City adopted the 'Number of Citizens Participating in Conservation Activities', and the 'Number of Adopted Policy Proposals on Biodiversity' as indicators, hoping that more citizens participate in habitats conservation efforts and propose policy ideas.

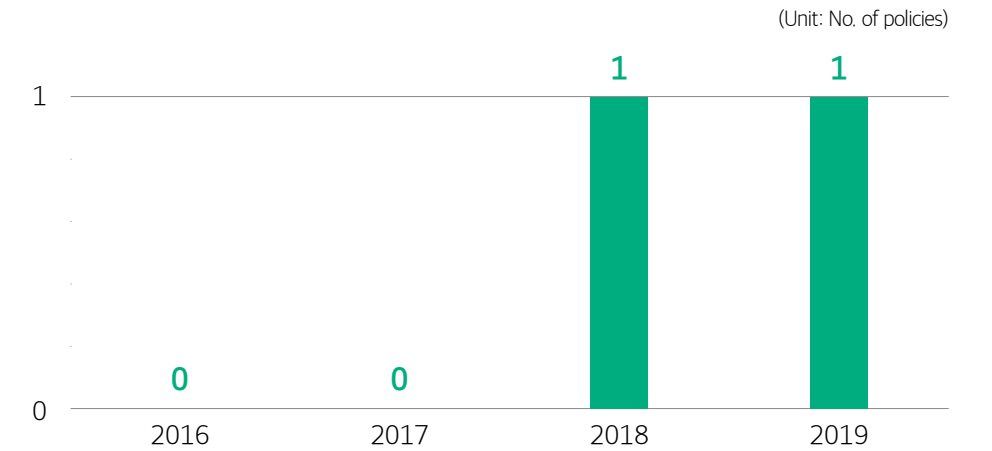
Indicator 2-5-1
Number of Citizens Participating in Conservation Activities



Source: Results of monitoring by the Environment Education Team and local organizations

The number of citizens participating in the conservation of habitats, more specifically, in the monitoring of habitats in Suwon, increased by 80 from 283 in 2018 to 363 in 2019. When adding the number of participants in civic group-led monitoring, a total of 3,479 citizens participated in the habit conservation activities 153 times in 2019.

Indicator 2-5-2
Number of Adopted Policy Proposals on Biodiversity



Source: Good Governance Committee, and Green Space and Landscape Division

The number of adopted biodiversity policy proposals was one, as the 'Green and Environmental Welfare for Sustainable Green Governance in Suwon and the Creation of Urban Forests Led by Citizens' suggested by the Committee on the Environment and Transport was adopted.

Ecological Information Board at Ilwol Reservoir / Source: Suwon Council for Sustainable Development



03

Suwon SDGs Action Report

in line with UN 2030 Agenda for Sustainable Development

The Implementation of the UN Sustainable Development Goals in Suwon 2020

Expansion of permeable surfaces



30%

Water self sufficiency rate

Water management system participated by citizens

Securing healthy ecosystem for streams

Recycling rainwater/water



Improving water quality of streams



Suwon 2030 Sustainable Development Goal 3: City with Transparent and Clean Water Cycle

Suwon, as a City of Water to Realize Transparent and Clean Water Cycle Based on Its Long Tradition of Public-private Water Governance

Suwon 2030 Sustainable Development Goals(SDGs) were adopted under the vision of ‘Suwon, a Sustainable City where Human and Environment Coexist.’ Despite being a densely populated city, with more than 1 million people living in a relatively small area of 121km², the vision represents Suwon citizens’ hope for sustainable living in harmony with nature. Among 10 Sustainable Development Goals(SDGs) adopted by Suwon, SDG 3 is focused on water management for transparent and clean water cycle.

The city’s name, Suwon, literally means ‘sources of water.’ As its name presents, waters of its major streams go through the Hwanguji Stream and then flow into other county/city’s streams like Jinwi Stream, Anseong Stream and Pyeongtaek Stream. As such, Suwon plays an important role in supplying water to other counties/cities, and how the city manages quality and quantity of water not only affects itself but also neighboring municipalities.

For this reason, Suwon has been paying particular attention to its water management for long time. In 2020, Suwon set a wide range of policy goals and tried policies regarding the management of the ecological status of its 4 major streams and non-point pollution on basins, water self-sufficiency rate, and the management of impermeable layers and groundwater. These goals consist of five areas: first, the conservation of the river ecosystem; second, water quality management; third, promotion of the public awareness and citizens’ participation in water management; fourth, the education on water environment/water circulation; and lastly, saving water resources. The goals are based on the results of workshops participated by citizens, experts’ feedbacks, and the pledge of the 2030 Agenda for Sustainable Development: ‘Leave No One Behind’ and were written by using easy-to-understand terms and contents for the general public.



Ecological Survey for Streams

Source: The Water Environment Center of the Suwon Sustainable City Foundation(Location : Woncheonri Stream)





Target 3-1 Ensuring Healthy River Ecosystems and Monitoring Life in Water Environments

The target was adopted to secure vertical and horizontal connectivity of rivers for healthy river ecosystem; to continue monitoring on the condition of the river ecosystem; and to expand the number of monitoring locations. Its indicators are the 'Number of Physical Structures by Section of Four Rivers in Suwon,' the 'Number of Species by Section of Four Rivers in Suwon,' the 'Amount of Budget Allocated for Biological Research of Rivers,' and the 'Number of Official Monitoring Locations and Frequency for the Evaluation of the River Ecosystem' and they are based on the results of research conducted by civil society for monitoring.

Citizens participated in setting the target and relevant indicators and checking the results, while the city administration was in charge of financial support for such efforts. Despite relatively small budget, Suwon City became the envy of other municipal governments since the city was able to accumulate long-time data with the Suwon River Network, a governance body.

The health of river ecosystem is greatly influenced by abiotic factors like various physical/horizontal aspects connected to adjacent waterfronts in addition to vertical factors like waterways. While Suwon citizens have raised their voice for long time over the loss of river functions and the need for restoring rivers that have been damaged by urban development, but unfortunately abiotic factors have been constantly increased.

The research project on the aquatic ecosystem of four major rivers and the project for monitoring river/lake water quality are included in the 100 projects of the Suwon city administration. In the process of the project, researchers observed changes in various species which include invasive species; endangered wild species level I and II; national climate change indicator species; and Least Concern(LC) species on the National Red List. Algae monitoring and small streams were added to the research topics in 2020, however, research on small rivers were not actually conducted due to shortage of budget, while efforts have been made to overcome such shortcomings by creating synergies of public-private water governance.

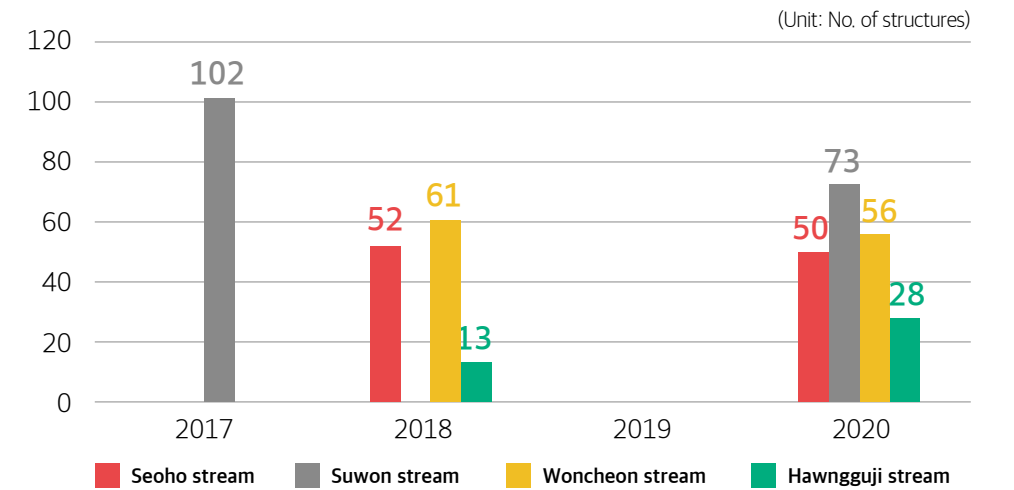
Gwanggyo Reservoir Located in the Water Supply Protection Area in Suwon City
/ Source: Public Affairs Office of Suwon City

Suwon Stream, the Representative Stream of Suwon, and Banghwa Suryujeong Pavilion / Source: Public Affairs Office of Suwon City



Indicator 3-1-1
Number of Physical Structures by Section of Four Rivers in Suwon

The number of physical structures was calculated, mostly focusing on the four major streams of Suwon. These physical structures disturb the river ecosystem and deteriorate river functions. The results of pre-2020 research on physical structures could not be used as a guideline due to lack of consistency in methods and distance, but 2020 research confirmed that the density of physical structures increased in accordance with the level of urbanization in the area. According to this result, the city needs to put more efforts to minimize the installation of additional structures and remove not-functioning old structures for healthier river ecosystem.



Item	2017	2018	2019	2020
Seoho Stream	-	52	-	50
Suwon Stream	102	-	-	73
Woncheonri Stream	-	61	-	56
Hwangguji Stream	-	13	-	28

Source: The Water Environment Center of the Suwon Sustainable City Foundation
 (water ecosystem monitoring project participated by citizens)

The 2017-2019 research on river structures were not planned from the current view of this target/indicators so its results cannot be directly compared with the 2020 research. In addition, the situation has been changed with new structures like bridges, trails, and sewage outlets. Hwangguji Stream, while all sections of the stream were investigated, showed an increase in the number of structures. Given such result, the number of structures shall be annually investigated to monitor/prevent any indiscriminate increase in structures, and discussions shall be made to come up with measures to restore nature, e.g., reducing the number of structures and removing not-functioning ones. In addition, the results of such discussions shall lead to the implementation of actual projects.

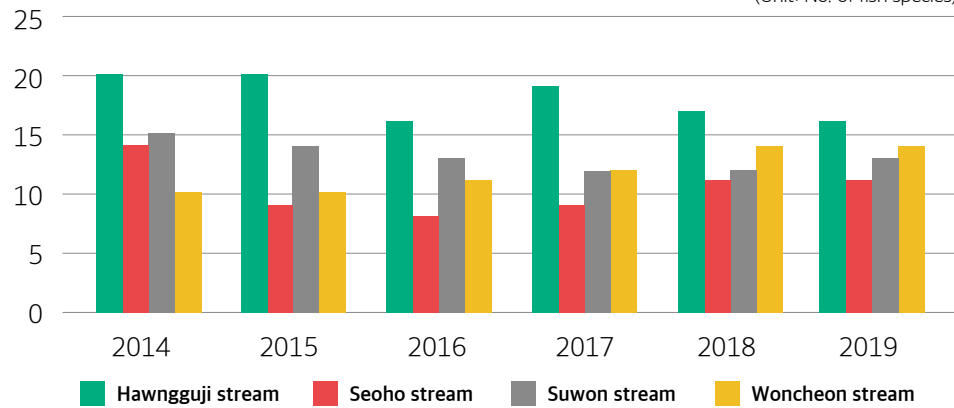


Indicator 3-1-2
Number of Species by Section of Four Rivers in Suwon

The 15-year-long research bears significant meaning given that citizens participated in the efforts to restore nature. Although not big changes were observed in the number of species as of 2015, the analysis on dominant species and keystone species and the evaluation on the clustering phenomenon and vertical severability of fish seem necessary.

(Unit: No. of fish species)

Number of Fish Species by Section of Four Rivers in Suwon



Source: Water Environment Center of the Suwon Sustainable City Foundation



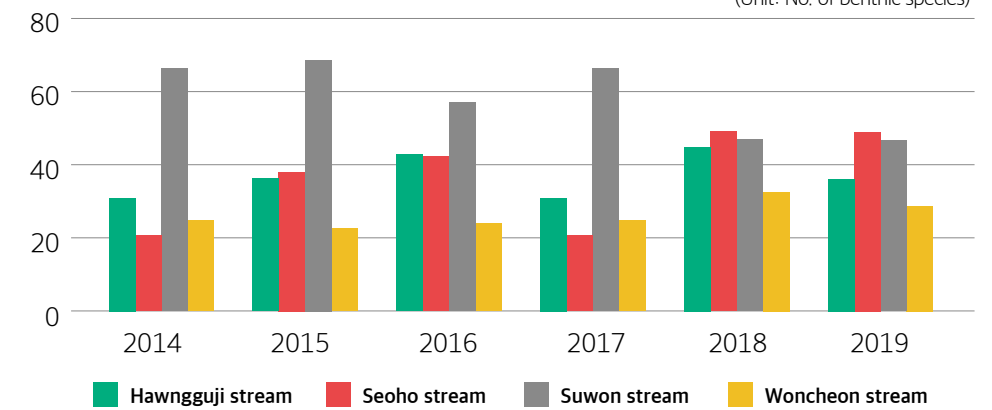
Snakehead and Catfish / Source: Water Environment Center



Larvas of Calopteryx atrata and Crocothemis servilia / Source: Suwon Environmental Movement Center

(Unit: No. of benthic species)

Number of Benthic Species by Section of Four Rivers in Suwon



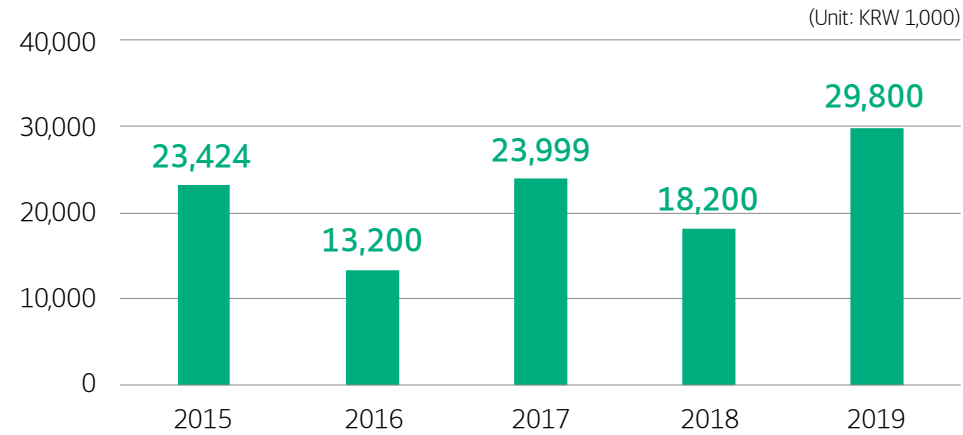
Source: Data on the water ecosystem monitoring project participated by citizens, The Water Environment Center of the Suwon Sustainable City Foundation

As for the species by river, *Ischnur sengalensis*, a national climate change indicator species, was constantly observed in Seoho Stream, while two national climate change indicator species, *Ischnur elegans* and *Ischnur sengalensis* were found in Suwon Stream in 2015 and 2017, respectively.

No endangered species but many invasive species such as prickly lettuce (*Lactuca serriola*) and giant ragweed (*Ambrosia trifida*) were found in Woncheonri Stream. As for Hwangguji Stream, a rare finding of diving beetle (*Cybister chinensis* Motschulsky), an endangered wildlife class 2, had been made since the research began in 2005, however, it has disappeared since 2016. While Suwon will continue such research, the decrease in number of species in 2018 is because the research was conducted bimonthly in that year unlike the past. The frequency of the research was readjusted to every month in 2020. In the same year, the city signed an agreement with the National Institute of Ecology to verify the produced data and improve its reliability and has been pushing forward with the creation of public archive through EcoBank by 2021.



Indicator 3-1-3
Amount of Budget Allocated for Biological Research of Rivers



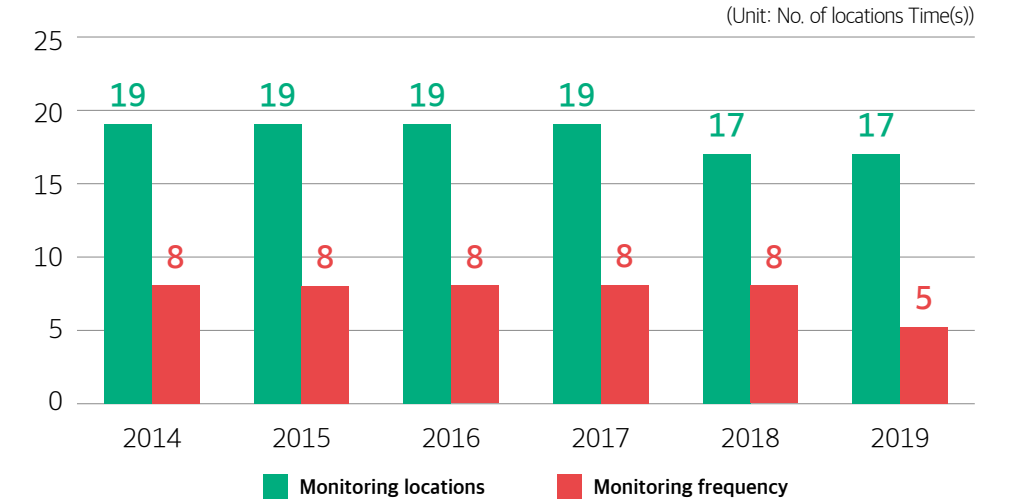
Item	Base year (2015)	2016	2017	2018	2019	비고
Budget	23,424	13,200	23,999	18,200	29,800	

Source: Internal data of Suwon City

This project would have been impossible without voluntary civic participation since there was almost no change in the budget for securing aquatic ecosystem data. In 2015-2018, an average of about 20 million won was allocated from the budget of the Suwon River Basin Network, the secretariat for public-private governance. However, the budget for monitoring was cut in 2016 until it was resecured from the Suwon local government's subsidy to resume the research. It is problematic that the budget for research fluctuates according to changes in the relevant organizations like the Suwon River Network, and the Water Environment Center of the Suwon Sustainable City Foundation. A minimum budget shall be guaranteed to afford workers' wages, experts' advices about results and expenses for items necessary for investigations so that such research can go without interruptions.

Indicator 3-1-4
Number of Official Monitoring Locations and Frequency for the Evaluation of the River Ecosystem

The biological research has been mainly focused on the four rivers; however, the research on small rivers is also necessary to promote the overall river ecosystem and the quality of residents' lives. Although not reflected in indicators, some small rivers have been included in the biological research since 2020. Suwon has 7 local rivers, 24 small rivers and 12 reservoirs, and given that, the scope of such research shall be expanded by increasing the monitoring locations and frequency.



Item	Base year (2015)	2016	2017	2018	2019	Notes
Number of official monitoring locations	19	19	19	17	17	Number of Places
and frequency	8	8	8	8	5	Number of Times

Source: Internal data of Suwon City

Monitoring locations for the evaluation on the river ecosystem were decided through a general meeting of monitoring groups. In general, these locations were selected around upper, middle, and downstream points of rivers and some more locations were added when deemed necessary. By river, 4-5 locations of Seoho Stream, Suwon Stream, Woncheonri Stream and Hwangguji Stream have been monitored 8-9 times. At each point, such monitoring has been conducted four times per season. To find new species, it seems that more monitoring locations shall be designated rather than increasing frequency.

In addition, standardized checklists and experts' analysis will further promote the reliability of the monitoring results. Suwon expanded the monitoring locations to 29 locations, including tributaries, to expand the scope of research and include small rivers.





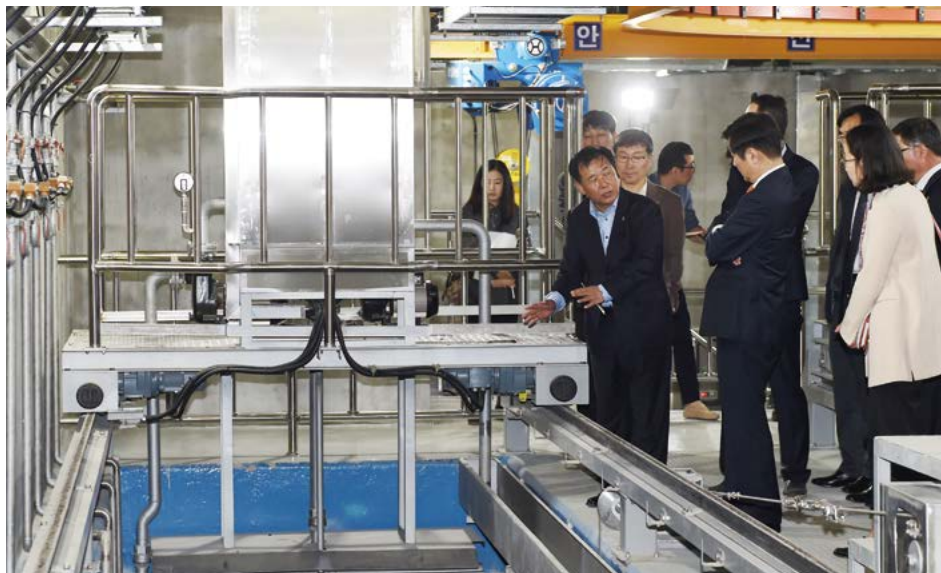
Suwon Citizens Participating in Monitoring / Source: Suwon Council for Sustainable Development (Location: Gwanggyocheon)



Target 3-2 Improving Water Quality of Streams and Lakes

To improve the water quality of rivers and lakes, Suwon focused on reduction of non-point source(NPS) pollution loads in connection with the designation of NPS pollution management areas in 2020. In this regard, the following two indicators were set: the 'Number of NPS Pollution Reduction Facilities in Suwon' and 'Water Quality in Major Rivers and Lakes in Suwon'. Among Suwon's ongoing 100 projects, two projects, 'the Cooperation Project for the Win-win Development of Gwanggyo' and 'the Project for the Reclaimed Wastewater at Hwanggujicheon Sewage Treatment Plant' can be considered in line with this target.

The data on water quality of rivers in Suwon were analyzed by using BOD, SS, T-N, and T-P. In general, BOD standards and water quality of rivers showed signs of improvement, while Suwon Stream and Woncheonri Stream were in Grade Ib and Seoho Stream and Hwangguji Stream were in Grade II and Grade III respectively. This seems to be the results of a gradual increase in nonpoint source pollution(NPS) reduction facilities with the designation of NPS pollution management areas, and the pollution load control by the adoption of the Total Pollution Load Management System (TPLMS) also contributed to the results. The analysis on lakes used indicators of COD, T-N, T-P, and chlorophyll concentrations. The results showed deterioration in water quality, ranging from normal (III) to very poor (IV) levels. There seems to be a persistent inflow of non-point source pollutants in watersheds in urban areas, and more attention shall be paid to the improvement of water quality of lakes. In particular, the green algae occurring in summer months in West Lake, Ilwon Reservoir, Manseok Reservoir, and Gwanggyo Reservoir shall be managed. As for West lake, various approaches such as using vegetation as a natural water filter, diversion of water flow, or bypass routes can be considered.



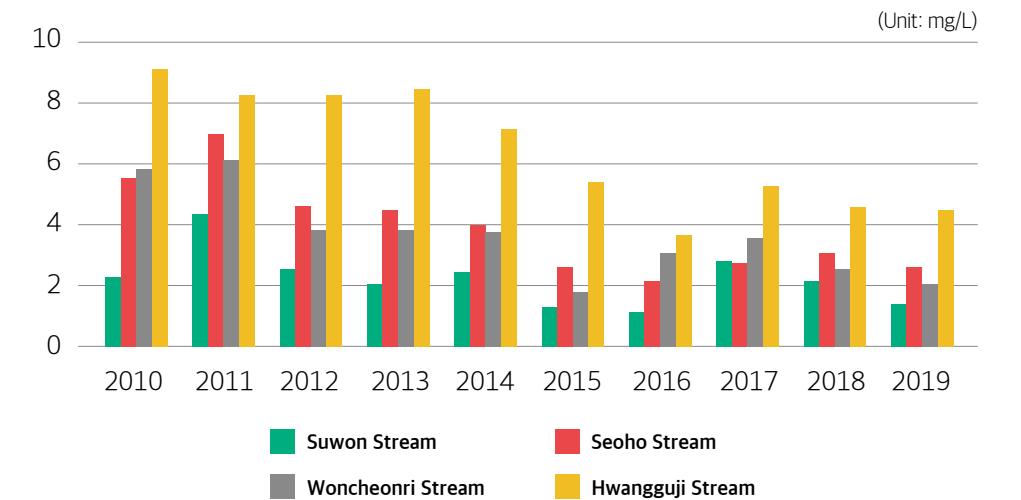
Officials from the Environment Bureau of Suwon City inspecting NPS Pollution Reduction Facilities / Source: Public Affairs Office of Suwon City

Indicator 3-2-2 Water Quality in Major Rivers and Lakes

The indicator, based on official data of Suwon City, suggests that the overall water quality has improved compared to the significant decrease in water quantity of rivers. However, the water quality of reservoirs has deteriorated. Given the results, tailored plans for reservoirs, rather than a quick experimental fix, are required. The city is in need of more advanced measures in terms of the treatment of pollutants and the reuse of discharged water to improve water quality in aquatic environments, such as rivers and lakes. The current standard for the quality of discharged water is not strict enough to control green algae caused by treated wastewater and effluents in rivers and lakes. So, extra efforts beyond the legal standards shall be made to improve water quality.

- 1) BOD: The amount of oxygen consumed by aerobic microorganisms while they decompose organic matter
- 2) SS: Solid particles which remain in suspension in water
- 3) T-N: Total amount of nitrogen compounds in water
- 4) T-P: Total concentrations of phosphorus in water
- 5) COD: Chemical oxygen demand
- 6) Chlorophyll: Green pigment found in plants and other organisms, which enables them to use the energy from sunlight.

Changes in Yearly Average Water Quality of Major Rivers in Suwon(BOD)



Changes in Water Quality of Major Streams in Suwon by BOD, SS, T-N, and T-P

Item	2015	2016	2017	2018	2019	Streams
BOD(mg/L)	1.3	1.1	2.8	2.1	1.4	Suwon Stream
	2.6	2.1	2.7	3.1	2.6	Seoho Stream
	1.8	3.1	3.5	2.5	2	Woncheonri Stream
	5.4	3.6	5.2	4.6	4.5	Hwangguji Stream

Item	2018	2019	Indicator	2018	2019	Streams
SS(mg/L)	3.7	3.6	T-N/T-P (mg/L)	4.2 / 0.058	4.1 / 0.027	Suwon Stream
	7.4	8.6		5.7 / 0.079	7.2 / 0.105	Seoho Stream
	4.4	4		3.5 / 0.085	4 / 0.056	Woncheonri Stream
	12	11.2		4.7 / 0.216	4.3 / 0.177	Hwangguji Stream



Water Quality of 4 Major Rivers in Suwon and the Target by 2030

Item	Water Quality of 4 Major Rivers by BOD(mg/L)			
	Suwon Stream	Seoho Stream	Woncheonri Stream	Hwangguji Stream
2010	2.2	5.5	5.8	9.1
2011	4.3	6.9	6.1	8.2
2012	2.5	4.6	3.8	8.2
2013	2	4.5	3.8	8.4
2014	2.4	3.9	3.7	7.1
2015	1.3	2.6	1.8	5.4
2016	1.1	2.1	3.1	3.6
2017	2.8	2.7	3.5	5.2
2018	2.1	3.1	2.5	4.6
2019	1.4	2.6	2	4.5
2030 Target	Grade Ib	Grade II	Grade Ib	Grade II

Water Quality of Major Reservoirs

Item	Base year (2015)	2016	2017	2018	2019	Reservoirs
COD(mg/L)	8.5	6.9	7	6.2	7.5	Manseok Reservoir
	10.5	8.6	7.5	7.1	11.4	West Lake Reservoir
	18.2	71.6	6.8	9.7	11.7	Ilwol Reservoir
	7.1	5.5	4.2	4.8	5.5	Shindae Reservoir
	7.5	5.4	4	4.1	4.7	Woncheon Reservoir
	5.1	4	4.1	5.5	7.2	Hagwanggyo Small Reservoir

Item	Base year (2015)	2016	2017	2018	2019	Reservoirs
T-N(mg/L)	1.5	3.4	1.4	1.9	1.6	Manseok Reservoir
	6.6	8.4	6.8	5.7	7.3	West Lake Reservoir
	3.9	12.2	7.9	2.6	3.5	Ilwol Reservoir
	0.9	1.7	1.4	1.4	2.3	Ilwol Reservoir
	0.6	1	0.8	0.7	0.6	Woncheon Reservoir
	1.3	1.2	1.3	0.9	0.8	Hagwanggyo Small Reservoir

Item	Base year (2015)	2016	2017	2018	2019	Reservoirs
T-P(mg/L)	0.05	0.063	0.047	0.062	0.072	Manseok Reservoir
	0.105	0.108	0.099	0.085	0.162	West Lake Reservoir
	0.23	0.827	0.114	0.06	0.102	Ilwol Reservoir
	0.023	0.037	0.018	0.029	0.026	Shindae Reservoir
	0.018	0.038	0.019	0.027	0.019	Shindae Reservoir
	0.013	0.019	0.017	0.015	0.016	Hagwanggyo Small Reservoir

Item	Base year (2015)	2016	2017	2018	2019	Reservoirs
Chlorophyll (mg/m ³)	53.5	39.8	5.1	25.9	62.3	Manseok Reservoir
	53.3	47.6	8.8	31.6	147.3	West Lake Reservoir
	137.4	352.1	6.1	26.4	94.5	Ilwol Reservoir
	16.1	18.1	3.1	10.7	13.3	Ilwol Reservoir
	14.3	19.7	2.9	11.1	20.1	Woncheon Reservoir
	7	7.2	0.4	14.2	28.4	Hagwanggyo Small Reservoir

Source: Internal data of Suwon City

Target 3-3

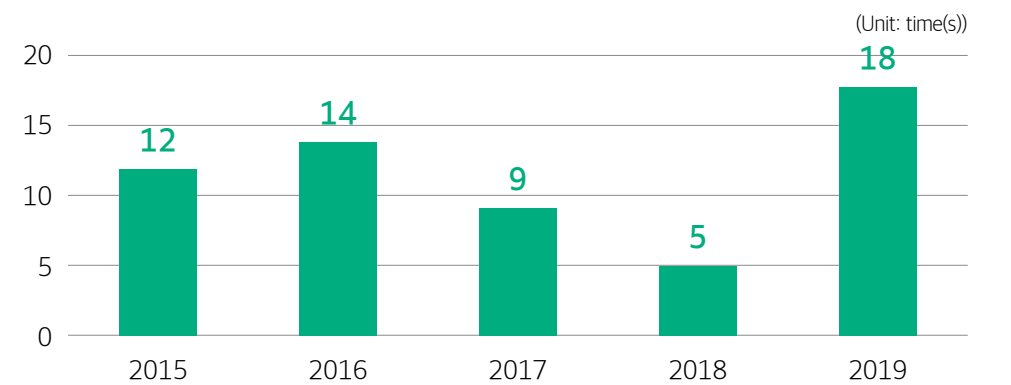
Promoting Public Awareness to Build a Water Management System Participated by Citizens

Suwon City is to build a citizen-participating water management system by providing citizens with education on water environments and ecological aspects of urban rivers. As a city of water, Suwon City needs to consider differentiated and more advanced approaches to promote citizens' awareness compared to other municipalities.

Budget and manpower are essential for all environmental educational programs to attract participants and make programs sustainable. We suggest forming a dedicated team jointly by the Environment Center of the Suwon Sustainable City Foundation and the Suwon River Network to make differentiated programs that complement the existing ones.

Indicator 3-3-1

Frequency of Education on Water Environment and Circulation by Target Group



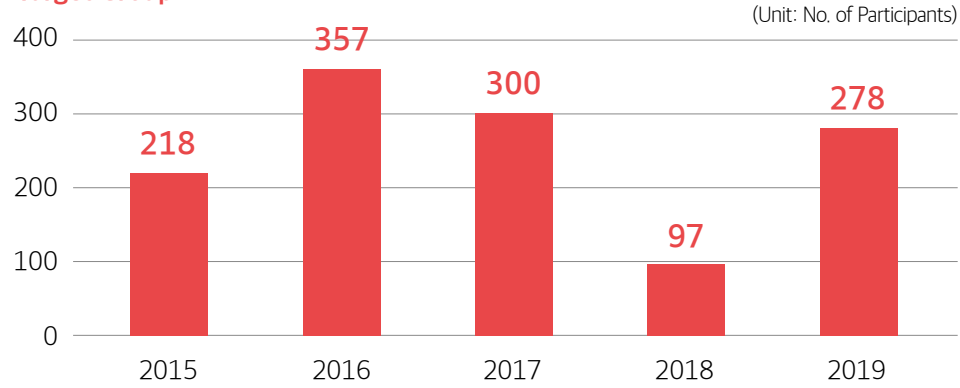
Item	2015	2016	2017	2018	2019	Average
Frequency of Education	12	14	9	5	18	11.6

Source: Water Environment Center of the Suwon Sustainable City Foundation

The frequency of education was above the average in 2015 and 2016, however, the number decreased in the process of the work being transferred from the Suwon River Network to the Water Environment Center of the Suwon City Sustainable City Foundation in 2017 and 2018. Basically, supports in terms of budget and manpower should be continued in the future to allow these organizations to provide more high-quality programs to citizens.



Indicator 3-3-2
Number of Participants in Education on Water Environment and Circulation by Target Group

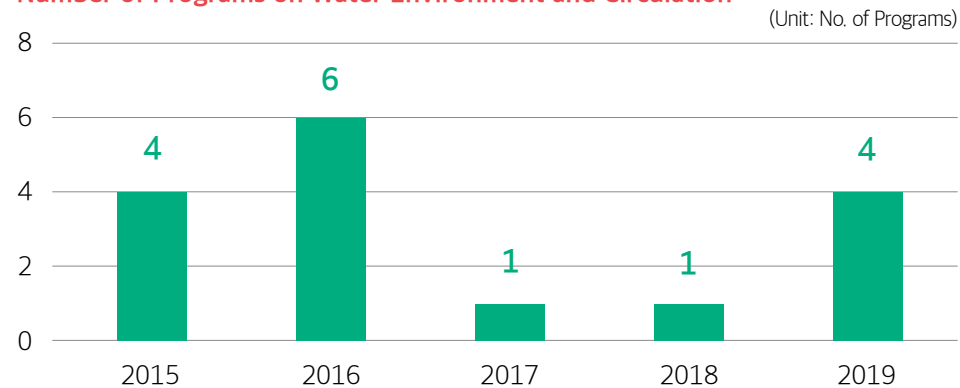


Item	Base year (2015)	2016	2017	2018	2019	Notes
Number of participants	Adults(178) Adolescents(40)	Adults(201) Adolescents(156)	Adults (300)	Adults (97)	Adults (278)	

Source: Water Environment Center of the Suwon Sustainable City Foundation

Educational programs focused on water environment and circulation have been continued in Suwon. In 2015, these programs attracted many participants, but mostly adults, and then, in the following year, there were many exemplary cases of governance-oriented programs targeting different age groups: children, adolescents, youth, and adults. However, as previously mentioned, the contents and scope of the programs were shrunk due to the transfer of work from the Suwon River Network to the Water Environment Center of the Suwon City Sustainable City Foundation. And then, in 2019, more basic and intermediate level programs were introduced contributing to more sustainable education on water environment and circulation, however, participants of these programs were limited to adults. Given that, for future programs, it seems necessary to consider various groups of different ages and social classes from the planning phase, so that it can provide everyone with a fair opportunity of water education and a wider range of differentiated contents.

Indicator 3-3-3
Number of Programs on Water Environment and Circulation



Suwon SDGs Action Report

Item	Base year (2015)	2016	2017	2018	2019	Notes
Number of programs	4	6	1	1	4	

Source: Water Environment Center of the Suwon Sustainable City Foundation

The education programs on water environment and circulation went smoothly in 2015 and 2016. However, the number of programs reduced to 1 in 2017 and 2018 until it jumped to 4 in 2019, recording a significant year-on-year increase. Still more various forms of quality programs shall be provided, supported by collaborative governance and we recommend targeting various groups, such as private organizations, social gatherings, and water activists while providing networking opportunities and education supports.

The Water Environment Center has played a leading role in water education, befitting Suwon's image as a city of water. In addition, the Center also has contributed to getting more citizens involved in educational activities and raising their awareness. Still, Suwon needs year-round visiting education and more educational services tailored to different age groups and shall increase the number of participants and those completing educational courses. The city also needs to adopt training courses for nurturing adults' activists in the water environment field.

The Minister of Environment Designated Suwon as the Environmental Education City / Source: Public Affairs Office of Suwon City



Target 3-4 Increasing Water Self-sufficiency and Conserving Water

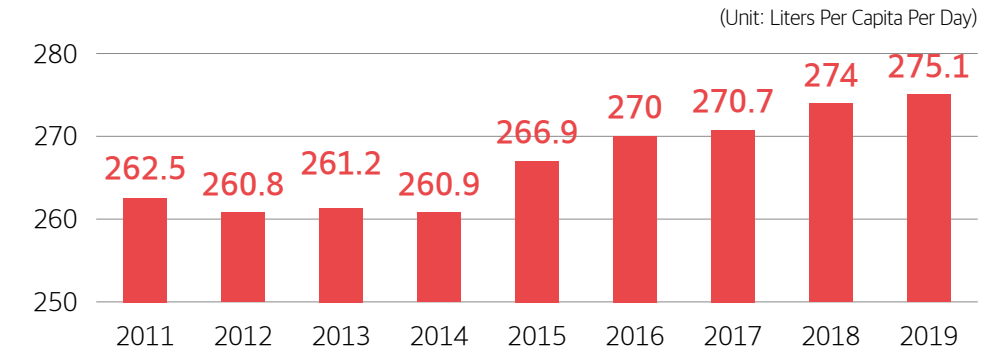
Suwon City set a goal to increase its water self-sufficiency rate from 10.9% in 2010 to 30% by 2030 and has been implementing policies for rainwater reclamation, water recycling and conservation to be more water self-sufficient. With the city's hope for satisfying its water needs within its water supply and keeping the water consumption to the minimum level, the city adopted 'Suwon's Water Self-sufficiency Rate' as an indicator to measure the progress. Indeed, promoting water self-sufficiency would be a wise way to use water resources. However, Suwon also needs to consider developing other applicable indicators given the lack of Suwon's own water sources. In recent years, the rivers in Suwon have been losing water along with urbanization and development of multiple housing sites and an increase in impermeable layers. There is also a concern over a potential sharp increase in water flow from large private/public buildings into groundwater. Under the circumstances, pre- or post-management of underground discharged water shall be included as part of the city's plan to promote self-sufficiency. It also means that the city needs strategies to manage and quantify underground discharged water and make it to flow into streams, in addition to its policy for recycling of rainwater, wastewater, and heavy water. For example, it will be worth considering adopting a basic research system where underground effluent flow meters are installed in public facilities within a designated area. It will allow to check the total daily, monthly, and yearly amounts of underground discharged water in that area, and the results can be used as a reference to predict the amounts in other areas.

Indicator 3-4-1 Suwon's Water Self-sufficiency Rate (%)

In principle, Suwon's water self-sufficiency rate shall be defined by the ratio of water produced from the city's water sources to water consumed at the regional level of Suwon, however, we need further consultation with the administration about the use of water sources. Considering that Suwon's own water intake source is only Gwanggyo Reservoir, Suwon redefined its water self-sufficiency rate to be the 'ratio of water reused to water consumed at the regional level of Suwon.' This is to check the amount of the water reused compared to the water consumed. If the amount of reused water increases through policy efforts, it will mean higher water self-sufficiency.

Indicator 3-4-2 Per Capita Water Consumption in Suwon (Liters Per Capita Per Day)

The daily per capita water consumption means the average amount of water each person in a particular area uses on a daily basis. Suwon's daily per capita water consumption is much higher than 148 liters recommended by the UN. The daily per capita water consumption in Suwon has been generally increasing since 2011 while 2014 was an exception. The daily per capita water consumption of South Korea is between 260 and 275 liters (on average of 266.9 liters in 2011-2019), much higher than the level recommended by the UN. Given that, it seems necessary to carry out water conservation campaigns and promote households' water-saving practices to cut water consumption. Also, the data on the per capita water consumption shall be classified by purpose of water use, for example, water consumed for household purposes or water consumed in restaurants, offices, etc. for commercial purposes, and more detailed action plans shall be drawn based on such analysis.



Item	Base year (2015)	2016	2017	2018	2019	비고
Per capita water consumption	266.9	270.0	270.7	274.0	275.1	

Source: Internal data of Suwon City

Indicator 3-4-3 Capacity of Treatment Facilities for the Reuse of Water (Rainwater, Heavy Water, Sewage)

Item	Reused treated sewage (m ³ /year)	Reused heavy water (m ³ /year)	Reused rainwater (m ³ /year)	Total (m ³ /year)	Amount of treated sewage (m ³ /year)	Rate of reused treated sewage(%)
2015	9,238,837				166,565,565	5.6
2016	10,137,573	643,860	27,298	10,808,731	177,996,981	5.7
2017	18,080,908	142,942	21,850	18,245,700	189,224,083	9.6
2018	19,936,298	110,950	27,331	20,074,579	190,103,828	10.5
2019	19,886,517				178,314,064	11.2

Source: Internal data of Suwon City

While the rate of reused water in Suwon has risen every year, the amount of reused water has increased more rapidly since 2016. On the other hand, the amount of reused heavy water has gradually reduced, and the capacity of rainwater facilities has not much increased. Still, it is very encouraging that 317 public/private rainwater storage facilities have been installed in the city.



Target 3-5

Increasing Areas with Permeable Surfaces for Rainwater Infiltration

Suwon City aims to reduce the rate of areas with impervious surfaces to improve the water circulation system. Actually, the city has won a series of prizes in the recognition of its Smart Rain-City Suwon project, such as the silver prize at the Green World Awards organized by the Green Organization in 2019, and an internationally acclaimed and renowned environmental prize of 2018 Energy Globe Award by the Energy Globe Foundation. The city also won the prize at the national Clean Water City Awards in 2020.

Rainwater Station / Source: The Public Affairs Office of Suwon City



Rainwater Sprinkler and Rain Garden Installed in Front of the World Cup Stadium / Source: Public Affairs Office of Suwon City



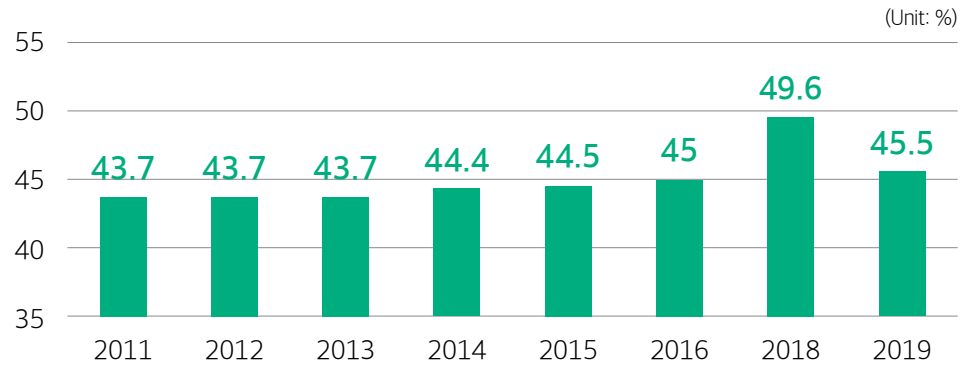
Indicator 3-5-1

Rate of Areas with Impermeable surfaces Compared to Total Area of Suwon (Suwon's Rainwater Circulation Project)

The rate of areas with impermeable surfaces, which had been around 45% until 2016, increased to a level close to 50% in 2018, but dropped to 45.5% in 2019.

Such trend indicates that development damaging the natural ground surfaces is still underway, and that more policy interventions are required in the process of development to minimize impermeable surfaces. In recent years, there is a general tendency of preserving natural ground surfaces or managing the rate of green areas through artificial ground greening to avoid the expansion of impermeable surfaces.

Rate of Areas with Impermeable surfaces Compared to Total Area of Suwon (Suwon's Rainwater Circulation Project)



Item	Base year (2015)	2016	2017	2018	2019	Notes
Rate of areas with impermeable surfaces compared to total area	44.5	45	0	49.6	45.5	

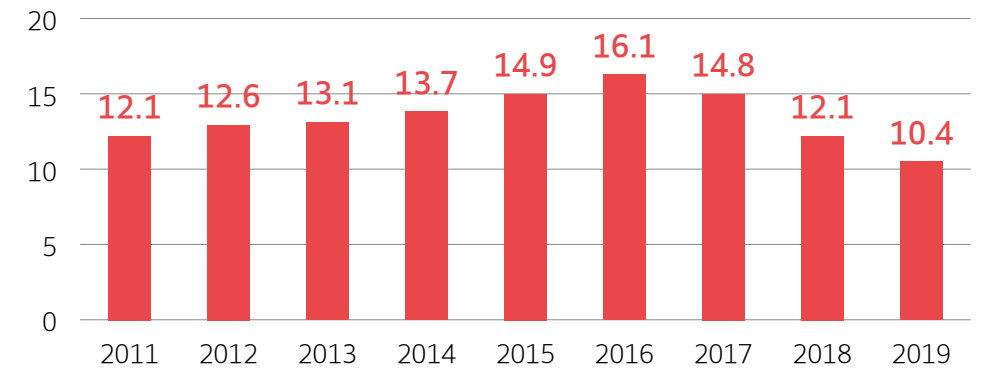
Source: Internal data of Suwon City

Indicator 3-5-2

Annual Average Groundwater Level in Suwon

The average groundwater level of Suwon has continuously decreased since 2016 until the level fell to 10.4m in 2019. Of course, such interpretation has its limits since this data on ground water level is from the only Groundwater Monitoring Network in Suwon. To address this problem, the city is pushing forward with the expansion of the groundwater monitoring network to further investigate changing groundwater levels for wider areas. The city also needs to preserve green areas and turn impermeable surfaces into permeable ones in order to fill ground water and secure appropriate levels in connection with the changes in the ground water levels. In addition, institutional foundations, for example, establishing relevant ordinances, are required to support the monitoring of groundwater levels and minimize fluctuations in the levels. Proactive policy alternatives based on common sense, such as strategies for the management and reduction of groundwater consumption shall be tried until the analysis and review on clear data become available.

(Unit: m)



Item	Base year (2015)	2016	2017	2018	2019	Notes
Annual average groundwater level	14.9	16.1	14.8	12.1	10.4	

Source: Internal data of Suwon City

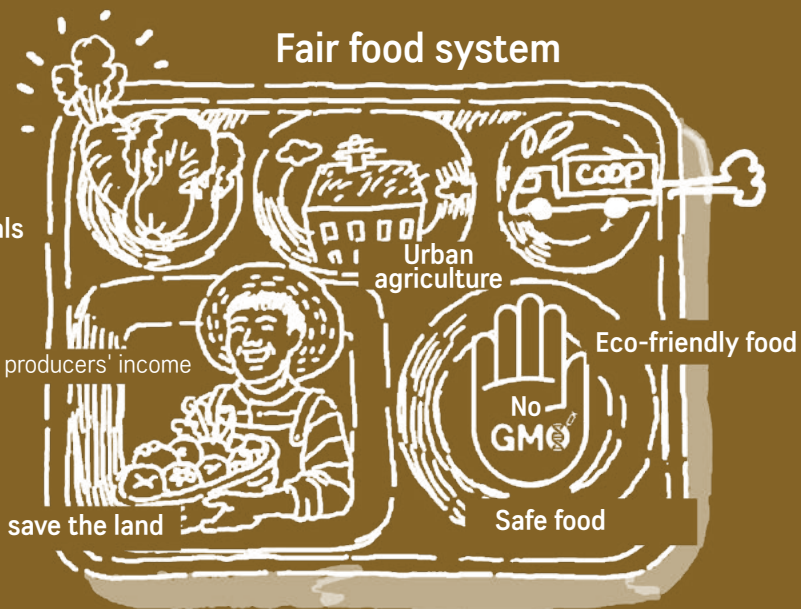


04

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020



Suwon 2030 Sustainable Development Goal 4: Healthy and Sustainable Agriculture and Food

Suwon Completing the Basic Food Plan, and the City's 'Shared Refrigerator' Attracting a Nationwide Attention as a Successful Model

Suwon SDG 4, 'Healthy and Sustainable Agriculture and Food' was set by considering the city's local conditions in line with the UN Sustainable Development Goal 2, 'Zero Hunger.' Under the goal, Suwon aims to promote urban agriculture and provide healthier food by bringing changes to this densely populated consumer city with still big appetite for food and development.

Suwon, a city with a population of 1.2 million, allocates almost KRW 100 billion for free school meals. From 4- to 5-year-olds to high school students benefit from free school meals, provided through collaborative governance between the Gyeonggi Province, the Office of Education, and Suwon City. The Basic Food Plan of Suwon suggests a strategy to integrate school meals with public meal services in the social welfare sector. 'The Integrated Food Strategy' encompasses the entire process of production, distribution, consumption, and disposal of food, while incorporating the principles of sustainable development and values like environmental protection, care, safety and health.

However, the number of farming households and agricultural areas has steadily decreased in Suwon as the city have

become more urbanized, turning into a typical food consumer city. This is because that Suwon is located at the transportation hub of the metropolitan area and the production costs and land prices have continuously risen with the growing demand for residential development. Suwon City has been allocating the budget to expand school meals and improve food quality while providing institutional and administrative supports for promoting urban agriculture and healthier dietary life of citizens.

since 2010. Actually, the scale of Suwon's urban farming is the largest among municipalities of Gyeonggi Province and many Suwon citizens are involved in urban farming. Furthermore, Suwon City runs direct food markets inside traditional markets including the market around Mt. Gwanggyo, to promote local food and its accessibility and to increase farmers' income.

The civil society of Suwon carried out 3-year-long 'Shared Refrigerator Project' with the goal of making food more accessible, especially for vulnerable populations. As a result, currently more than 23 villages have 'shared refrigerators,' helping people share excess food with neighbors, thereby reducing food waste and increasing vulnerable groups' accessibility to food. As time went by, 'shared refrigerator' became part of villagers' daily life. And the project proved itself to be an effective way of promoting sustainable food sharing and also contributed to promoting a sense of community.





Target 4-1 Building a Local Food System and Governance

Basic food plan: A basic food plan refers to an integrated plan that is established by a local government (or a central government) and encompasses the whole process of the production, distribution, consumption, and recycling of food, in order to provide citizens with safe and healthy food and protect the local economy and environment and eventually ensure a sustainable food system.

In the case of Suwon, the city completed the 2020 Research on such plan (Sep. 2019-Apr. 2020) and established the Basic Food Plan of Suwon to promote citizens' health, nature, safety, and food accessibility. The city also launched a private-public governance system to form the Suwon Food Committee to promote the implementation of its Basic Food Plan.

The Rice Harvesting Event in Rice Fields / Source: Suwon City Photo Bank, photographed by Kang Jewon

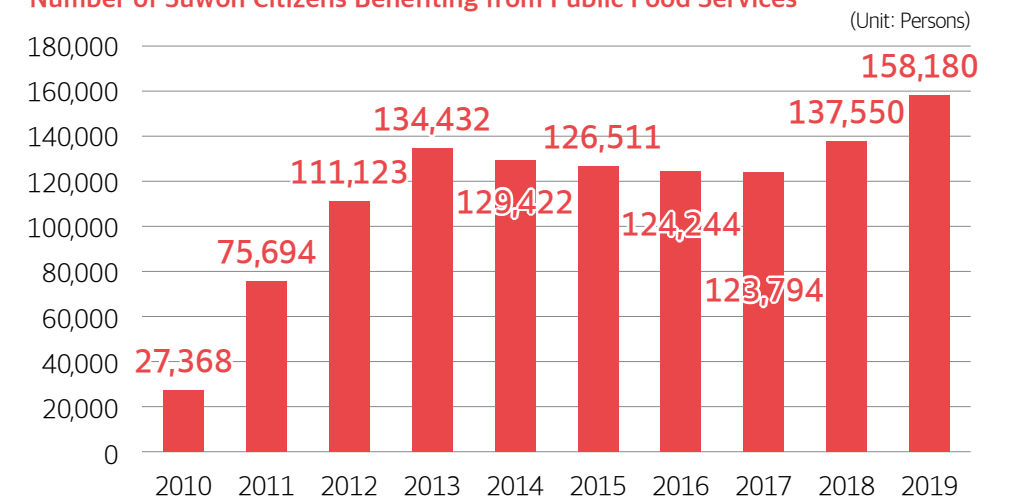


Target 4-2 Ensuring Citizens' Right to Food

This target aims to ensure greater access to healthy and adequate food for all citizens including vulnerable groups, the poor, and young population from infants to teenagers. To this end, the city has been implementing public food services for low-income groups in the city. In addition, it provides public food services to infants, children, out-of-school teenagers, teenage immigrants, kindergarteners, and students of elementary, middle, and high schools. By this way, it will make sure that no citizen suffers from poverty and starvation.

Indicator 4-2-1

Number of Suwon Citizens Benefiting from Public Food Services



Item	2015	2016	2017	2018	2019
No. of Beneficiaries	126,511	124,244	123,794	137,550	158,180

Source: The Bioindustry Division of Suwon City

Note: Free school meals were expanded to all grades of elementary schools in 2011; and then to kindergartens, elementary schools, and middle school students of the 2nd-3rd grade in 2012; and, more recently, expanded to cover everyone from kindergarteners to high school student in 2019.

The number of citizens benefiting from public food services had decreased after recording 126,511 in 2015 and went up again in 2018, and then the number increased sharply to 158,180 in 2019. What is noteworthy is that free school meals were expanded to cover all high school students in the second half of 2019. It means a total of 44,742 students benefit from free school meals. In addition, Suwon City supports middle schools to fill the price gap between GMO and non-GMO foods, to provide students with healthier school meals. Also, the city supports fruit snacks for after-school childcare programs and day care centers. Since the normal operation of school cafeterias became impossible in this COVID-19 crisis, the city adopted school meal kits for home delivery, to support students and households and also protect the livelihoods of food producers and school meal providers.

Suwon City has been providing free school meals for private kindergartens, elementary schools, middle schools, high schools, special schools, and alternative educational institutions, while supporting them with high quality agricultural products, non-GMO products, milks, and fruits. In addition, the city adopted school meal kits for home delivery in the COVID-19 crisis. However, the city still needs to eradicate food inequality and create a more stable and sustainable food system through policy interventions.



West Lake and Chukman Reservoir / Source: Suwon City Photo Bank, photographed by Kang Je Won



Educating Children for Healthy Dietary Habits / Source: Suwon Citizens' Network for Education on Healthy Dietary Habits(Location : Seoho Middle School)

Target 4-3 Ensuring Income of Local Farmers and Producers

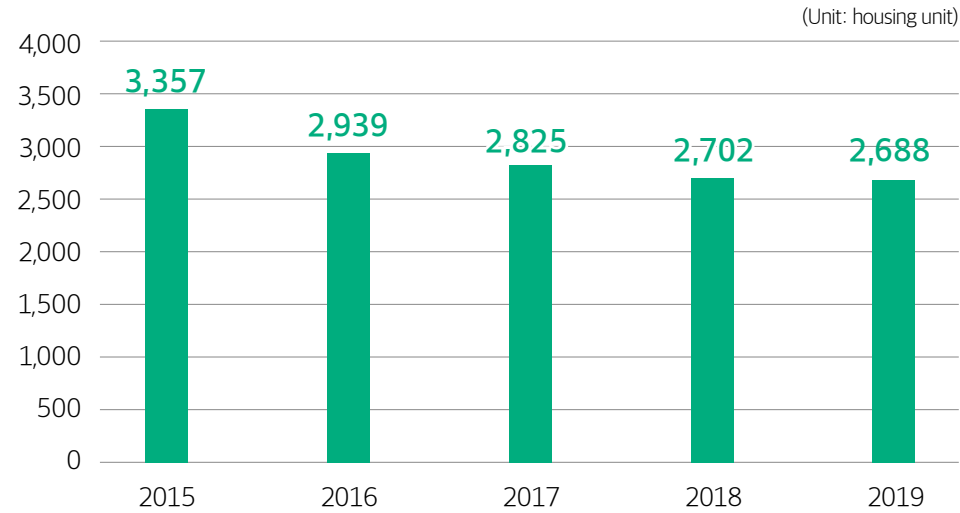
Under the target, the city aims to increase the income of local farmers and producers of processed food; establish a system for supporting and expanding direct markets and food stores selling local agricultural products; promote the adoption of smart labels for locally produced agricultural products and processed food products; support local SMEs' by promoting local food processing and distribution; expand financial support and promote consumption for eco-friendly agricultural products and food; and actively seeks new markets for local farm products.



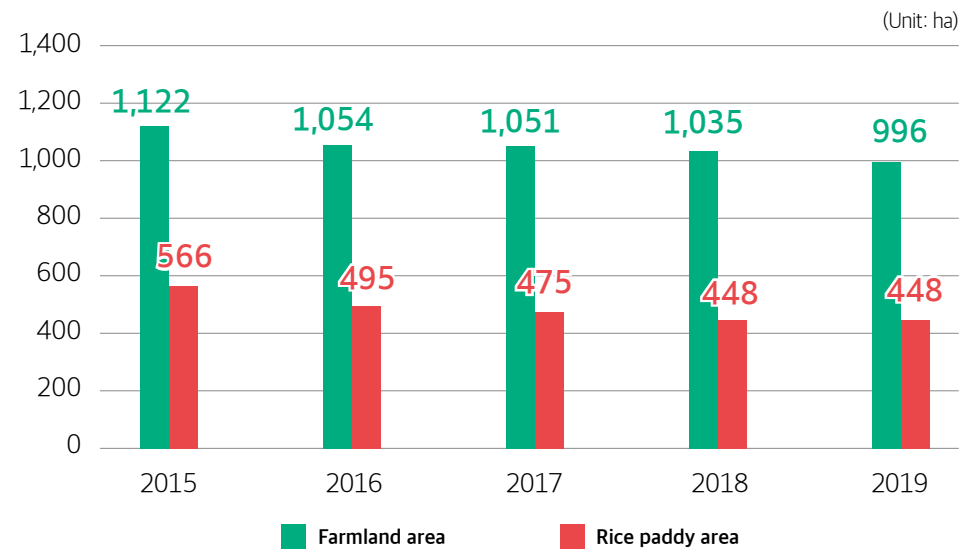
Indicator 4-3-1 Number of Farming Households in Suwon

Indicator 4-3-2 Farmland Areas in Suwon

Number of Farmers in Suwon



Number of Farmers Areas in Suwon



(Unit: housing unit, ha)

Item	2015	2016	2017	2018	2019
No. of farming households	3,357	2,939	2,825	2,702	2,688
Farming area (Paddy field)	1,122 (566)	1,054 (495)	1,051 (475)	1,035 (448)	996 (448)

Source: KOSIS, E-Government Indicator, Survey on Agriculture and Fishery

The number of farming households in Suwon showed a gradual decrease from 3,357 households in 2015 to 2,688 households in 2019. As urban development and new housing projects results in an influx of population and a growing demand for convenient living facilities, it has become more difficult for farmers to maintain their farmlands. For reference, a total number of Suwon's households were 492,939 in 2018.

The farmland area decreased from 1,122 ha in 2015 to 996 ha in 2019. The rice paddy area reduced from 566 ha in 2015 to 448 ha in 2019. Since farmers mostly rent lands from outsiders, along with land development projects, new buildings such as apartments and shopping centers have been replacing farmlands little by little.

New measures, such as basic payment scheme for farmers or purchasing all agricultural produce, shall be considered to support the livelihoods of farmers and facilitate smooth supply of food.

Indicator 4-3-3

Number of Direct Marketplaces and Local Food Stores

Number of direct sales markets and local food stores in Suwon, and annual sales

(Unit : No. of stores & KRW 1,000)

Item	2015	2016	2017	2018	2019
No. of stores	3	3	4	4	5
Annual turnover	2,559,000	6,708,000	6,088,586	6,756,761	7,270,423

Source: The Agricultural Products Distribution Team, The Bioindustry Division

The number of direct marketplaces and local food stores in Suwon increased from 3 in 2015 to 5 in 2019, while the number of local food store(s) remained unchanged in the same period. In fact, there is only 1 direct food store, and direct marketplaces open only on weekends while their number has been growing every year.

Although the local food store records a high rate of increase in sales, it has limits in the supplied volume and the number of items. And the budget for local food stores and farmers is not still enough, despite the clear need for ensuring more stable supply of agricultural products.

The number of farmers supplying agricultural products to local food stores has decreased every year after recording the highest in 2016.

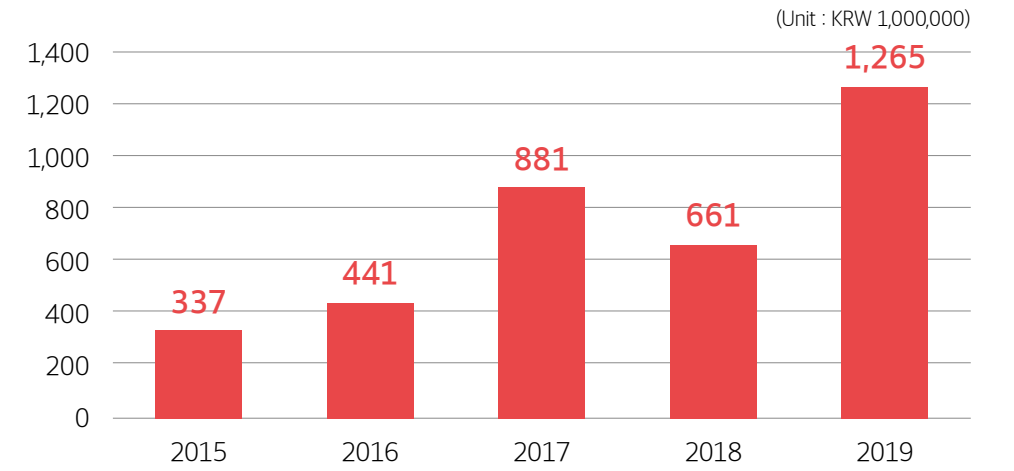
Adequate budget shall be secured to ensure the sustainable growth of local food stores and the supplied agricultural items need to be readjusted and diversified to include, for example, more processed products, while farmers participating in the adjustment process.





Direct Local Food Store in Suwon / Source: Suwon City Photo Bank, photographed by Kang Je Won(Location : Gwanggyosan Branch of Suwon Local Food Store)

Indicator 4-3-6
Budget for the Promotion of Urban Agriculture in Suwon



Item	2015	2016	2017	2018	2019
Budget	337	441	881	661	1,265

Source: The Urban Agriculture Team of the Agricultural Technology Division, Agricultural Technology Center

Note: The rental fees for state-owned land are included in the 2019-2020 budget.

Suwon is a city where King Jeongjo of the Korean Joseon Dynasty built Hwaseong Fortress and artificial reservoirs to lay the foundation for farming. The city had been a center of agriculture with critical agricultural institutions, e.g., the Rural Development Administration, and the College of Agriculture and Life Sciences of Seoul National University located in the city. Although some institutions were relocated, Suwon still has a very vibrant culture of urban agriculture. Suwon City provides citizens with plots for vegetable gardens and about 2,000 households grow vegetables on the plots provided by the city government. Citizens enjoy leisure and produce food through healthy labor in their garden. In the process, it makes citizens interested in the environment, cities, and healthy food. It also continues to produce urban farmers and urban agricultural managers. The city has been increasing the amounts of relevant budget, to allow more people to enjoy such experience and help educated agricultural workforces have more opportunities to work so that they can contribute to further promoting urban agriculture.

As of July 2020, a total of 2,191 plots are provided for urban farming in 4 farming places: Duredul Park (139 plots), Mulhyanggi Park (174 plots), Citizen's Farm at Top-dong (1,800 plots), and Youth Culture Park (78 plots).





Citizen's Farm at Top-dong / Source: Suwon City Photo Bank, photographed by Kang Jewon

Target 4-4

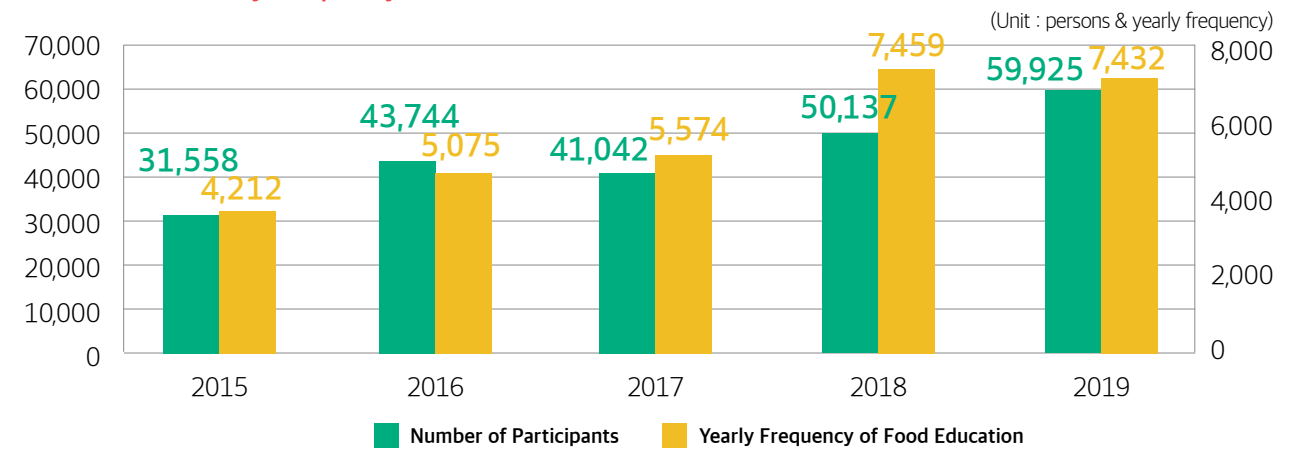
Education on Food for Citizens and the Promotion of Healthy Eating Culture

The target was set under the recognition that a sustainable local food system shall be based on healthy eating habits and dietary consumption. The target aims to build a food inspection system and provide citizens with supports and educa-

tional opportunities to improve their nutritional status. The food inspection system is required to encompass the whole food cycle from production to consumption for safe food free of radioactivity, chemicals, and GMOs.

Indicator 4-4-1 Number of Participants in Food Education in Suwon

Indicator 4-4-2 Yearly Frequency of Food Education in Suwon



Item	2015	2016	2017	2018	2019
No. of participants	31,558	43,744	41,042	50,137	59,925
Frequency	4,212	5,075	5,574	7,459	7,432

Source: Data from the Division of Hygiene Policy (Traditional Fermented Sauce Making Programs by the Center for Children's Foodservice Management), the Division of Bioindustry, the School Food Service Support Center, the Public Health Center, and the Suwon Traditional Culture Center

The number of participants in food education increased from 31,558 in 2015 to 59,925 in 2019 in Suwon, and the yearly frequency of such education (or the number of educational events per year) rose from 4,212 to 7,432 in the same period. The goal of food education is to enable individuals or groups of Suwon citizens to voluntarily develop healthy eating habits. The statistical data was produced by calculating the number of participants in food programs overseen the Division of Bioindustry and the Hygiene Policy Division of Suwon City, such as food programs for making low-sodium traditional fermented sauces and other programs by the Center for Chil-

dren's Food Service Management targeting kindergarteners, elementary school students, and their parents, and also the number of participants in programs provided by Suwon Traditional Food Experience Center.

Since adopting 'Yearly Frequency of Food Education', and the 'Number of Participants' as indicators, Suwon City had made a steady improvement in 2016-2018 and then the yearly frequency of such education remained almost unchanged in 2019.

Better education conditions, such as more spaces for food education, need to be secured to further increase the number of participants and expand the scope of programs, and the use of shared kitchens can be considered for such education-



Nutrition Education by the Health Center of Yeongtong District / Source: Suwon City Photo Bank, photographed by Yang Jun-young

Indicator 4-4-3
Amount of Budget for the Safety Inspection on Food Ingredients in Suwon

(Unit: KRW 1,000)

Item	2016	2017	2018	2019
Budget	26,392	23,983	24,330	26,400

Source: The Center for Children's Food Service Management, the Division of Bioindustry

al programs.

The budget for food safety inspections has not been much changed, recording 26,392 thousand won in 2016 and 26,400 thousand won in 2019. With the expansion of free, eco-friendlier school meals, safety inspections have become more important and shall be continued to ensure the supply of safe and high-quality ingredients and to keep school food suppliers to remain alert. Food safety inspections protect citizens from heavy metals, radioactive materials, and other hazardous substances in food, and safety inspections for school

meals are particularly important.

The amounts of the budget for food safety inspections seem to have been maintained at a level to afford the cost for commissioning inspections such as safety inspections, heavy metal inspections, radioactivity inspections, and genetic tests on Korean native cattle breeds.

The budgetary supports shall be guaranteed, especially given citizens' growing concern over food safety with the recent outbreak of COVID-19 and climate change.

Rice Planting Event / Source: Suwon City Photo Bank, photographed by Kim Kisoo



05

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020

Weekly working hours
32 hours



A good city
to start
a business



Employment rate

70%



Rate of
temporary
and daily
employees

15%



Social economy
Creating the ecosystem



Encourage growth
Supporting SMEs



Suwon 2030 Sustainable Development Goal 5:

Quality Jobs and Industrial Innovation

A Steady Increase in the Number of Employees since 2015 with the Promotion of Quality Jobs and Industrial Innovation

Suwon Sustainable Development Goal 5 (or SDG 5) is to ensure stable livelihoods of citizens by promoting stable employment and safe working environments for the sustainable development of Suwon. The indicators to monitor the progress are as follows: the creation of quality jobs; improvements in wages and working conditions; a favorable city for start-ups; the creation of the right social and economic ecosystem; and encouraging small and medium-sized enterprises(SMEs).

With regard to quality jobs, the number of employees (wage and salaried workers) in Suwon has steadily increased since 2015, reaching 521,000 as of 2019. The employment rate is at the 60% level, while the employment rate of youth (15-29 years old), women, and the elderly shows a steady increase. Although Suwon City has pushed forward with the conversion of non-regular workers in the public sector to regular workers since 2015, the rate of regular workers dropped to 72.7% in 2019, from 73% in 2015. Therefore, the city administration and civil society shall work together to keep the conversion of public-sector non-regular workers to regular workers and to increase the share of regular workers in the private sector through discussions on administrative supports and consensus building.

While wages and working conditions show a gradual improvement, a great number of people are working for long hours. Efforts and ideas to achieve the dual purposes of reducing working hours and increasing wage levels, particularly

for non-regular workers, are required. Meanwhile, urgent policy efforts shall be made for the promotion of the occupational safety. In this regard, it was encouraging that the Suwon Non-regular Workers'

Welfare Center participated in the Gyeonggi Province's Labor Safety Project 2020 and conducted activities for the prevention of industrial accidents in Suwon such as monitoring industrial safety levels at construction sites.

Suwon launched and has been running a specialized organization offering a range of business support for start-ups, and thanks to such efforts, the number of start-ups reached an annual average of 12.6 in 2015-2019. The city needs to check the overall policies for supporting the sustainable business activities of start-ups.

The amounts of the financial support for SMEs have steadily declined and stood at only 1.09 billion won in 2019.

The social economy puts priorities on people rather than capital (or profits) and on the benefit of the whole society rather than the interests of individual companies and organizations and is becoming increasingly important because of its merits such as supplying services suitable for the needs of communities, providing jobs for the vulnerable, and revitalizing the local economy. In this regard, Suwon City launched the Social Enterprise Support Center and has been providing technical supports for social enterprises, resulting in the steady increase in the number of social enterprises. Moreover, the city went one step further for a systematic policy approach by establishing the Basic Plan for the Social Economy in 2020.

On the other hand, the number of SMEs has been continuously increasing and reached 120,000 as of 2019. The budget allocated by the municipal government for SMEs support was significantly cut as it was transferred to the Business Support Center for SMEs since the center's launch. As the city's public





agencies put a priority on the purchase of SMEs products in the procurement process, the total amount of purchases from SMEs increased to 428.74 billion won in 2019. In addition, the amount of financial support for the technological development of SMEs has gone up, especially with the launch of the Business Support Center for SMEs, increasing significantly to reach 1.17 billion as of 2019, while being used to improve SMEs' R&D environments, e.g., the operation of shared research facilities and the promotion of relevant projects. Such financial supports shall be further strengthened, given the demand for more advanced technology and technological diversity.

Quality jobs promoting stable livelihoods, and the guarantees of stable employment and safe working environments are essential elements of the sustainable development of Suwon. In particular, the city needs to pursue principles like sustained, inclusive, and sustainable economic growth, full and productive employment, decent work for all, and equal pay for equal work. In addition, long working hours shall be reduced to strike a healthy work-life balance. Suwon needs to strengthen the foundation of the local economy by supporting SMEs which account for 90% of job creation and promoting technological development. The city is also required to promote qualitative growth for its socio-economic revitalization and move towards a more resilient society through a sustainable economic system that better responds to changing internal/external environments. The city also needs to further promote economic innovation, flexibility, and job creation by supporting start-ups/entrepreneurs that play an important role in the creation of new jobs and the development of new industries.

The Landscape of Suwon Deltaplex (previously named Suwon Industrial Complex) / Source: Suwon City Photo Bank, photographed by Jo Seonggo

Target 5-1 Creating Quality Jobs

- Employment rate: By 2030, achieve an overall employment rate of 75% or above to realize a sustainable and stable local society, with particular attention paid to young job seekers and vulnerable groups with the goal of increasing the employment rate of women (65% or above) and the youth (60% or above) and people with disabilities (20% or above).
- The percentage of regular employees in total employees: By 2030, increase the percentage of regular employees to 85% to ensure the qualitative stability of employment.

Along with the population increase, the employment rate in Suwon has been stagnant since 2015, remaining at the level of 60% (within deviation of plus or minus 1.7%) and was at 60.2% as of 2019. The employment rates of young job seekers (aged 15-29) and vulnerable groups such as women and the elderly seem to have improved with a slight increase

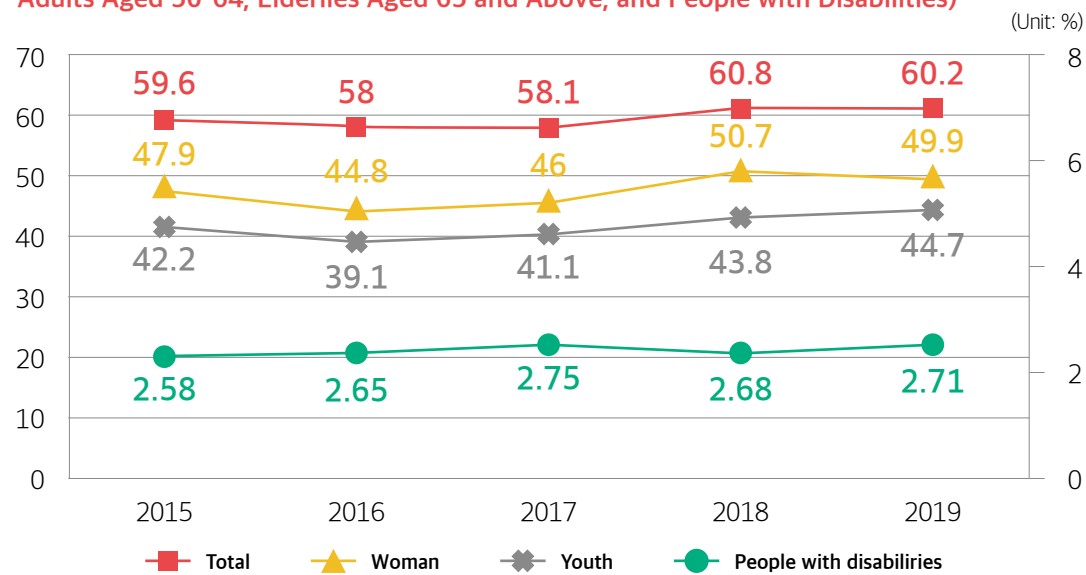
in the numbers. As of 2019, the youth employment rate was 44.7% while the employment rate of women and people with disabilities record 49.9% and 2.71%, respectively.

The percentage of regular employees had increased in 2015-2017 but fell to 72.7% in 2019, which lower than 73% in 2015.

Suwon City has been converting non-regular workers to regular status in the public sector since 2015, and the South Korean central government has also implemented and supported policies for such conversion. Despite such efforts, the share of regular workers as of 2018 went back to the 2015 level, because of the declining share of regular workers in the private sector.

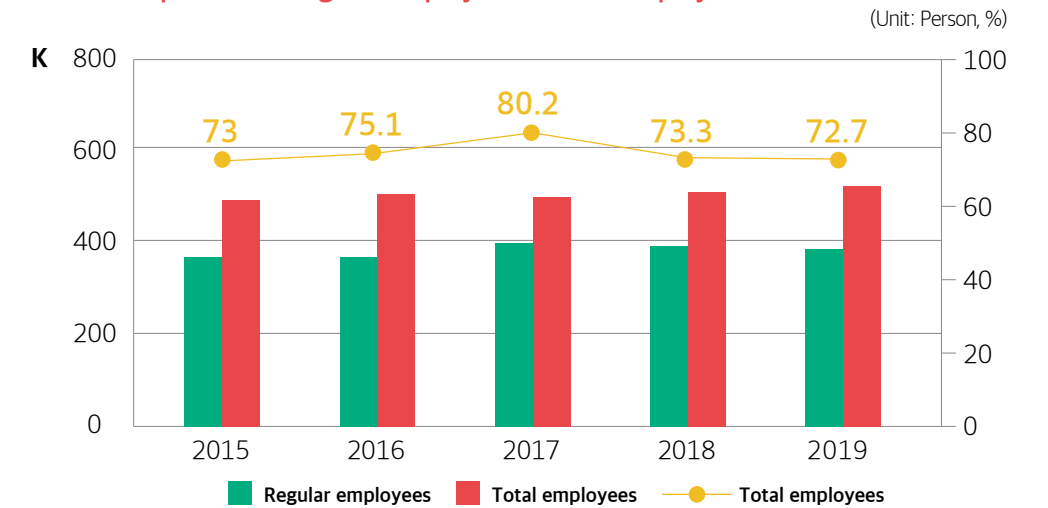
Therefore, the city administration and civil society shall cooperate to build consensus and provide supports for increasing the share of regular workers in the private sector while maintaining such conversion efforts in the public sector.

Indicator 5-1-1 Employment Rate in Suwon (for Women, Young People Aged 15-29, Middle-Aged Adults Aged 50-64, Elderlies Aged 65 and Above, and People with Disabilities)



Source: the Welfare Center for Non-regular Workers of Suwon

Indicator 5-1-2 The Proportion of Regular Employees in Total Employees



Source: The Welfare Center for Non-regular Workers of Suwon

The number of regular employees had increased from 360,000 in 2015 to 378,000 in 2019. The total number of employees had also increased from 493,000 in 2015 to 521,000 in 2017. However, the rate of regular employees decreased to 72.7% in 2019, which is similar to the 2015 level.



Job Fair in the Suwon Industrial Complex / Source: Suwon City Photo Bank and photographed by Kang Jewon



Target 5-2 Improvement of Payments and Working Conditions

- The weekly/yearly working hours of employees: The legal working hours for employees are set at 40 hours per week but actual working hours may differ depending on the nature of work and workload. The working hours shall be effectively managed to give employees the proper amount of time to recharge and improve quality of lives.
- Average monthly payment of employees: A certain level of monthly payment shall be secured to ensure decent life for citizens.
- Fatalities caused by occupational accidents¹⁾: Occupational safety is as important as the quantity of jobs and good working conditions. Suwon aims to cut the number of deaths caused by occupational accidents and reduce the rate of deaths per 10,000 population(‰) to 0.22‰.

1) The evaluation is based on data that includes Hwaseong City due to the absence of Suwon-specific data.

Citizens shall be able to have enough free time to ensure a sustainable and decent quality of life. To that end, adequate amounts of wages shall be guaranteed with minimum working hours. However, the level of wage is usually proportional to the amount of time required to do the job, so even if the hourly wage is high, it will not be possible to earn enough money by working short hours (This also explains why a regular full-time job is preferred than a high-paying short-term contract job). Therefore, we need to gradually reduce working hours within the extent of securing adequate monthly income rather than rushing to cut working hours. Eventually, wage levels and working hours shall be managed together. At the same time, ensuring workers' safety and preventing/minimizing occupational accidents are the key factors for improving the working environment.

Suwon had seen a steady decrease in the working hours of employees since 2017, reaching an average of 41.4 hours per week in 2019. More specifically, as of 2019, male workers (43 hours/week) worked 3.8 hours more than female workers (39.2 hours/week), and regular workers (44 hours/week) worked 7.8 hours more than non-regular workers (37.8 hours/week). Despite such decrease in working hours, the annual working hours calculated based on the weekly working hours stood at 2,152.8 hours, higher than the national average (1,967 hours) and also that of Mexico (2,137 hours), a country with the longest working hours among OECD members.

Recently, with a growing interest in work and life balance among Koreans, its importance has been widely recognized across the nation. Under the circumstance, Suwon City introduced a plan to prevent overtime work and promote the use of annual leaves. As part such efforts, every Wednesday is designated as a 'Family Day,' encouraging employees to have no meeting after 6 pm and finish work on time. However, not only administrative efforts but also supports/ideas from the private sector are required for achieve a better work-life balance.

The level of payment has steadily increased since 2017, and the average monthly payment

recorded 3,077 thousand won in 2019, showing an increase of 258 thousand compared to 2017.

The monthly payment of male workers (3,213 thousand won) is 401 thousand won higher than that of female workers (3,213 thousand won), and regular workers are paid (3,698 thousand won), 1,514 thousand won higher than non-regular workers (2,184 thousand).

The hourly wage also has increased every year by 6-8%, higher than the inflation rate, and it recorded 18.6 thousand won as of 2019. The hourly wage of male workers(21.0 thousand won) is 6.2 thousand won more than that of female workers (14.8 thousand won), and the hourly wage of regular workers (21.0 thousand won) is 6.6 thousand won more than that of non-regular workers (14.4 thousand won). While there is a gap in the wage per unit hour between regular workers and non-regular workers, no gender gap exists in Korea's wage systems so the difference between man and women depends on the type of work and workload.

Suwon City has been implementing the minimum wage system to increase the hourly wage of non-regular workers. While Korea's legal minimum hourly wage was 8,350 won in 2019, Suwon City set the minimum hourly living wage at

10,000 won and has been applying it to short-term employees of government offices and public institutions. Still more policy efforts are needed to further promote the living wage scheme in the private sector, and linking the living wage scheme with the city's procurement system will be worth considering.

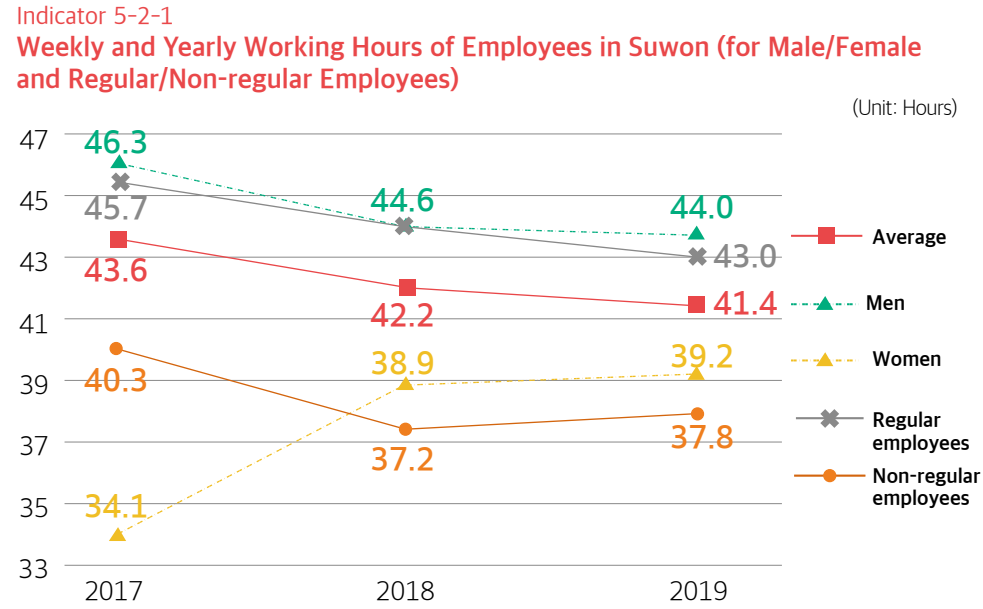
What is as important as wage levels or working hours is workers' safety. As of 2018, occupational fatalities per 10,000 workers in Suwon was around 0.79‰, higher than the national average of 0.51‰ and that of major OECD countries. Moreover, it has been showing a rapid increase since 2016.

In general, wages and working conditions have been gradually improving, but many people are still working long hours. Given that, more efforts and ideas are required to achieve the dual goals of reducing working hours and improving wage levels, with particular attention paid to the wage level of non-regular workers. Also, urgent policy efforts are required to secure occupational safety. One good news is that the Welfare Center for Non-regular Workers of Suwon has been involved in activities for the prevention of industrial accidents such as monitoring industrial safety at construction sites as part of the Gyeonggi Province's Labor Safety Project 2020.

Job Fair for Middle-aged and Older People / Source: Suwon City Photo Bank, photographed by Kim Kisoo



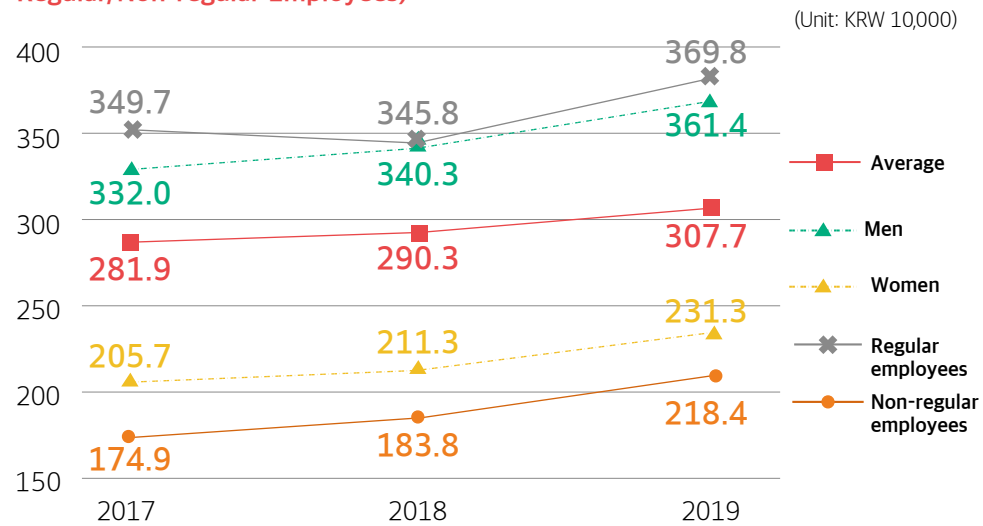
Weekly Working Hours of Employees in Suwon



Source: The Welfare Center for Non-regular Workers of Suwon

In Suwon, the working hours of male employees are longer than their female counterparts and regular workers tend to work longer than non-regular workers. Meanwhile, female workers, whose working hours were relatively short, show increased slightly. The average weekly working hours of employees were 41.4 hours in Suwon as of 2019.

Indicator 5-2-2
Average Monthly Payment of Employees in Suwon (for Male/Female and Regular/Non-regular Employees)

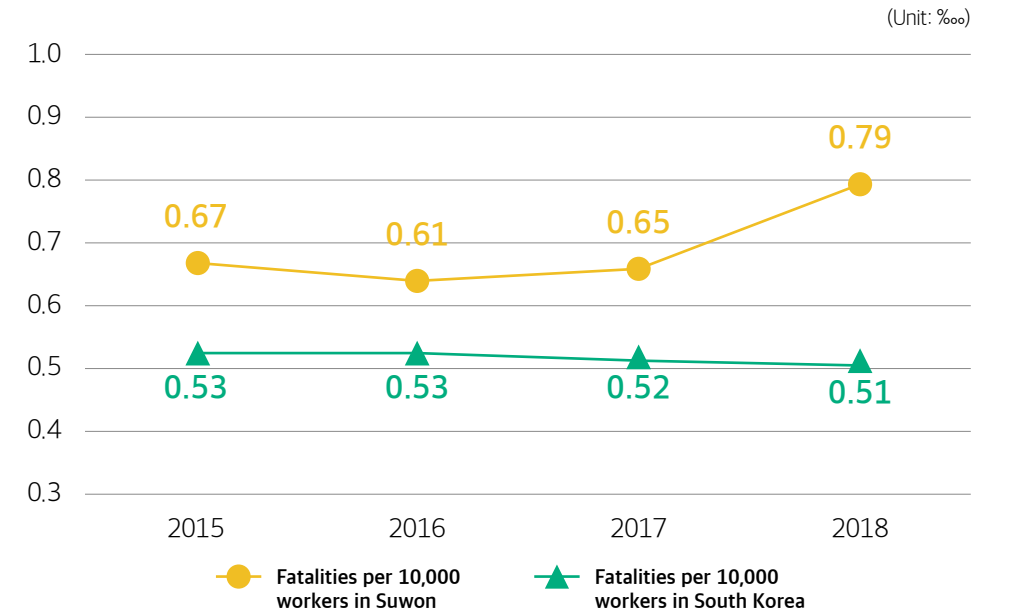


Source: The Welfare Center for Non-regular Workers of Suwon

In Suwon, the monthly payment of male employees is more than that of female employees, while regular employees receive more than non-regular workers. Generally, the monthly payment has been steadily increasing, and the average monthly payment was 3,077 thousand won in 2019.

Indicator 5-2-3
Occupational Fatalities Per 10,000 Workers(‰) in Suwon

Occupational Fatalities per 10,000 Workers(‰) in Suwon Areas (Sowon, Hwaseong, and Yongin Combined)



Source: Ministry of Employment and Labor, Analysis on Industrial Accidents, and Total Fatalities

In Suwon, the number of work-related fatalities decreased slightly in 2016, and then the number had constantly increased, reaching 87 as of 2018. The fatalities per 10,000 workers record 0.79‰, which is 55% higher than the national average of 0.51‰. Furthermore, the rate has sharply increased since 2016. Under the circumstance, urgent policy efforts shall be made for the prevention of occupational accidents.



Target 5-3 A Good City to Start a Business

- The number of newly established start-ups and 3-year survival rate(%): Start-ups are especially important in terms of job growth and the development of new industries, and they promote economic growth by enhancing innovation and flexibility. In this report, the number of start-ups¹⁾ is limited to those who went through the Business Support Center for Start-ups of Suwon.
- Financial support²⁾ for SMEs³⁾: Start-ups are small in size at the beginning phase and need financial supports to maintain their businesses.

- 1) The Business Support Center for Start-ups of Suwon: Suwon has been implementing a business support program to create its own successful start-up model since 2012 and providing supports in terms of business management, technology, tax, accounting, and law, through consultation with professional managers and external experts.
- 2) Financial supports : Interest rate subsidy from SME Fund, SMEs Credit Guarantee's contribution, Shared Growth Cooperation Project's contribution, and other interest rate subsidies and contributions for each project
- 3) Small and medium-sized enterprises(SMEs): Companies with 3-year average sales of 150 billion won or less

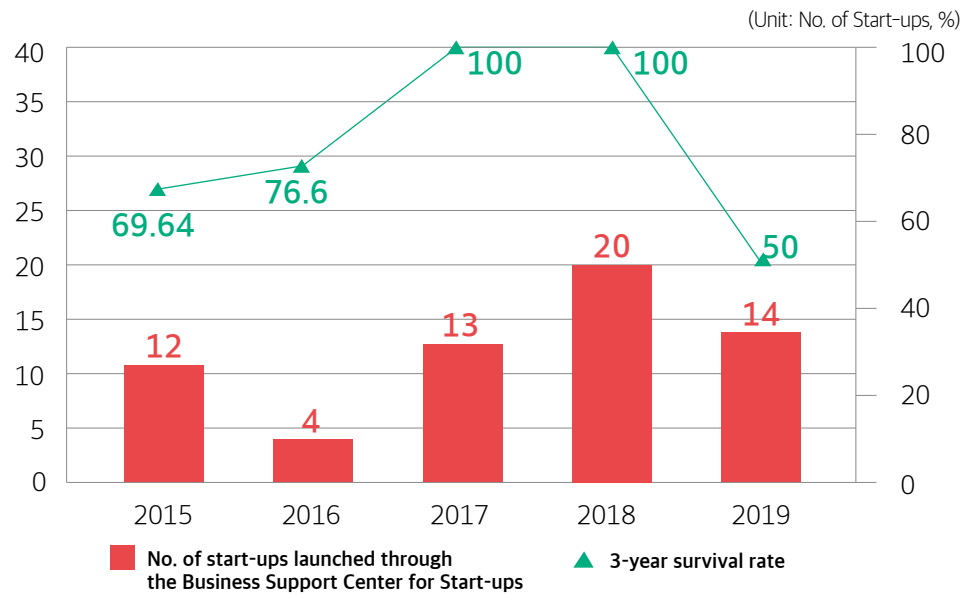
Sufficient number of jobs, as sources of income, shall be guaranteed to sustain the livelihoods of citizens and promote the quality of life, and it is undeniable that a large number of jobs are created by start-up businesses. That is one of reasons that Suwon City established the Business Support Center for Start-ups and have been providing integrated supports in terms of business management, technology, tax, accounting, and law through consultation with professional managers and external experts. The center also provides financial supports to sustain business operations of SMEs.

A yearly average number of 12.6 start-ups was created in 2015-2019. The amount of the financial support for SMEs continued to decline from 4.68 billion won in 2015 to 1.09 billion won in 2019. Given sluggish supports for SMEs and a rapid decline in the 3-year survival rate, an overall check-up on relevant policies is required.

Suwon Startups Audition / Source: Suwon City Photobank, photographed by Kang Jewon



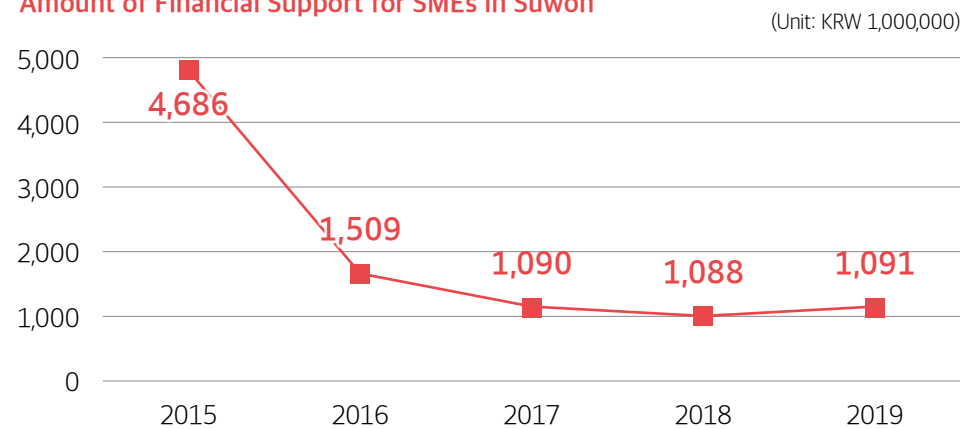
Indicator 5-3-2
Three-year Survival Rate of Start-ups (Including Social Enterprises)
Supported by the Business Support Center for Start-ups of Suwon



Source: Employment Policy Team of the Employment Policy Division

The number of start-ups was only 4 in Suwon as of 2016, but a yearly average number of 12.6 start-ups were created in 2015-2019. The 3-year survival rate reached 100% in 2019 but dropped sharply to be around 50% in 2019. This is because the number of start-ups was extremely small in 2016, recording only 4, of which only 2 survived.

Indicator 5-3-3
Amount of Financial Support for SMEs in Suwon



Source: Business Support Team of the Business Support Division

The amount of the financial support for SMEs was 4.68 billion won in 2015, but the number continued to decline, recording 1.09 billion won in 2019. The overall check-up on policies for start-up supports seems necessary given stagnant SME supports and a rapid decline in the 3-year survival rate.

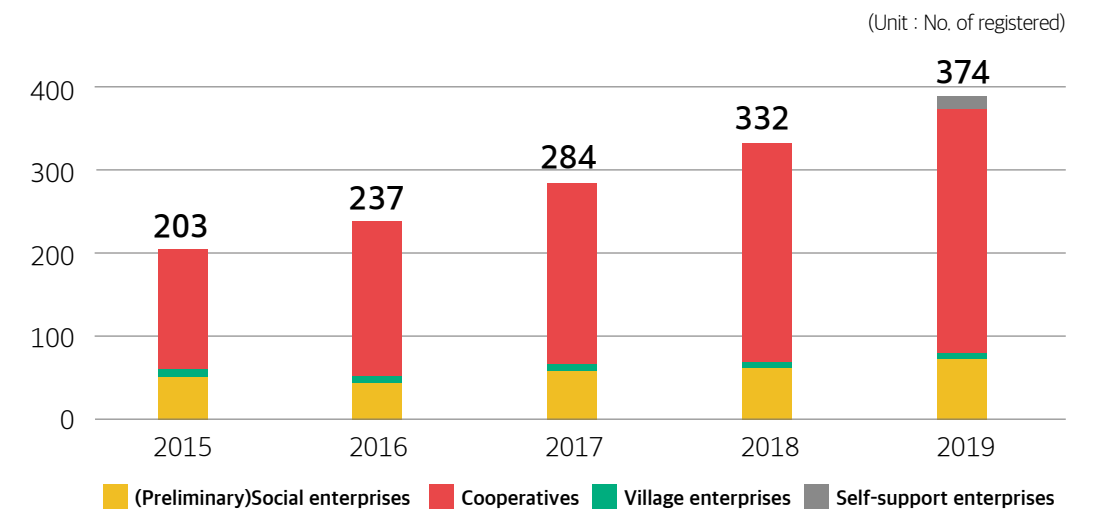
Target 5-4
Completing the Ecosystem for Social Economy

- Number of registered social enterprises¹⁾ and cooperatives: Social enterprises play an important role in building a sustainable local economic system and strengthening economic resilience. They also create social values through production/sales of goods/services, based on cooperation and partnership. In this regard, the number of social enterprises shall be managed to have a certain scale and create a sustainable ecosystem for social economy. Suwon City aims to increase the number of registered social enterprises and cooperatives to over 650 by 2030.
- The implementation rate of the Basic Plan for Social Economy(%): The city conducted research on the '5-year Basic Plan for Social Economy in 2020' and plans to adopt the implementation rate of the Basic Plan for Social Economy as an indicator for Target 5-4.

1) Social enterprise: The term 'social enterprise' means an entity certified as prescribed in Article 7 of the Social Enterprise Promotion Act (SEPA) to be the one that pursues a social objective aimed at enhancing the quality of life of community residents by providing vulnerable social groups with social services or job opportunities or by contributing to the communities while conducting its business activities, such as the manufacture or sale of goods and services. Social enterprises are legally classified into (preliminary) social enterprises, village enterprises, cooperatives, and self-support enterprises.

Social economy puts priorities on people rather than capital (or profits) and on the benefit of the whole society rather than the interests of individual companies and organizations and is becoming increasingly important because of the following merits: supplying services recognizing communities' needs which are not recognized by the nation or public agencies; providing jobs for the vulnerable; and revitalizing the local economy. Given that, Suwon City launched the Social Enterprise Support Center and has been providing technical supports for social enterprises/cooperatives, and such efforts have been resulted in a steady increase in the number of social enterprises, reaching 374 as of 2019. In addition, Suwon City recently set the Basic Plan for Social Economy for more elaborated policy supports.

Indicator 5-4-1
Number of Registered (Preliminary) Social Enterprises and Cooperatives



Source: Korea Social Enterprise Promotion Agency, and Social Economy Team of the Regional Economy Division



The number of social enterprises and cooperatives registered in Suwon has been steadily increasing since 2015. In 2019, the self-support enterprise was added as a type of social enterprises, and the number of registered companies increased from 203 in 2015 to 374 in 2019.

Suwon's Social & Economic Sharing Festival / Source: Suwon City Photo Bank, photographed by Kang Jewon



Target 5-5 Boosting the Growth of SMEs

- Number of SMEs: The city is to increase the number of SMEs, which accounted for about 90% of employment as of 2019, to promote stability and employment opportunities.
- Budget allocated for supporting SMEs: SMEs need financial supports since their financial status is relatively poor compared to larger companies while SMEs account for a larger share of job creation.
- Expenditure spent for the purchase of SME products and its share in the total purchasing cost: It means the amount of expenditure that Suwon's public institutions spend for the purchases of SME products and the share of the SME products purchasing cost in the total purchasing cost of Suwon's public institutions. The city is to increase its spending on the purchase of SME products and its share in total purchasing cost.
- Annual budget for supporting technological development: Small and medium-sized enterprises(SMEs) have limits in their investment in technological development. Given that, Suwon City supports their technological development/improvement by launching/operating shared research facilities and encouraging the use of such facilities. The relevant budget shall be steadily increased.

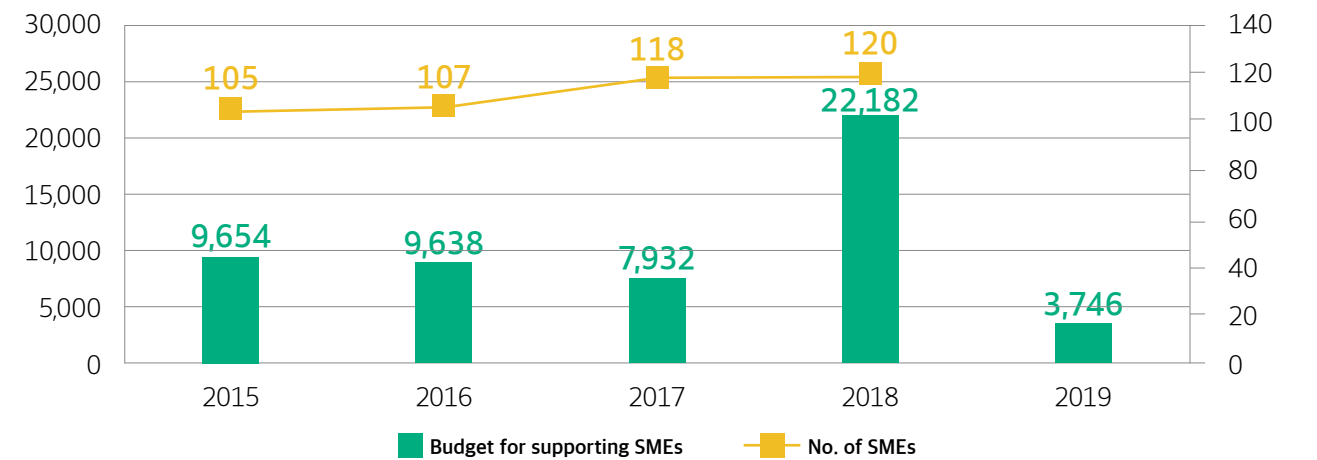
The number of SMEs, which take up the largest share of employment, has steadily increased and reached 120,000 as of 2019. Suwon City's budget for supporting SMEs was significantly cut as relevant work was transferred to the Business Support Center for SMEs since its launch.

Suwon City's support for technological development of SMEs have mainly focused on operation of shared-use research facilities and relevant projects. Its financial support steadily increased and reached 1.17 billion won as of 2019. Given the demand for more advanced technology and technological diversity, relevant budget needs to be steadily increased.

Indicator 5-5-1 Number of SMEs in Suwon

Indicator 5-5-2 Budget for Supporting SMEs in Suwon

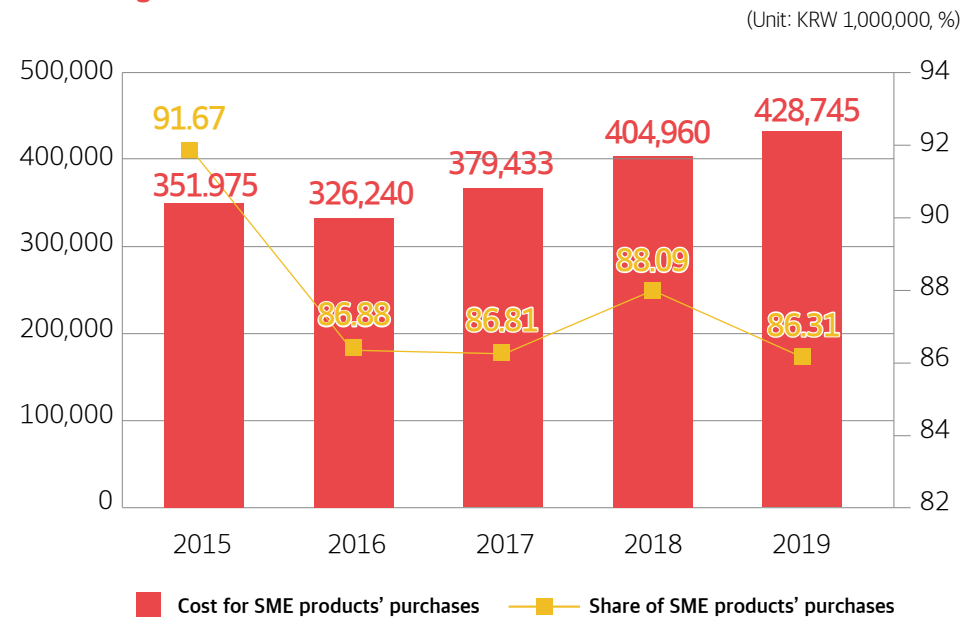
(Unit: KRW 1,000,000, No. of SMEs/K)



Source: Local Financial Management System and the Business Support Team of the Business Support Division
The data on the number of SMEs: provided by KOSIS(Korea Statistical Information Service), the Ministry of SMEs, and the Survey on the Status and Number of Startups (by City, Country, and District)

The number of SMEs steadily increased in Suwon, reaching 120 thousand as of 2018. The amount of budget for supporting SMEs was 9,654 million in 2015 and sharply increased in 2018 with regard to the plan to launch the Business Support Center for SMEs and then fell significantly to 3,746 million in 2019 as the construction of the Business Support Center for SMEs completed in that year.

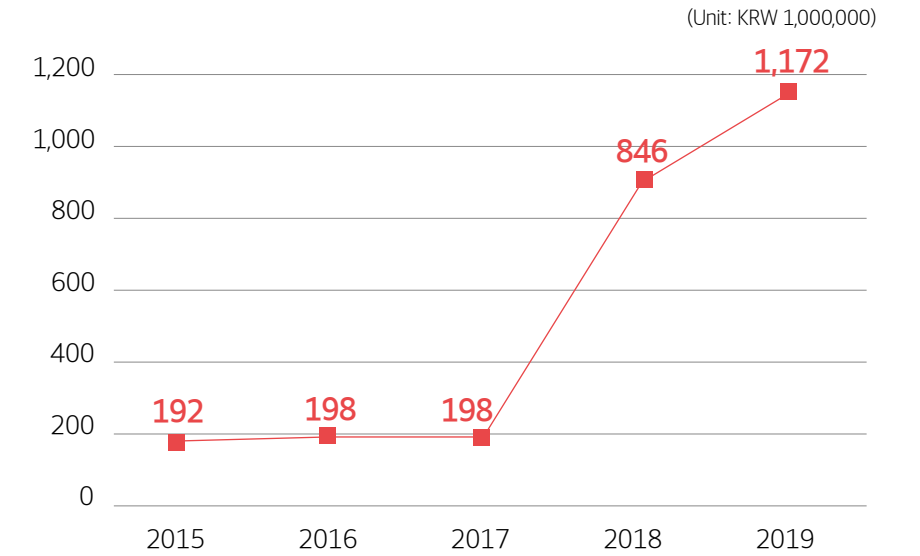
Indicator 5-5-3
The Share of the Cost for Purchasing Products from SMEs in the Total Purchasing Cost of Suwon's Public Institutions



Source: Business Support Team of the Business Support Division, Comprehensive Data on Public Purchasing

Suwon's public institutions spent 326.24 billion won for purchasing products from SMEs and the number increased to 428.74 billion won in 2019. However, the cost for purchasing SME products accounted for 86.31% of total purchasing cost as of 2019. It means more policy efforts are required to increase the share of SME products in the public procurement market.

Suwon's Annual Budget for Technological Development



Source: The Investment Team of the Business Support Division and Local Financial Management System

The yearly amount of budget was around 190 million won in 2015-2017 and increased significantly in 2018-2019 with the plan for the launch of the Business Support Center for SMEs.

Disinfection service by a social enterprise at Suwon Nammun Market / Source: Suwon City Photo Bank and photographed by Kang Jewon



06

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020

Green technology Green industry

Using eco-friendly green products
Eco-friendly technology and industry, supported by Suwon



Green Market
Promoting green flea markets

Fair travel

Creating local jobs Development of local culture
Environmental protection



Recyclable waste
Reduce waste and promote recycling



Suwon 2030 Sustainable Development Goal 6: Sustainable Consumption and Production

Recycling 68.3% of Household Wastes Generated in Suwon as of 2018

As our society has become more advanced since the industrial revolution, complex social problems have arisen across sectors and the society has turned into a consumer society with priorities given to profits and convenience rather than environment. A vicious cycle is being repeated, where excessive consumption and production cause environmental issues like urban waste disposal, As the use of plastics becomes more common, discarded plastics flow into oceans and microplastics contamination not only threaten marine life but also humans. Under the circumstance, Suwon City set 'Sustainable Consumption and Production,' as one of its Sustainable Development Goals. The city is to turn itself into a city where everyone lives in harmony with nature by promoting the production and consumption of green products, reducing general consumption and household wastes, and raising people's awareness of resource circulation.

The production and consumption of green products minimize the impact on the environment and saves social costs like the costs of ecological restoration. From the perspective of consumers, purchasing green products not only contributes to social and environmental benefits, but also economic benefits. In this regard, Suwon City monitors the purchase of green products in public institutions to encourage the use of green products with lower impact on the environment, as a way to alleviate environmental pollution while maintaining

consumption and production for the convenience of citizens. As of 2019, the city's public institutions purchased green products worth 16.2 billion won, accounting for 56.26% in their total purchasing costs and Suwon is striving to increase the rate to 70% by 2030.

In addition, Suwon has been making efforts to promote the reduction and recycling of household wastes. As of 2018, the city recycled 62.3% (707.2 tons/day) of household wastes with the goal of increasing the rate to 75% by 2030. Sustainable consumption and production begin with changes in perceptions of both producers and consumers. That is why Suwon has been striving to expand the scope and strengthen the effectiveness of environmental education since 2012, with the vision of an 'environmental education city in harmony with the nature.' Suwon has been conducting visiting education service in addition to the educational programs held at resource recycling facilities, and the yearly frequency of visiting education service increased from 43 times in 2018 to 93 times in 2019, giving citizens more opportunities for environmental learning and promoting public awareness of the environment.





Waste Transfer Station at Tap-dong / Source: Suwon City Photo Bank, photographed by Kang Jewon

Target 6-1 Promoting the Purchase of Green Products

- The rate of green product¹⁾ purchasing cost(%) in the total purchasing cost at Suwon's public institutions: increase the rate of green product purchasing cost for lessening impact on the environment and promoting environmental sustainability.
- Number of green markets (for sharing and resource circulation)²⁾: By 2030, increase the number of green markets by more than 3 times.

1) Green product: It refers to a product designed to minimize the input of energy, resources, and the generation of greenhouse gases and pollutants.
 2) Green market (for sharing and resource circulation): It refers to a market where people sell/buy second-hand products that are of no use to them or they don't use often. A green market is not only for selling products but also for sharing experiences.



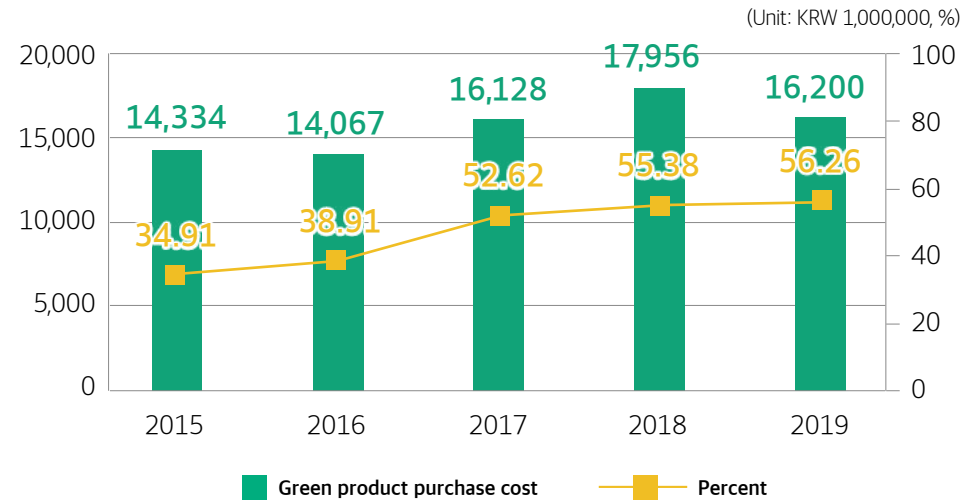
The consumption and production patterns of human, along with industrial factories, have been developed in a way that puts environmental burdens. However, it also means that we can make the environment more sustainable by changing the way we consume and produce and lessening the impact on the environment. From this point of view, the city of Suwon strives to turn itself into a proactive consumer of green products. As part of such efforts, the city held a ceremony of making its pledge of purchasing green products and has been providing education for green purchasing to public officials in charge of purchasing products.

In Suwon's public institutions, the green product purchasing cost and its share(%) in their total purchasing cost have increased since 2015, even though such growth slowed somewhat in 2019. Suwon's public institutions bought green products worth 16.2 billion won, accounting for 56.26% of their total purchase cost in 2019. They aim to increase the rate of green product purchasing cost in the total purchasing cost to 70% by 2030.

With the global attention to the environment and environmental regulations, the promotion of green product manufacturing technology will contribute to strengthening the competitiveness of Suwon's exporting companies. In this regard, policies supporting green manufacturing technology will be worth considering in addition to promoting green purchasing. Suwon City has been supporting green markets and encouraging consumers to choose more sustainable green products. The number of green markets has increased every year since 2015 and reached 195 in 2019.

The public and the private sector shall work together to sustain the efforts to create a culture of ethical consumption and to promote the reduction and recycling of urban waste. As for green markets, the problem is, while they have grown in numbers, they seem to be losing its original purpose of promoting resource circulation while serving more commercial purposes. In this regard, there should be an overall review on the relevant policy/budget for more qualitative growth of the green markets.

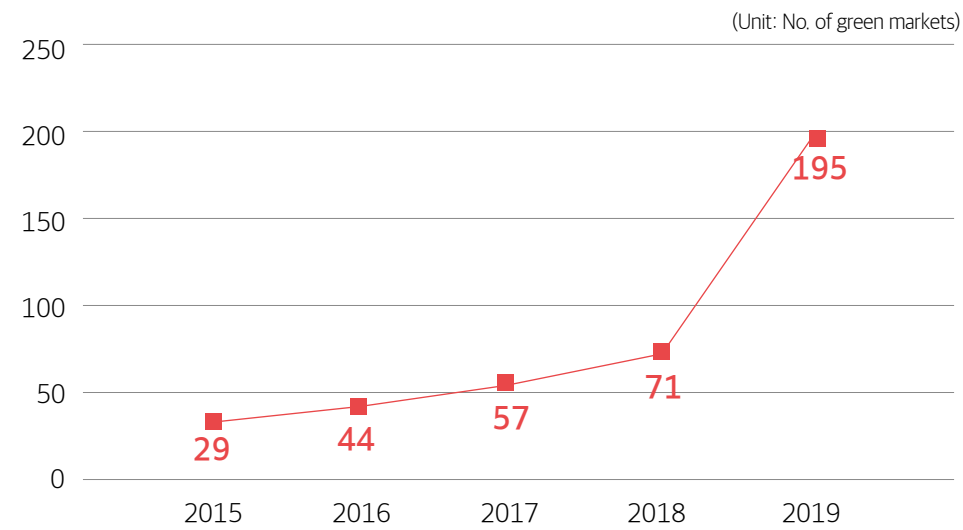
Indicator 6-1-1
Share of Green Product Purchase Cost in Total Purchase Costs of Suwon's Public Institutions



Source: Data on Green Product Purchasing at Public institutions provided by the Environmental Policy Team of the Environment Policy Division

As of 2019, Suwon's public institutions bought green products worth 16.2 billion won, accounting for 56.26% of their total purchase costs. The green product purchase cost and its share(%) in their total purchase costs have grown since 2015. However, such growth slowed somewhat in 2019 which calls for a comprehensive review of the green product purchasing.

Number of Green Markets in Suwon



Source: The Report on the Sharing Markets and Operation of Green Stores by the Resource Recycling Team of the Cleaning and Resource Division

The number of green markets has grown from 29 in 2015 to 195 in 2019. The markets shall be constantly managed and operated to promote eco-friendly and ethical consumption.



The International Conference on Green Purchasing held in Suwon / Source: Suwon City Photo Bank, photographed by Lee Yong-Chang

Green market held during the International Conference on Green Purchasing
/ Source: Suwon City Photo Bank, photographed by Lee Yong-Chang



Target 6-3 Reducing Consumption and Household Waste

- Recycling rate as a percentage of the total household waste: The city is to reduce the total volume of household waste and increase the recycling rate of household waste.

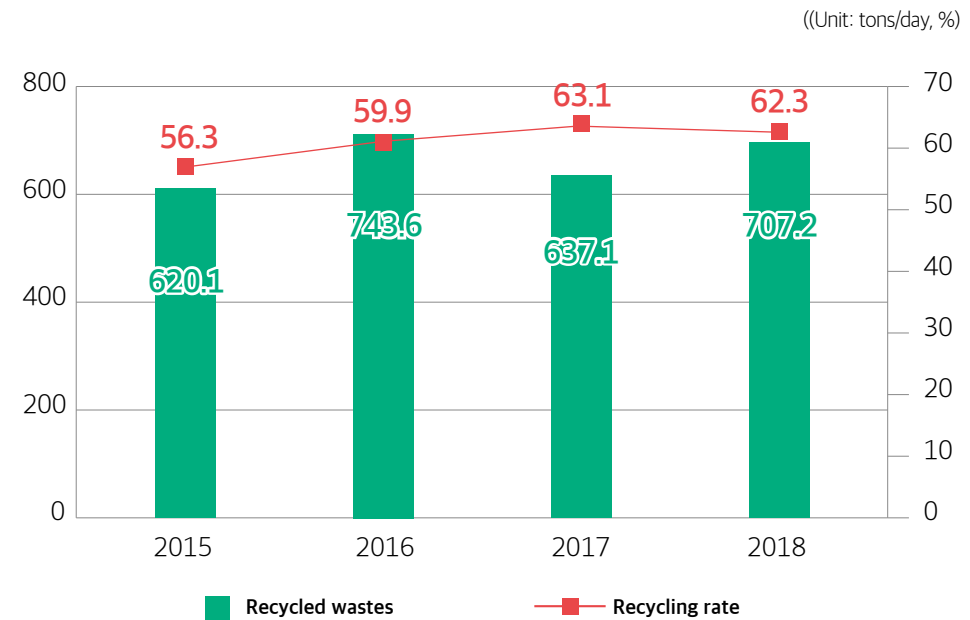
As of 2018, the amounts of household waste reached 1,134.8 tons per day in Suwon. While its volume changes every year, the population increase and the growing demand for living facilities and commodities make it more difficult to suppress the amounts of urban waste. Therefore, the city needs policy to achieve the dual goal of increasing the recycling rate of household waste and reducing the amount of generated waste.

Suwon recycled 62.3% (707.2 tons/day) of total household wastes in 2018 and has the goal of reaching 75% recycling rate by 2030. The city is to create a culture of sustainable consumption and production by changing lifestyle, restraining over-packaging, and developing recycled packaging materials, through cooperation with public institutions, citizens, and producers.



Suwon Resource Circulation Center / Source: Suwon City Photo Bank, photographed by Kang Jewon

Indicator 6-3-1
Recycling Rate of Total Household Waste



Source: Data on waste generated in South Korea and waste disposal by KOSIS(Korea Statistical Information Service)



Resource Circulation Experience Center / Source: Suwon City Photo Bank, photographed by Kang Jewon

Suwon Resource Recovery Facility
/Source: Suwon City Photo Bank, photographed by Kang Jewon



Target 6-5

Raising Awareness for the Circulation of Resources

- Number of education sessions on resource circulation: A certain level of education is required to promote awareness of resource circulation. Considering that, the number of education sessions on resource circulation shall be increased to help more citizens to participate in such education and promote public awareness.

Sustainable consumption and production begin with changes in perceptions of both producers and consumers.

That is why Suwon City has been striving to expand the scope and effectiveness of environmental education since 2012, with its vision of an 'environmental education city in harmony with the nature.'

The city also has carried out visiting education service to give citizens more environmental learning opportunities, and the yearly frequency of such visiting education service has increased from 43 times in 2018 to 93 times in 2019.

Education for Green Purchasing
/ Source: Suwon City Photo Bank photographed
by Kang Jewon





07

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020

A convenient city

A city convenient for children,
people with disabilities,
women and the elderly



Lifelong education

Fair learning environment for children
Pleasant libraries close to you

Village libraries



A happy city
Helping neighbors in need



A healthy city



Minimum living guarantees



Suwon 2030 Sustainable Development Goal 7: Promoting Citizen's Happiness through Welfare, Health and Education

Introducing the Citizen's Happiness Index to Promote the Qualitative Im- provement in Welfare, Health, and Edu- cation

Suwon City is to promote the happiness of citizens by guar-
anteeing minimum standards of life and providing various ed-
ucational opportunities. Under the goal, Suwon adopted the
following targets: promoting happiness with the introduction
of the Citizen's Happiness Index; guaranteeing the minimum
living standards and eradicating poverty; promoting health
services and preventive care; and increasing the scope and
quality of universal and mandatory education. The city gov-
ernment has been committed to achieving the targets and
commissioned research to set out criteria for the introduction

of the Citizen's Happiness Index in 2020.

The city has been implementing the Master Plan for Social
Security, which shows a relatively high rate of implementa-
tion. The relative poverty rate of South Korea was 16.9% and
the rate of recipients of basic pension was around 60% in
2018. Given that, there is a need for Suwon City to strengthen
policies for ensuring real income security and stable life after
retirement to cut the relative poverty rate and the relative el-
derly poverty rate. The rate of delinquents, whose access to
the universal healthcare is prohibited since they could not
afford the insurance premiums due to poor economic situa-
tions, increased to account for 33.33% in 2017. Suwon aims to
reduce the rate of such delinquents to 30% by 2030. However,
the public consensus on the necessity of financially support-
ing such delinquents and new policy ideas are required to
achieve the goal.

The Appointment Ceremony of the 2nd Local Social Security Council / Source : Suwon City Photo Bank, Photographed by Gang Jewon



The number of recipients of the National Basic Living Security had constantly increased in Suwon, reaching about 220,000 people or 1.8% of Suwon's population in 2019. However, such increase was not caused by lowered income levels but by stronger welfare policies. Nevertheless, other measures shall be devised to cover those still left behind in the current welfare system.

To achieve the target of promoting health services and preventive care, Suwon established and has been implementing the local health care plan to cover as much citizens as possible. As of 2019, 18.6% of Suwon citizens visited public health centers, and the city aims to increase the rate to 22% or above by 2030. The rate of Suwon citizens practicing moderate or higher physical activity was 22.5% in 2019, and Suwon aims to increase the rate to 24% by 2030. As of 2018, the number of Suwon citizens having general health check-ups was 360 thousand or 78.4% of its population. The city aims to increase the rate of citizens having general health check-ups to 89% by 2030 and promote public awareness of the importance of health check-ups.

The suicide mortality rate per 100,000 residents of Suwon was remarkably high, recording 22.2 as of 2018.

To achieve the target of increasing the scope and quality of universal and mandatory education, Suwon provides out-of-school youth with educational opportunities and supports lifelong education programs and libraries especially small community-based libraries. While the municipal budget for out-of-school youth has steadily increased, recording 4.04 billion as of 2019, and the city aims to increase it to 7 billion by 2030. The budget for lifelong education increased to 2.69 billion but its share in the total municipal budget decreased to 0.11% in 2019. As for libraries, the budget for supporting libraries also decreased to 15.51 billion, accounting for 0.6% of the total municipal budget and more financial supports are required for making them to be more accessible. On the other hand, the number of small community-based libraries and relevant budget have constantly increased, and now, the city needs new policy ideas to promote the sustainability of small libraries with a minimum administrative budget.



Source: imagetoday

Target 7-1 Promoting Happiness with the Introduction of Citizens' Happiness Index

- Suwon Citizens' Happiness Index¹⁾: The city is to introduce the Citizens' Happiness Index to check the levels of citizens' happiness and set the directions of relevant policy.

1) Happiness Index: It refers to an index that measures various domains of happiness and quality of life such as life satisfaction, future expectations, unemployment rate, self-pride, hope and love, in addition to economic values like gross domestic product(GDP)

Happiness is the feeling of truly enjoying one's life, and one must be free of material deprivation or social oppression to be happy, and it is important to create a social system that can help individuals live a happy life.

It is said that Korea has a large gap between growth and happiness. As of 2018, South Korea's gross national income (GNI) per capita exceeded 30,000 dollars and the country had grown into the world's 10th largest economy. However, Korea is reportedly the least happy country among the OECD member countries. It means the nation's growing GDP has not increased the level of happiness. With Quality of life(QOL), a much broader concept than any economic indicator, research on various domains of life is required for measuring QOL. In this respect, Suwon has been working on the adoption of Suwon Citizens' Happiness Index.

Source: imagetoday



Target 7-2 Guaranteeing the Minimum Living Standards and Eradicating Poverty

- Implementation rate of the Master Plan for Social Security¹⁾ : The Master Plan for Social Security shall be managed to cover as much citizens as possible.
- The poverty rate(relative poverty rate²⁾ and the relative elderly poverty rate³⁾ : The poverty rate shall be managed not to exceed the 2015 level, with particular attention paid to the elderly poverty rate, a vulnerable group of society, in consideration of aging population and rapidly changing social environments.
- The rate of delinquents who cannot afford overdue premiums (less than 30 thousand won) of the National Health Insurance Service⁴⁾: The rate of such delinquents shall be managed not to exceed 30% of the total delinquents of the National Health Insurance.
- The rate of recipients of the National Basic Living Security(NBLS)⁵⁾ and the yearly payments: The rate of recipients of the National Basic Living Security shall be managed properly in consideration of income levels and welfare policies.

1) Master Plan for Social Security: It refers to a 4-year legal plan established by a local government by considering the welfare needs of local residents and welfare resources in the region, according to Article 35 of the Act on the Use and Provision of Social Security Benefits and Search for Eligible Beneficiaries.

Article 35 (Formulation of Plans for Regional Social Security) ① The Mayor of the Special Metropolitan City Mayor; the Mayor of each Metropolitan City; the Mayor of each Special Self-Governing City, the Governor of each Do; or the Governor of each Special Self-Governing Province (hereinafter referred to as "Mayor/Do Governor"), and the head of each Si/Gun/Gu shall formulate a plan for regional social security (hereinafter referred to as "regional social security plan") every four years, and formulate an annual implementation plan in accordance with the regional social security plan every year. In such cases, such a plan shall be correlated to a master plan prescribed in Article 16 of the Framework Act on Social Security.

- 2) Relative poverty rate: It refers to the proportion of people whose incomes are less than 50% of the national median income compared to the total population
- 3) Elderly poverty rate: It refers to the poverty rate among people aged 65 and above.
- 4) National Health Insurance Service(NHIS): It refers to a health insurance program set up by the national government to provide insurance benefits provided for the prevention, diagnosis, and medical treatment of and rehabilitation from diseases and injury, for childbirth and death, and for improvement of health, in the form of in-kind or cash in accordance with the National Health Insurance Act. All Koreans living in South Korea benefit from the insurance as subscribers or dependents. The service also applies to foreigners residing in Korea.
- 5) National Basic Livelihood Security(NBLS): It refers to cash or in-kind support provided to households whose income is less than 60% of the median income to guarantee a basic standard of living in consideration of basic necessities, medical care, housing, education, etc.

The level of implementation of the Master Plan for Social Security is evaluated through a scoring system, based on how well the details of the plan were prepared, the adequacy of the implementation process, the progress it made after its execution, and the level of citizens' participation. Based on these evaluation items, Suwon achieved a high level of implementation, scoring

96-97 out of 100. Later, the scoring system was replaced with the percentage(%) system due to some limits in the scoring system, and Suwon recorded 87-89% of the implementation rate. While the rate is higher than those of other municipalities, an overall inspection is required as the rate has declined.

Poverty can be classified into absolute poverty and relative poverty. In Korea, relative poverty related to income inequality is more emphasized than absolute poverty. Suwon's poverty rate was 9% in 2015, and the rate more than doubled in 2017, recording 18.3%. Although the rate decreased by 1.4% in 2018 compared to the previous year, the poverty rate was still as high as 16.9% and the rate of basic pension recipients was maintained at 59-60%. Given that, Suwon needs to strengthen policies for the promotion of real income security to reduce the relative poverty rate in the city.

The National Health Insurance Service is a representative social security system of South Korea and is designed to prevent excessive burden on households due to large medical expenses incurred by an illness or injury. Citizens pay insurance premiums and the insurer, the National Health Insurance Service, provides insurance benefits in order to lessen the financial burden and allow citizens to get necessary medical

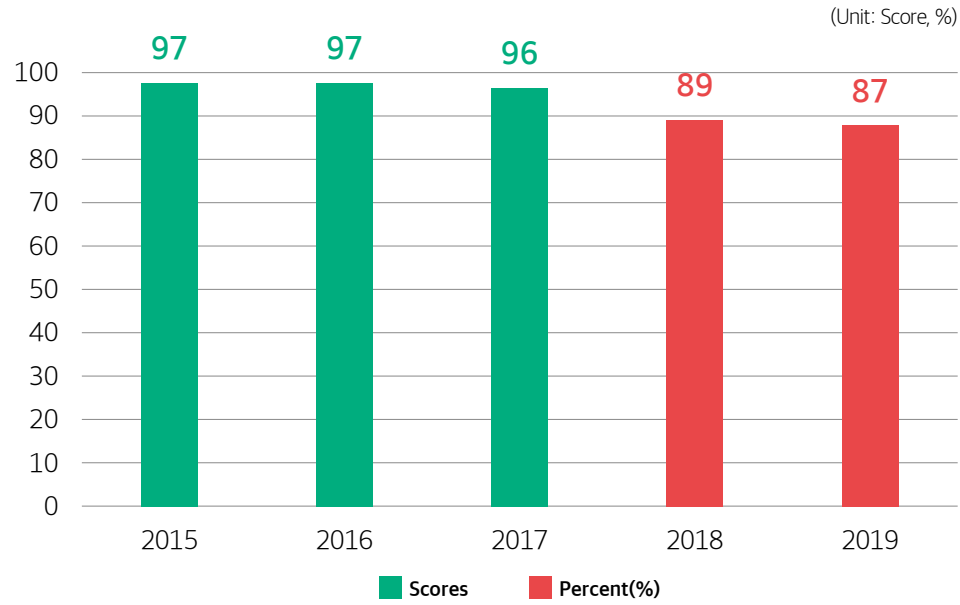
services. However, people who do not pay insurance premiums are prohibited from benefiting from the service. Suwon had seen a gradual increase in the rate of economically poor delinquents who hadn't paid overdue premiums (less than 30 thousand won) for over 6 months since the rate recorded 32% in 2014, 33.33% in 2015, 32.56% in 2016, and 33.33% in 2017. Under the circumstance, Suwon set the goal of reducing the rate of such delinquents to 30% by 2030. A delinquent here refers to a person who needs medical services but whose access to the universal healthcare is prohibited since they could not afford the insurance premiums with extremely small or no income. To address this issue, it seems necessary to consider healthcare reimbursement plans, along with other policy ideas, while building consensus on this problem.

The rate of recipients of the National Basic Livelihood Security(NBLS) recorded 1.55% of Suwon's total population in 2015 and the rate has increased ever since. However, such increase is not caused by lowered income levels but by stronger welfare policies such as relaxing standards for receiving the NBLS. However, the city still needs to further reach out to the poor who are left behind the current basic livelihood guarantees.

Source : imagetoday



Indicator 7-2-1
Implementation Level of the Master Plan for Social Security



Source: Plan for the 4th Master Plan for Social Security and the Progress Report

Suwon has been selected as a model local government in terms of the level of implementation of the Master Plan for Social Security¹⁾ for 5 years in a row by the Ministry of Health and Welfare.

1) The level of implementation of the Master Plan for Social Security is expressed in scores based on the Evaluation Manual of the Ministry of Health and Welfare, but Suwon used percent values to indicate the level of implementation due to some limits found in the scoring system.



Suwon City Awarded with Grand Prize in the Evaluation of Local Social Security Plans / Source: Welfare Cooperation Division of Suwon City

Indicator 7-2-2
Poverty Rate(Relative Poverty Rate)



Source: Survey on the Welfare for Residents of Gyeonggi Province, the Baseline Study on Welfare and Balanced Development of Gyeonggi Province, the Study on the Needs of Local Social Security, and statistical yearbook

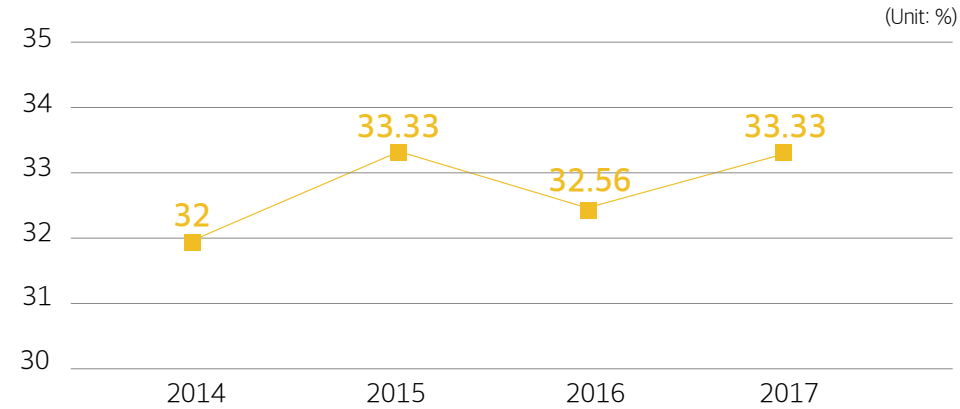
Suwon's poverty rate had gradually increased to reach 18.3% in 2018, more than twice as much as that of 2015, calling for policy actions to help the poor secure basic income in addition to existing welfare policies.



A Cultural Festival to Celebrate the Senior Citizens' Day / Source: Suwon City Photo Bank, photographed by Kang Jewon



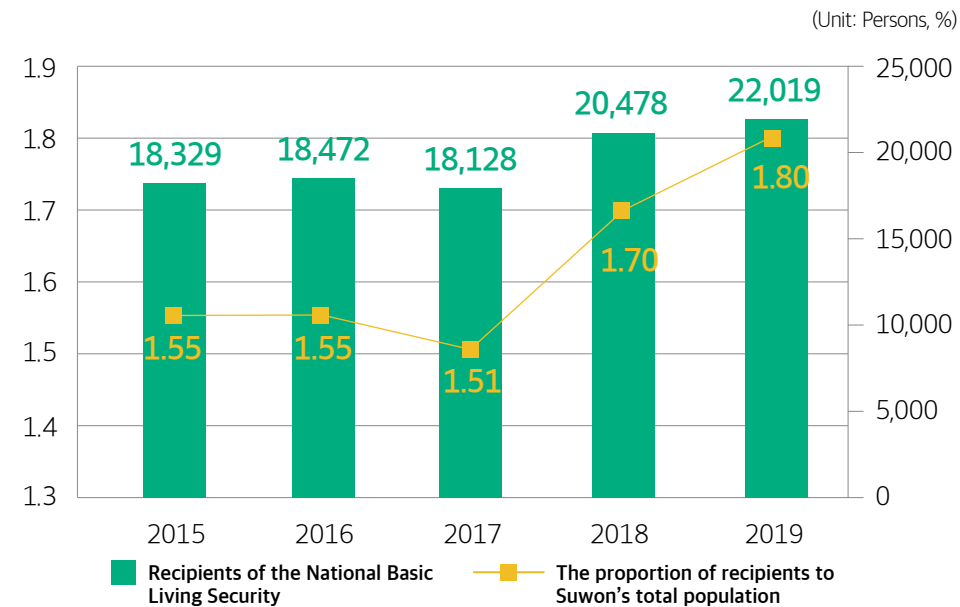
Indicator 7-2-4
Rate of Economically Poor Delinquents of the NHIS Premiums (Less than KRW 30,000 in Arrears)



Source: Study on the Production and Management of Social Security Statistics

The economically poor delinquents of the National Health Insurance Service premiums (less than 30,000 won in arrears) increased to account for 33.33% of the total NHIS delinquents in 2017. Suwon is to reduce the rate of economically poor delinquents to 30% by 2030.

Indicator 7-2-5
Rate of Recipients of the National Basic Living Security



Source: Demographics and Social Security Information System

The number of recipients of the National Basic Living Security had constantly increased in Suwon, reaching about 220,000 or 1.8% of Suwon's population as of 2019. However, such increase is not caused by lowered income levels but by stronger welfare policies. The city still needs to further reach out to the poor left behind the current basic livelihood guarantees in connection with income levels and welfare policies.

Target 7-3
Promoting Health Services and Preventive Care

- The proportion of citizens using public health centers¹⁾: The proportion of citizens using public health centers (compared to the total population) indicates the accessibility of public health and welfare services and shall be further increased to be above a certain level.
- The proportion of citizens practicing moderate to high intensity physical activities²⁾: Practicing moderate or vigorous intensity physical activities is important to promote health and prevent chronic diseases. Therefore, the city needs to further increase it to be above a certain level.
- The proportion of citizens having the general health check-up³⁾: Health check-ups reduce social costs through earlier detection of disease, so the city needs to increase the proportion of citizens having the general health check-up as much as possible.
- Suicide mortality rate: It refers to the number of suicide deaths per 100,000 people and the city needs to reduce the suicide mortality rate as much as possible.

The proportion of citizens using public health centers (compared to the city's total population) recorded 20.8% in 2016, a 17.3% increase from 2015, however, it steadily went down to 18.6% in 2019. In this regard, Suwon set the target of increasing the number to 22% by 2030 and has been working on the local health care plans to fulfill the health needs of residents and expand health services in connection with such plans.

The proportion of citizens practicing moderate to high intensity physical activities (compared to the city's total population) increased from 21.1% in 2015 to 22.5% in 2019. Still the city needs to pay constant attention to achieve the 2030 target of 24%.

Although an increasing number of Suwon citizens use the general health check-up program, the city needs to further increase the number. In 2018, 360 thousand people or 78.4% of those subject to the general health check-up in that year used the program.

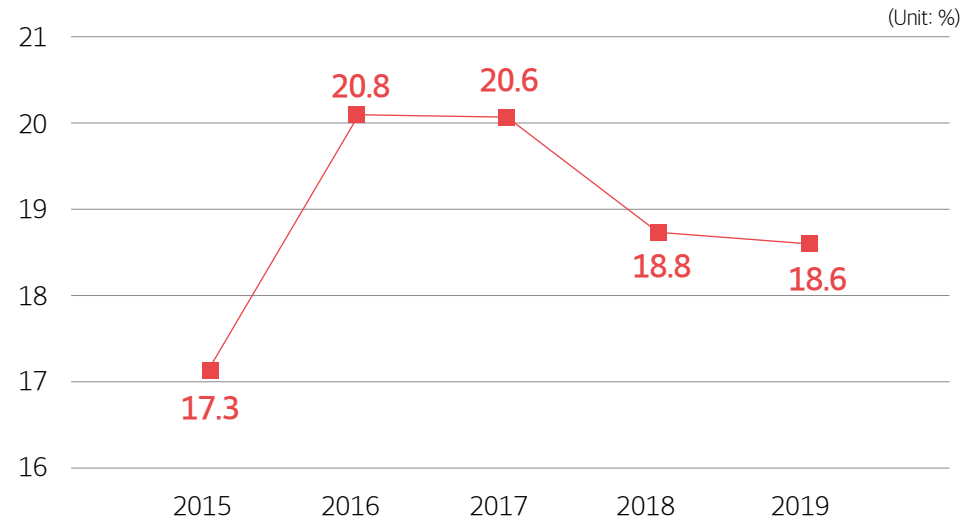
With the 2030 target of achieving 89% of the general health check-up rate, Suwon needs to further promote people's awareness of the necessity of health check-ups and come up with new measures to increase the check-up rate, especially among those who do not receive health checkups even though they need it.

In Suwon, the number of suicide deaths per 100,000 people had declined since 2015 and increased again in 2018, recording 22.2, which is lower than the national average of 26.6 but twice as high as the OECD average of 11.3. Given that, urgent measures shall be taken to reduce the number as much as possible.

- 1) The proportion of citizens using public health centers: It is the proportion of citizens who have used public health centers in a year to the total population.
- 2) The proportion of citizens practicing moderate to high intensity physical activities: It refers to the proportion of citizens who exercise for more than 20 minutes a day, 3 days a week, to the extent of feeling much more tired and short of breath than usual; or for more than 30 minutes a day, 5 days a week, to the extent of feeling a little more tired and short of breath than usual.
- 3) The proportion of citizens having the general health check-up: It is the proportion of citizens who use a medical check-up program which is conducted once every two years (or every year for non-office workers) for free or very low cost to identify long-term diseases such as metabolic syndrome for citizens aged 19 and above.



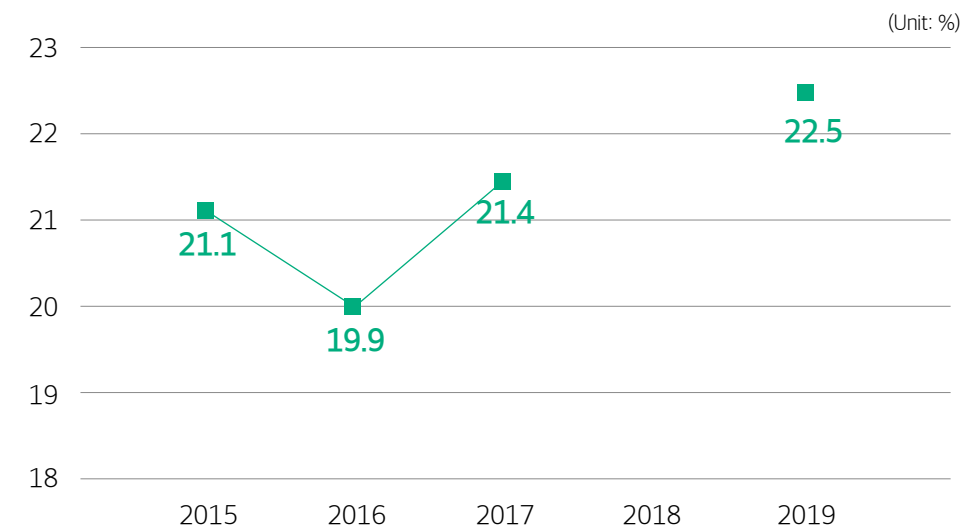
Indicator 7-3-1
The Proportion of Citizens Using Public Health Centers



Source: Health Survey for Local Communities, the Ministry of Health and Welfare

The proportion of citizens using public health centers (compared to the city's total population) increased to 20.8% in 2016 and then continued to fall to 18.6% in 2019. In this regard, Suwon set the target of increasing it to more than 22% by 2030.

Indicator 7-3-2
The Proportion of Citizens Practicing Moderate to Higher Intensity Physical Activities



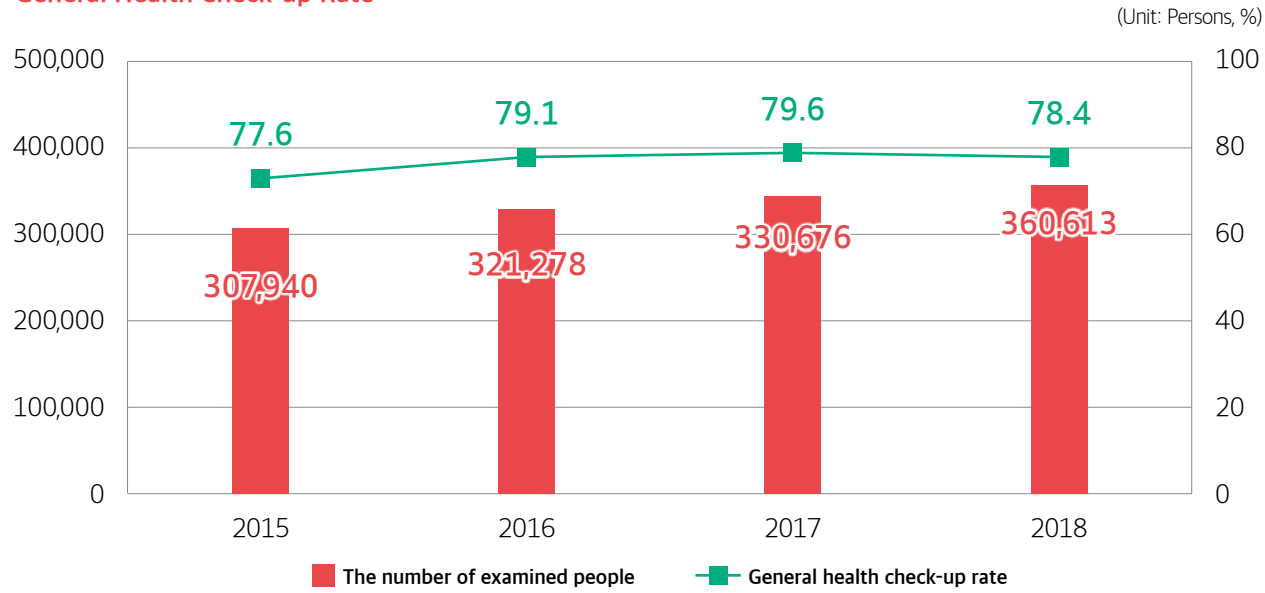
Source: Health Survey for Local Communities, the Ministry of Health and Welfare

The proportion of citizens practicing moderate to high intensity physical activities (compared to the city's total population) dropped to 19.9% in 2016 and then gradually increased, reaching 22.5% in 2019. In this regard, Suwon set the target of increasing it to more than 24% by 2030. The 2018 data is absent because the relevant item was not included in questionnaire of the 2018 Health Survey.

Opening Ceremony of the New Office Building of the Public Health Center of Paldal District
/ Source: Suwon City Photo Bank, photographed by Lee Yongchang



Indicator 7-3-4
General Health Check-up Rate



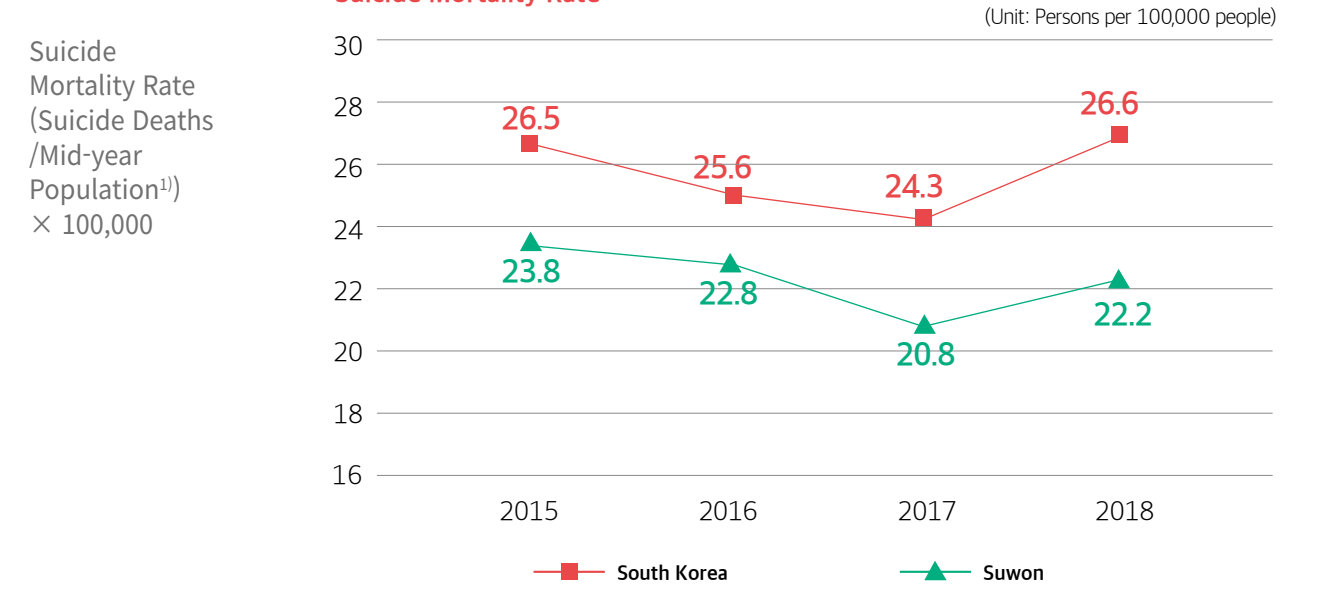
Source: Statistics for Health Check-ups, the National Health Insurance Service

The number of Suwon citizens having the general health checkup has increased steadily while the health check-up rate tends to slightly fluctuate affected by an increase in population. As of 2018, 360 thousand people (78.4%) used the general health check-up program.

Citizens Having the General Health Check-up / Source: Suwon City Photo Bank, photographed by Lee Yongchang



Indicator 7-3-5
Suicide Mortality Rate



Source: Suicide Deaths per 100,000 People (by Province, City, County, and District) according to e-Region Indicator of Statistics Korea and the Statistics on Causes of Deaths by the Demographic Trends Division

In Suwon, the number of suicide deaths per 100,000 people decreased to 20.8 in 2017 and then increased to 22.2 in 2018. Although it is lower than the national average, policy efforts are required for continuous reduction in suicide deaths.

1) Mid-year population: Mid-year population refers to population estimates as of July 1 and is usually used to calculate the birth rate and mortality rate.

Visiting Service by the Public Health Center / Source: Suwon City Photo Bank, photographed by Lee Yongchang



Target 7-5

Increasing the Scope and Quality of Universal and Mandatory Education

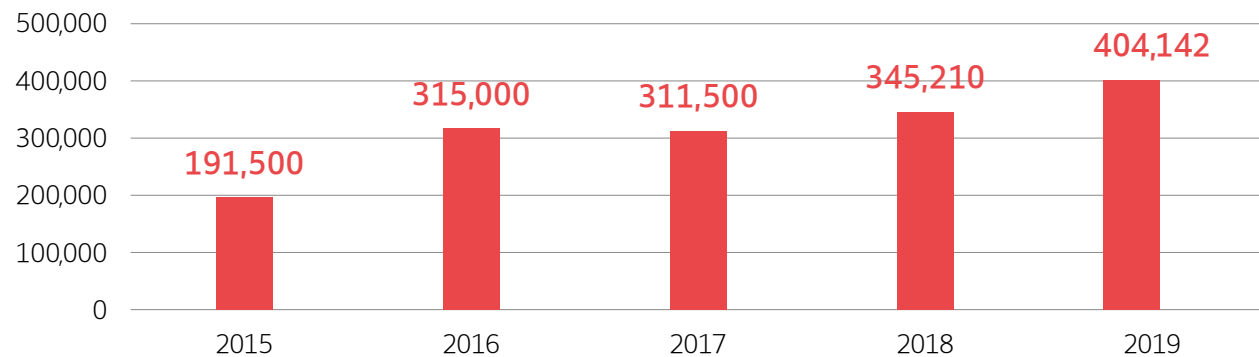
- Budget for out-of-school youth¹⁾: The city needs to establish and improve relevant policies and seek substantial measures to support out-of-school children/youth.
- Budget for lifelong education²⁾ and its proportion to the total budget, the number of programs, and the number of participants: Changes in the social education environment call for a new education system since the existing education system alone cannot adapt to such rapid changes. Given that, the lifelong education shall be promoted as an effective way to deal with such changing education environment.

The program for supporting out-of-school youth started with the enforcement of the Act on the Support for Out-of-school Youth in 2015. The program includes supports for counseling, education, vocational experience, employment support, and self-reliance, based upon individual characteristics and demand of out-of-school juveniles, to provide out-of-school children and adolescents with fair opportunities and help them better prepared for the future.

- 1) Out-of-school youth: 1) Children or adolescents who have been absent for three months or more after entering an elementary school or a middle school or a school providing equivalent courses, or who have been deferred from such school; 2) adolescents who have been dismissed or expelled from or dropped out of a high school or a school providing equivalent courses; and 3) adolescents who fail to enter a high school or a school providing equivalent courses.
- 2) Lifelong education: It refers to all types of organized educational activities except for the regular school education, including alternative education to get school diplomas, basic literacy education for adults, vocational training, education on liberal arts, education on culture and arts, and citizenship education

Indicator 7-5-3 Budget for the Program to Support Out-of-School Youth

(Unit: 1,000won)



Source: Estimates of revenue and expenditure regarding general and special accounts

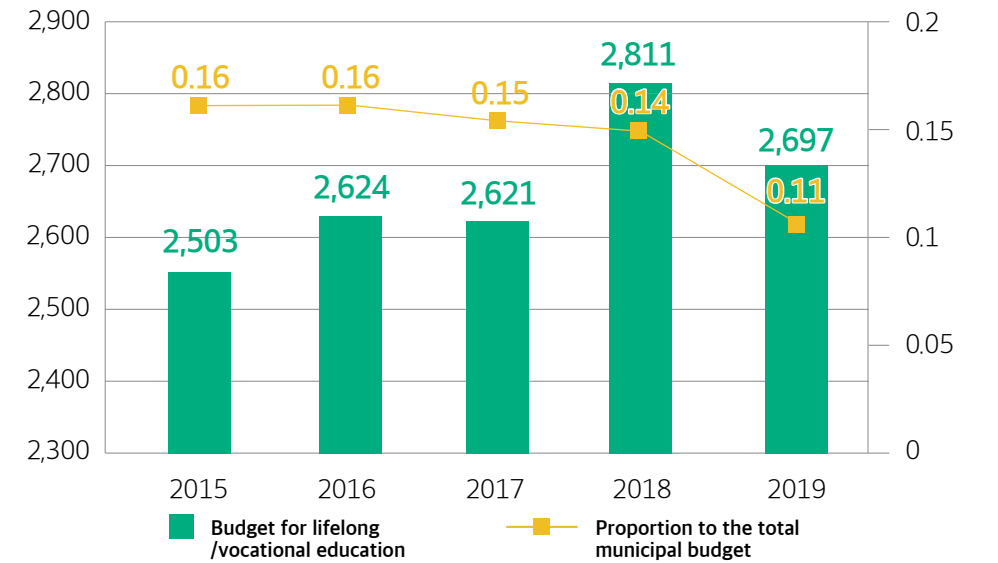
The amount of the municipal budget for supporting out-of-school youth increased from 190 million won in 2015 to 4.04 billion won in 2019. Suwon also set the target of increasing the amount to more than 7 billion won by 2030.

Target 7-6

Promoting Education for Democratic Citizenship and Lifelong Education

Indicator 7-6-1 Budget for Lifelong Education by Year

(Unit: KRW 1,000,000, %)



Source: Budget bill, general provisions and expenditure summary table (by function: general accounts)

Lifelong education has become more important with a increase in life expectancy. Suwon's lifelong education budget gradually increased from 2.5 billion won in 2015 to 2.81 billion won in 2018 and then decreased to 2.61 billion won in 2019, and the proportion to the total municipal budget constantly declined, recording only 0.11% in 2019. Given that, a gradual budget increase is required for lifelong education.

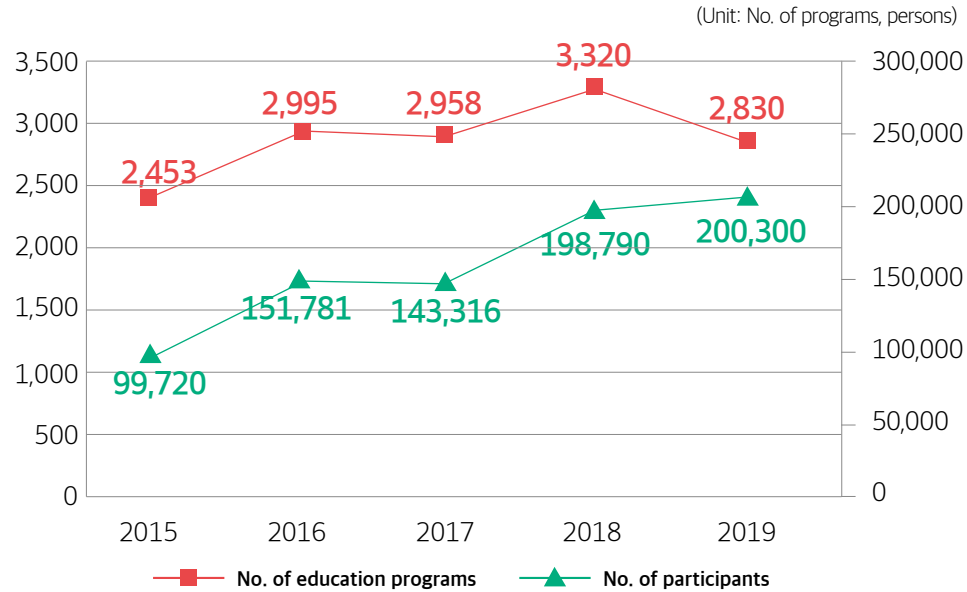


Source : imagetoday



Indicator 7-6-2 Number of Lifelong Education Programs

Indicator 7-6-3 Number of Participants of Lifelong Education Programs



Source: Lifelong Education Statistics Collection (appendix)

Even though the number of Suwon's lifelong education programs decreased in 2019 compared to the previous year, it had shown an overall increase since 2015, and the number of program participants had also increased in general. As of 2019, there were 2,830 lifelong education programs, participated by 200 thousand people.



Visiting Yeonmu Elementary School / Source: Suwon City Photo Bank, photographed by Gang Jewon

Target 7-7

Improving Libraries in Terms of Diversity, Popularity, and Accessibility

As of 2020, Suwon's 20 Public Libraries Lay the Foundation for a City of Arts and Humanities

Suwon has been promoting a project for expanding and revitalizing public libraries under the vision of Suwon, a City of Arts and Humanities. The project started with 9 public libraries and the city now has 20 public libraries, satisfying the recommended OECD standard. While these public libraries have played an important role in promoting local culture and lifelong learning, they have been significantly improved in terms of diversity, popularity, and accessibility. Still, the relevant budget increase seems necessary to further promote public library services. In the case of community-based small libraries¹⁾, the number and the relevant budget have steadily increased, and the city now needs new policy ideas to promote the sustainability of small libraries with a minimum administrative budget.

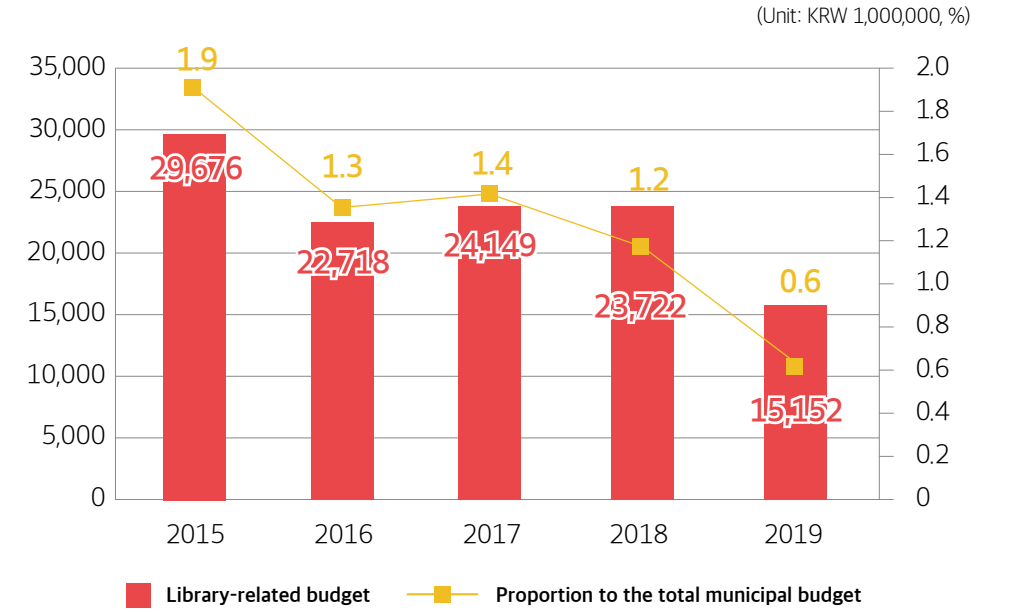
1) Small library: It refers to a library which is established to promote sustainability and self-reliance of small communities with the emphasis on people rather than economies of scale. A small library is required to have at least the building area of 33m², 6 seats, and 1000 books.

Public Libraries in Suwon / Source: The Office of Suwon City Libraries





Indicator 7-7-1
Amount of Library-Related Budget in Suwon



Item	Rate(%)	Library-related budget (KRW 1,000)	General account budget (KRW 1,000)
2010	1.5	15,644,419	1,074,663,875
2011	1.4	14,555,354	1,072,376,615
2012	1.4	16,047,074	1,171,055,181
2013	2	25,850,407	1,320,310,771
2014	2.6	39,478,741	1,491,597,538
2015	1.9	29,676,403	1,566,889,724
2016	1.3	22,718,297	1,685,542,920
2017	1.4	24,169,130	1,733,810,421
2018	1.2	23,721,995	2,025,557,431
2019	0.6	15,511,551	2,475,800,609

Source: Yearly budget (original budget) and budget status inquiries (final budget)

The library-related budget steadily decreased from 29.67 billion won in 2015 to 15.51 billion won or just 0.6% of the total municipal budget in 2019. Given such trend, the library-related budget shall be continuously monitored from the perspective of educational welfare.

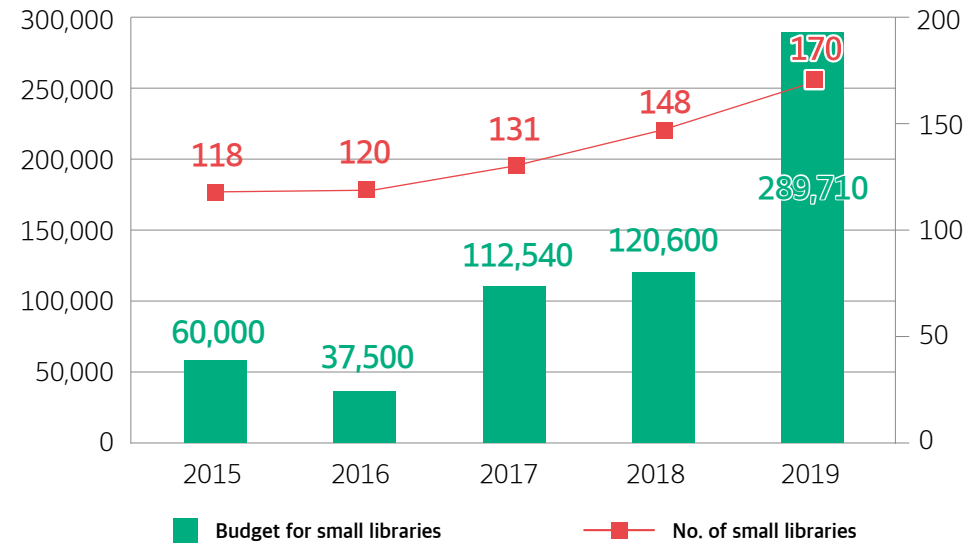


Indicator 7-7-2 Budget for Small Libraries in Suwon

Indicator 7-7-3 Number of Small Libraries in Suwon

A small library refers to a library which is established by a local government, legal entity, organization or an individual to provide knowledge, information, and a variety of cultural experiences. A small library is required to have at least the building area of 33m², 6 seats, and 1000 books.

(Unit: 1,000won, No. of small libraries)



Source: The yearly budget bill (final budget)

Item	Small library-related budget	No. of small libraries
2013	17,000	
2014	22,000	
2015	60,000	118
2016	37,500	120
2017	112,540	131
2018	120,600	148
2019	289,710	170

Source: The yearly budget bill (final budget), and internal data of the Library Policy Division of Suwon City

The number of small community-based libraries and relevant budget have steadily increased since 2015. As of 2019, about 290 million won was provided to support 170 small libraries. The number of small libraries and the relevant budget have steadily increased. However, the city now needs new policy ideas to make them more self-reliant, given the fact that the ultimate goal of small libraries is to contribute to society by promoting self-sustainability and networking among users.

Opening Ceremony of Indorae Small Library / Source: Suwon City Photo Bank, photographed by Kim Kisoo



08

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020



With Gender Equality Education

Create a safe society without gender discrimination
and sexual violence



Foreign residents to be treated like citizens
Education for promoting understanding and
respect for multiculturalism
Multicultural society



Suwon 2030 Sustainable Development Goal 8: Gender Equality and Multicultural Society

Suwon Realizes a Society of Gender Equality and Multiculturalism through Education for Promoting Gender Equality and Raising Multicultural Awareness

Eliminating discrimination based on gender, religion, country of origin, or cultural differences is important to create a sustainable city for all. To that end, we need to promote educational programs for gender equality and achieve gender balance in policy decision-making, while putting efforts to alleviate sexual and domestic violence.

In this globalized and connected world, respecting cultural diversity and raising awareness of different cultures are important, not only to prevent conflicts caused by misunderstandings but also to create a society where everyone can freely pursue happiness.

In Suwon, as of 2019, 34% of the city's public officials completed educational programs for promoting gender equality, and the city aims to double the number by 2030. The annual number of classes providing gender equality education at elementary, middle, and high schools had decreased since 2015,

recording only 36 in 2018, and then increased to 52 in 2019. Suwon aims to increase the number to 90 classes by 2030.

Although gender balance in leadership positions at Suwon's public offices has shown a steady improvement, still male officials account for 84% of leadership positions. However, such gender imbalance is likely to be further narrowed given the increasing number of newly recruited female public officials.

Suwon had made some progress in reducing domestic and sexual violence since 2015. However, in 2019, the number of cases involving convicted offenders increased by 16.4% year-on-year, reaching 2,163. Given the recent sharp increase, the city government needs to re-inspect the overall system for reducing domestic and sexual violence.

To create a healthy multicultural society based on the respect for cultural diversity and cultural synergy, Suwon City established a department dedicated to promoting multiculturalism and has been steadily increasing the relevant budget. The city also has been carrying out educational programs in elementary, middle, and high schools to improve awareness of multiculturalism. As of 2019, 11% of the city's public officials completed educational programs for raising awareness of multiculturalism, and the city aims to increase the rate to 17% by 2030.



Source : imagetoday

Target 8-1 Improving Quality of Gender Equality Education

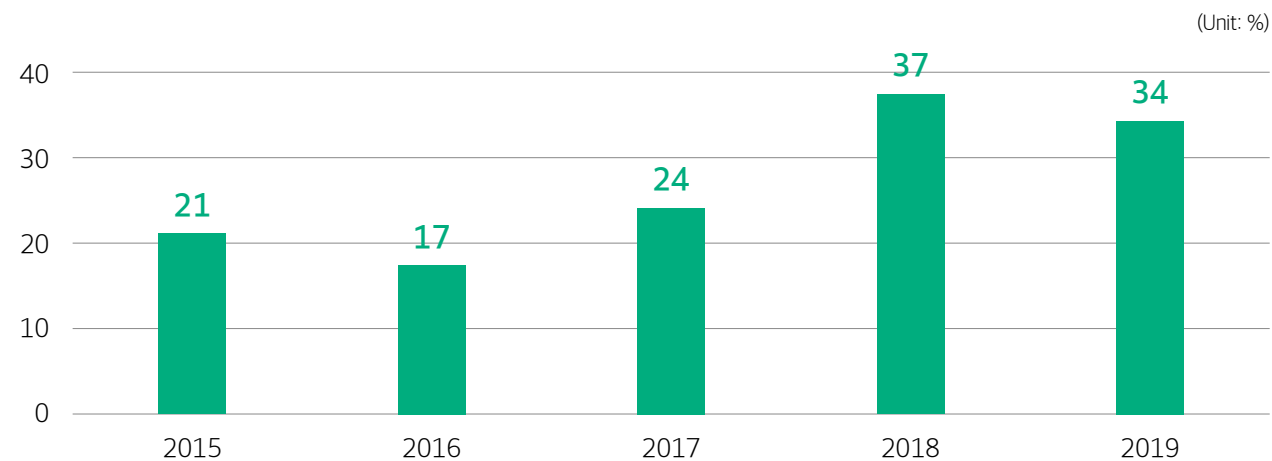
- Rate of public officials who completed gender equality education: Gender equality education for public officials helps those in charge of the overall city affairs be fully aware of gender equality. So, raising the rate of public officials having completed gender equality education is important to further promote the public awareness of gender equality across the city.
- Number of elementary, middle, and high school classes providing gender equality education: The number of classes providing gender equality education shall be increased as part the school curriculum to help students have the right perceptions of gender equality, especially when secondary sex characteristics appear.

The rate of Suwon's public officials who completed gender equality education had increased from 21% in 2015 to 34% in

2019, despite slight fluctuations by year. Suwon aims to raise the completion rate of gender equality education among public officials to 50% by 2030. To that end, the city is required to further publicize gender equality education and make it more accessible and engaging.

The number of classes providing gender equality education for students in elementary, middle, and high schools had shown a steady decline since 2015, recording 36 classes in 2018, and then increased to 52 classes in 2019. However, the number had shown a decreasing trend in general. In particular, the number of classes providing gender equality education tends to decrease in proportion to the age of students. Given that, Suwon City should seek ways to increase the general number of classes, while focusing more on middle and high schools in connection with the city's education support programs.

Indicator 8-1-2
Rate of Public Officials Who Completed the Gender Equality Education



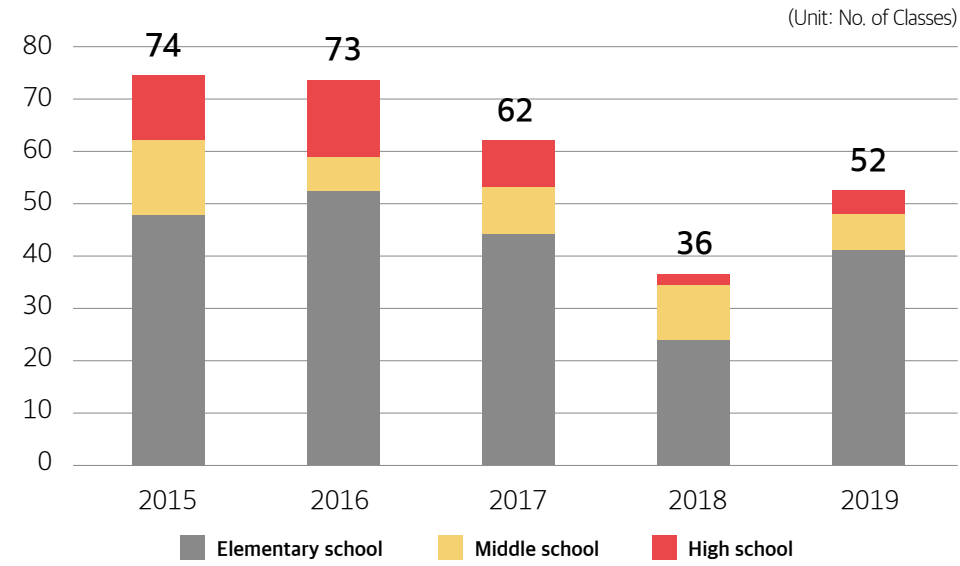
Source: Internal data of Suwon City

The rate of public officials who completed the gender equality education in Suwon City shows an increasing trend in general, despite slight fluctuations by year.



Gender-sensitivity Education Held in the Auditorium of Suwon City Hall / Source: E Suwon News, Kang Seongki

Indicator 8-1-3
Number of Classes Providing Gender Equality Education in Elementary, Middle, and High school



Source: Internal data of Suwon City

The number of classes providing gender equality education had shown an overall decrease and was much smaller in middle and high schools than elementary schools.



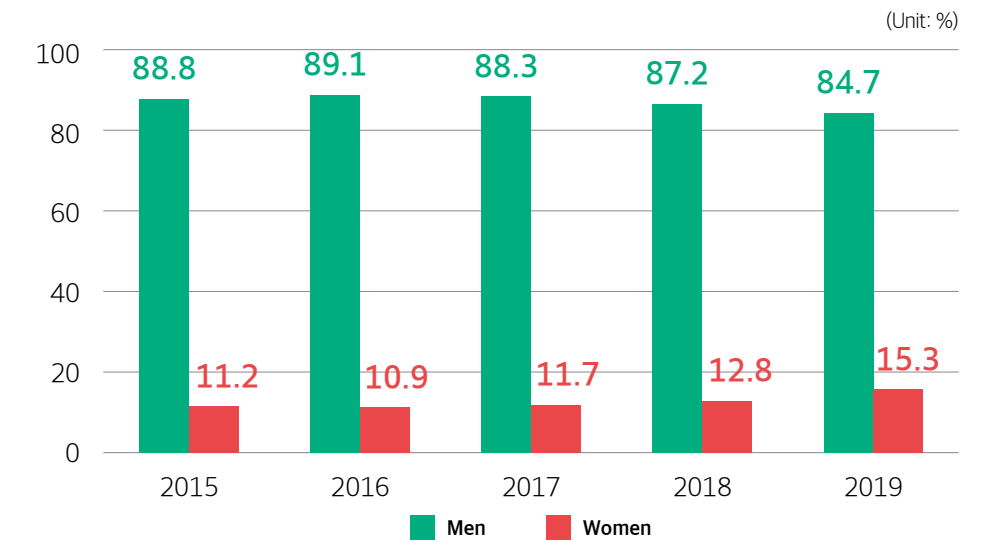
Education for Raising Awareness of Gender Equality at Yeonmu Middle School in Eui-dong / Source: E Suwon News, Kwon Yeonhee

Target 8-2
Building Better Governance for Gender Equality

● Gender ratio in leadership positions at public offices: The gender ratio among public officials of grade 5 or higher shall not be excessively concentrated on a specific gender, given their great impact on decision-making related to the establishment and implementation of urban management policies.

Among Suwon's public officials of grade 5 or higher, the ratio of men to women was 84.7 to 15.3 as of 2019. It showed a slight improvement compared to the 2015 level; however, it was still concentrated on a specific gender, compared to the ratio of men to women in total population (622,643 men to 612,061 women). However, such gender imbalance is expected to be further narrowed with the growing number of newly recruited female public officials.

Indicator 8-2-3
Gender Ratio Among Executives of Suwon's Public Institutions (Including Public Officials of Suwon City)



Source: Internal data of Suwon City

Changes in Gender Ratio Among Public Official of Grade 5 or Higher in Suwon

The gender ratio among Suwon's public officials of grade 5 or higher had shown improvement since 2015, but still male officials accounted for 84.7% of such leadership positions as of 2019.



Target 8-3 Ending Sexual Violence

- Number of counseling sessions for victims of domestic and sexual violence: Professional and careful counseling is a must for victims of domestic and sexual violence to recover and return to a healthy life. The number of victims of domestic and sexual violence shall be significantly cut, which will also result in the reduction in the number of relevant counseling sessions.
- Number of domestic and sexual violence cases involving punishments on perpetrators: Unlike other violent crimes, a careful approach beyond simple punishment is required when dealing with a perpetrator of domestic and sexual violence considering the relationship between the perpetrator and the victim, and eventually, violent acts subject to punishment and the number of domestic and sexual violence cases involving punishments on perpetrators shall be reduced together.

Since sexual and domestic violence often occur in close relationships with family members, relatives, and neighbors, sexual and domestic violence cases are approached from the perspective of protecting human rights, and the city provides counseling services to help the survivors feel safe and at ease. The victims of sexual and domestic violence need legal and medical services and psychological care, and they shall be able to share their pain through counseling which will also help them get back to the life they had before.

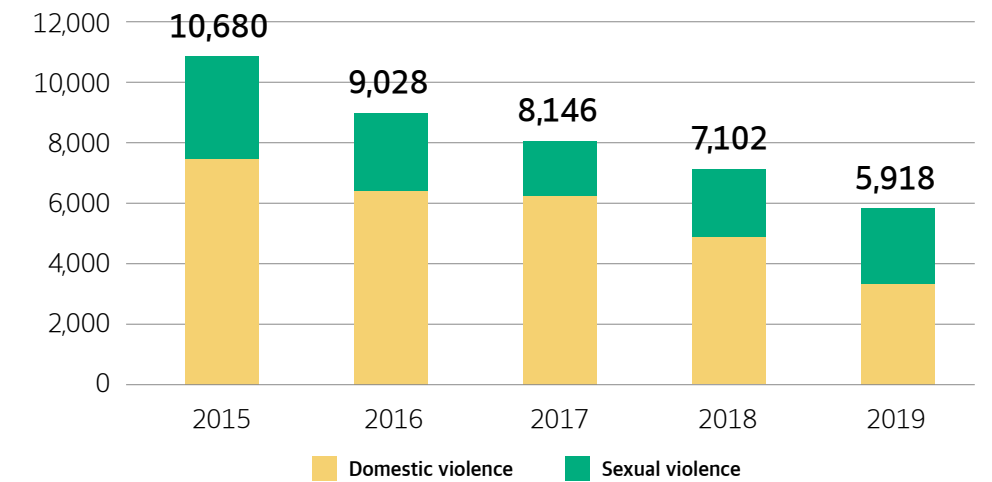
Suwon has been committed to creating a society free from domestic and sexual violence, ideally with no need for relevant counseling, and the city has been providing education to prevent sexual and domestic violence and raise awareness of such violence. The number of counseling sessions for survivors of domestic and sexual violence and the number of cases involving punishments on perpetrators serve as criteria for monitoring the increase or decrease of such domestic and sexual violence cases. After all, the number of cases involving punishments on perpetrators, relevant counselling sessions, and violent acts subject to punishment shall be reduced together.

The number of domestic and sexual violence cases involving punishments on perpetrators had decreased until 2018, but went up to 2,163 in 2019, an 16.4% increase from 2018.

In general, the city's efforts to reduce domestic and sexual violence had made some progress since 2015, but the recent increase in related numbers requires a re-examination of the relevant policies.

Number of Counseling Sessions for Survivors of Domestic and Sexual Violence

Indicator 8-3-1
Number of Counseling Sessions for Victims of Domestic Violence, Sexual Violence, Sex Trafficking, and Sexual Harassment
(Unit: No. of counseling)

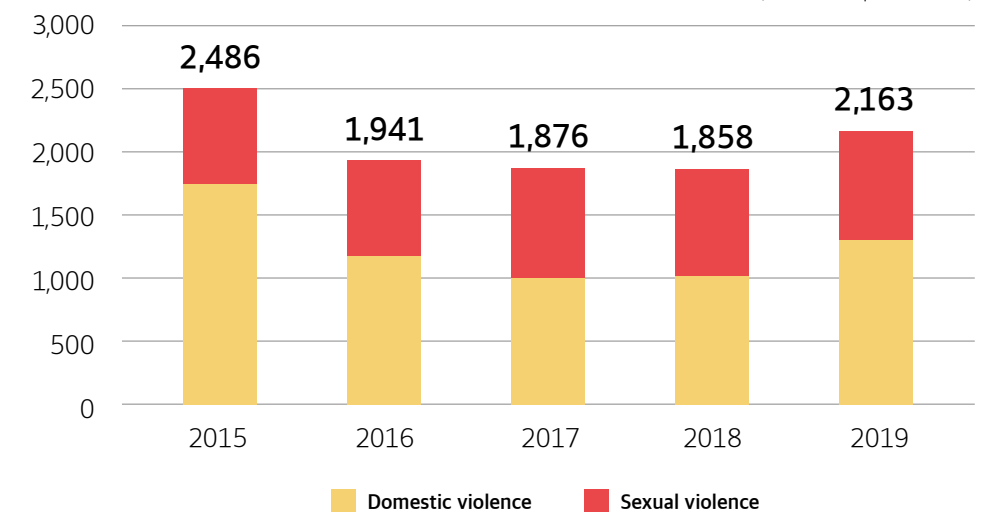


Source: Internal data of Suwon City

The number of counselling sessions for survivors of domestic and sexual violence had steadily decreased since 2015. However, the number of counselling sessions for sexual violence survivors had slightly increased after recording 1,764 in 2017.

Number of Domestic and Sexual Violence Cases Involving Punishments on Perpetrators

Indicator 8-3-2
Number of Domestic Violence, Sexual Violence, Sex Trafficking, and Sexual Harassment Cases Reported to the Police and the Number of Cases Involving Punishments on Perpetrators
(Unit: No. of punishments)



Source: Internal data of Suwon City

The number of domestic and sexual violence cases involving punishments on perpetrators decreased in 2015-2018 but increased again in 2019, recording 1,308 cases of domestic violence and 855 cases of sexual violence. Given that, a re-examination of the relevant policies is required.



Target 8-4

Guaranteeing Minimum Living Standards for Foreign Residents in Suwon

● **Multicultural policy and budget:** As part of its efforts to realize a multicultural society and cultivate respect for cultural diversity, Suwon City established the Multicultural Policy Team under the Bureau of Welfare and Women in 2017 and then promoted the team to the Multicultural Policy Division in 2019. As the Multicultural Policy Division needs an appropriate level of budget for multicultural support services, the city has made it available to check the amount of the budget and its proportion compared to the total budget of the Bureau of Women and Welfare.

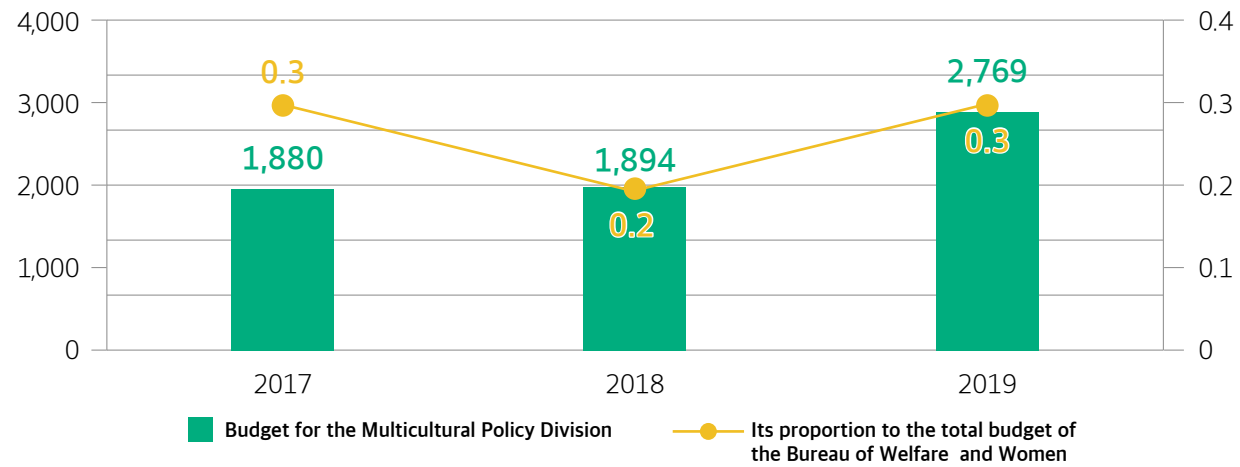
and, under the ideas of 'Hongik Ingan,' the city strives to realize a multicultural society where cultural diversity is respected and various cultures of different countries contribute to the improvement of the quality of life.

Given the fact that most of foreign immigrants in Suwon belong to low-income groups, Suwon City established the Multicultural Policy Division under the Bureau of Welfare and Women to strengthen support and take more customized approach for foreigners with diverse cultural backgrounds, help them adapt to life in Suwon, and promote public awareness of multiculturalism. The budget allocated for the Multicultural Policy Division increased from 1.88 billion won in 2017 to 2.769 billion won in 2019, maintained around 0.3% of the budget of the Bureau of Welfare and Women.

'Hongik Ingan' or 'To broadly benefit the human world' has been the national motto of South Korea since ancient times and is also the educational slogan of South Korea. Suwon believes that cultural diversity can enrich the lives of citizens

Indicator 8-4-1
Budget for Multicultural Support Compared to the Total Budget of Suwon City

(Unit: KRW 1,000,000, %)



Source: Internal data of Suwon City

As the Multicultural Policy Division has been established for efficient administrative services, the effectiveness of practical policy operation should be enhanced through proper and equal distribution and management of budgets.

Source: imagetoday

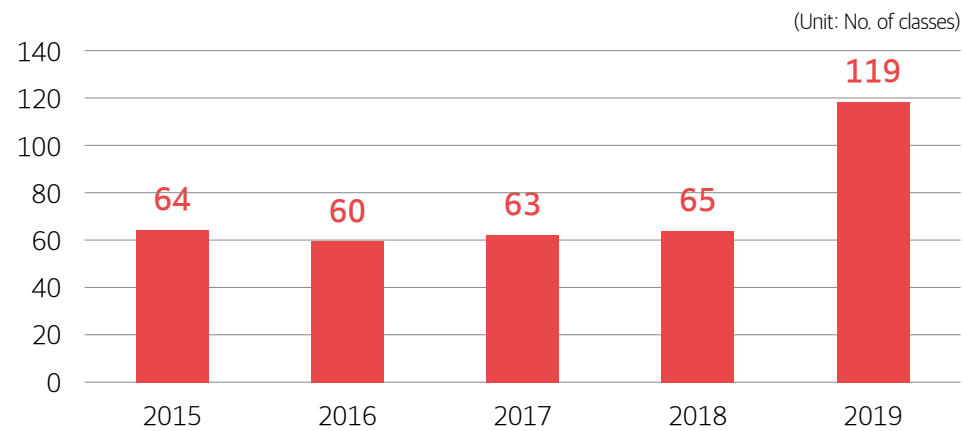


Target 8-5 Improving Suwon Citizens' Multicultural Awareness

- Number of classes providing education for improving multicultural awareness in elementary, middle, and high schools: Providing students with education for improving multicultural awareness in connection with school curriculum while they form their beliefs and identities would be a desirable and effective way to improve multicultural awareness.
- Rate of public officials who completed education for improving multicultural awareness: Raising multicultural awareness among public officials in charge of planning and implementing multicultural policies shall be a priority to further promote multicultural awareness across the city.

Multicultural awareness education has been provided for students of elementary, middle, and high schools, and the number of classes providing such education reached 119 as of 2019, while the number of public officials completed multicultural awareness education increased to 369 or 11% of Suwon's total public officials. Suwon strives to ensure that more than 17% of public

Indicator 8-5-1
Number of Classes Providing Education for Improving Multicultural Awareness Education in Elementary, Middle, and High school



Source: Internal data of Suwon City

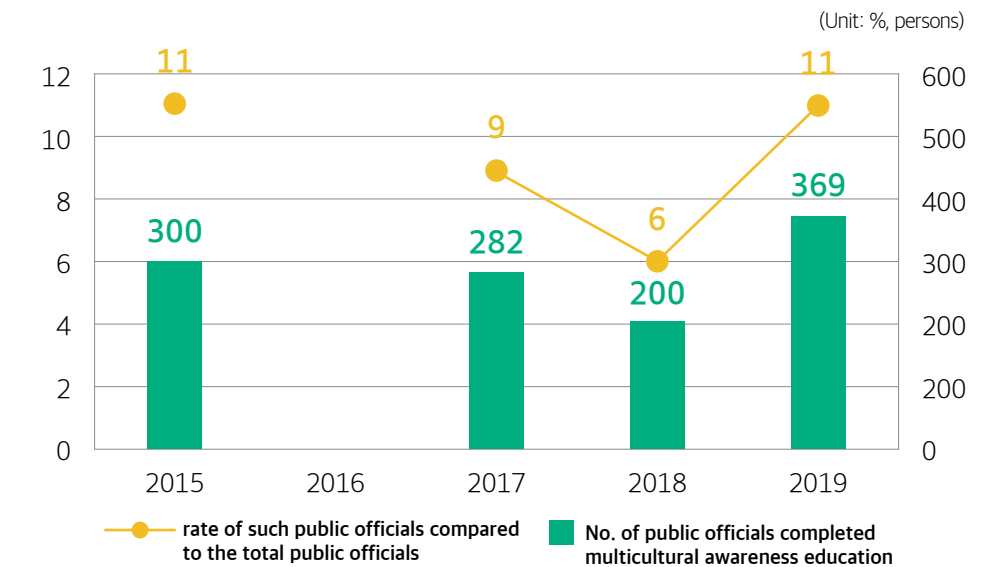
officials complete education every year by 2030.

The number of classes providing education for improving multicultural awareness was 64 in 2015 and then rapidly increased to 119 in 2019.



Meeting between Public Officials of the Multicultural Policy Division and Representatives of Organizations Related to Multiculturalism / Source: E Suwon News, Jeong Sukmi

Indicator 8-5-2
Rate of Employees at Public Institutions (Including Public Officials of Suwon City) Who Completed Education for Improving Multicultural Awareness



Source: Internal data of Suwon City

The growth in the number of public officials completed multicultural awareness education had been sluggish since the number recorded 300 in 2015. However, the number increased sharply to 369 or 11% of Suwon's total public officials in 2019. Still constant efforts are required to further expand education for improving multicultural awareness. In 2016, multicultural awareness improvement education was not implemented.



09

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020

Cultural villages

Culture and art in daily life
Culture and art created by people



A pleasant city

Comfortable living environment
With adequate population level,
convenient transport,
and green spaces



Housing

Safe and comfortable houses
Affordable housing prices for tenants



Suwon 2030 Sustainable Development Goal 9: Sustainable City and Culture for All

Suwon Responds to the Growing Urban Population with Social Housing Policy.

Providing and effectively managing infrastructure is an essential element for creating a resilient and sustainable city for all. In particular, cities need to plan and manage to provide appropriate population and residential environment; affordable and enjoyable public transport; adequate green spaces and ecological environment; and universal cultural environment for all citizens.

Suwon City has been maintaining a modest population growth not to put a sudden burden on existing urban infrastructure while alleviating the concentration of population in certain areas.

Currently, the number of houses in Suwon is sufficient to accommodate 100% of the city's population. However, the city is to increase the supply of pleasant and more affordable public rental housing for low-income families who are relatively dissatisfied with their residential environments. In this regard, Suwon recently implemented a pilot housing project to directly supply and manage public rental housing and has been considering new measures, such as the launch of a city housing corporation, to create more stable residential environments.

The city has been increasing the number of cultural spaces to make them more accessible while supporting artists and increasing budget for cultural projects to provide citizens more opportunities to participate in cultural and artistic activities. Nevertheless, the number of citizens visiting cultural or sports venues has not kept up with the pace of Suwon's population growth. Still the city has seen a constant increase in the number of visits to cultural/sports per capita.





Suwon Hwaseong Fortress, a UNESCO World Cultural Heritage Site / Source: Public Affairs Office of Suwon City

Target 9-1 Managing the City based on Urban Carrying Capacity and Helping Citizens Enjoy Basic Services

- Population: The urban population should be managed to prevent sudden change in social environment caused by rapid increase or decrease in population and to avoid excessive concentrations of administration services.
- Housing: Public rental housing, which is more affordable than private rental housing, should be further promoted to reduce the housing burden of residents in the city.
- Park area: The city is to increase the per capita park area to 11.0m² or more by 2030.
- Use of parks: Parks should be efficiently managed to be used by more citizens.

The population of South Korea has been increasing steadily since 2015, while the growth rate slowed down in recent years and showed a more moderate growth pattern. The population trend of Suwon is generally similar to that of the nation. With this growing urban population, the city divided some of its densely populated administrative units(or dong) to ensure equal access to administrative services for all citizens. As a result, the number of administrative units (or dong) has been increasing, recording 41 in 2015, 42 in 2016, 43 in 2018, and 44 in 2020.

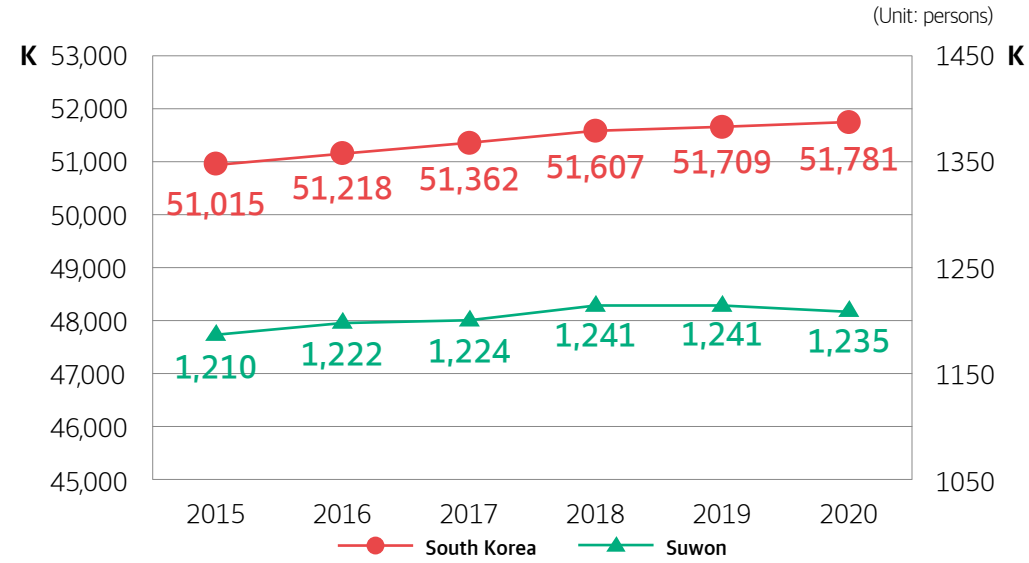
Looking at the population by administrative unit(or dong), the average number of residents per administrative unit (dong) was 29.5 thousand in 2015 and the standard deviation of the population distribution was not low, recording 12.2 thousand (41.2% = standard deviation/average number of population).

As of 2020, the average number of residents per administrative unit (dong) is 28.1 thousand and the number of residents subject to administrative services reduced by about 1.4 thousand, resulting in less administrative burden. The standard deviation of the population distribution records 11.3 thousand people (about 40.3% of the average) and the absolute value is about 900 people, indicating a 0.9% decrease. So, it can be seen that there has been a modest improvement in ensuring equal access to administrative services.

Suwon's park areas have been steadily increasing since 2015 and the city's per capita park area increased to 10.6m² as of 2020 in spite of the city's population growth. While park users are evenly distributed across all age groups, the user satisfaction tends to go up as the age of park users increases. The most frequently cited complaints are the lack of rest areas and convenience facilities (34.2%), the lack of parking lots (25.1%), and the lack of sports facilities (13.4%). There is a great demand for parking lots since users not only visit parks to take a rest but also to enhance their physical and psychological health and, in some cases, to use mountain trails connected to the park. Given that, it seems necessary to consider adding more convenience and sports facilities including parking lots in addition to expanding park areas.

Population Change in Korea and Suwon

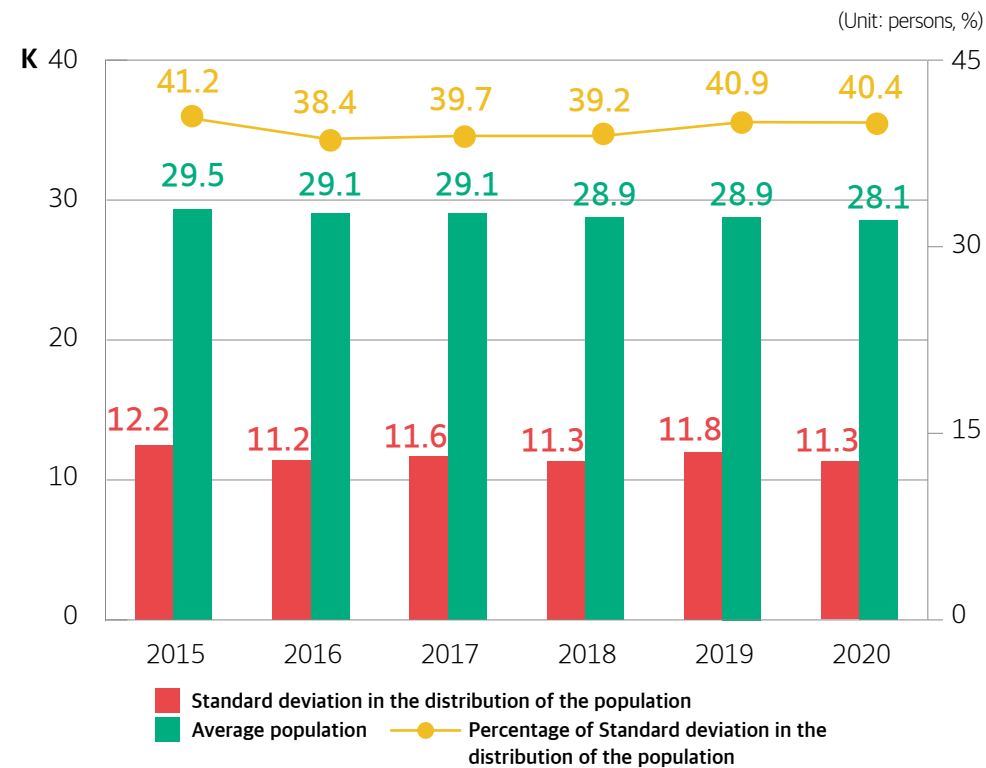
Indicator 9-1-1 Population Density in Suwon
Indicator 9-1-2 Population Growth/Decline Rate by Administrative Unit(or dong)



Source: Population Status by District/Dong (as of the end of January) by Statistics Suwon, and Population Estimations by Statistics Korea

The population of Korea has shown a modest growth from 765,632 in 2015 to 51,780,579, in 2020 and the growth of Suwon's population shows a similar trend to that of the nation, showing a steady and modest pattern without sudden or excessive burden on the city's infrastructure.

Population Concentration by Administrative Unit(or Dong) of Suwon



Source: Population Status by District/Dong (as of the end of January) by Statistics Suwon

In Suwon, the standard deviation¹⁾ in the distribution of the population, which suggests the degree of unevenness in population distribution, recorded 11,329 in 2020, reduced by 830 compared to the 2015 level, and the percentage of the standard deviation slightly fell to 40.4% or a 0.8% decrease from the 2015 level, indicating that Suwon's population has been managed to be more evenly dispersed across administrative units.

1) Standard deviation: Standard deviation is calculated as the square root of the variance (the average squared deviation from the mean). When the standard deviation is zero, there is no spread; that is, all the data values are equal to each other. It can be said that the more spread out a data distribution is, the greater its standard deviation.

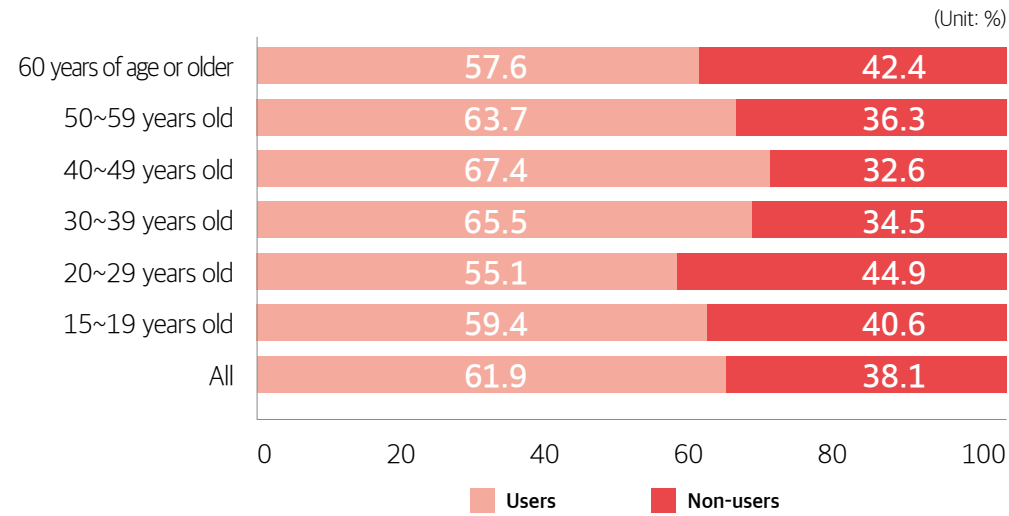
Suwon's Representative Park, Seoho Park and Seoho Reservoir / Source: Public Affairs Office of Suwon City



Indicator 9-1-4
Per Capita Urban Park Area (m²/person) in Suwon

As the sunset provision for urban park sites became effective in July 2020, some of designated urban park sites like the area for Jijidase Park were affected, which resulted in a reduction in the total park area of Suwon. As of 2020, The park area per capita is 10.6m² in Suwon.

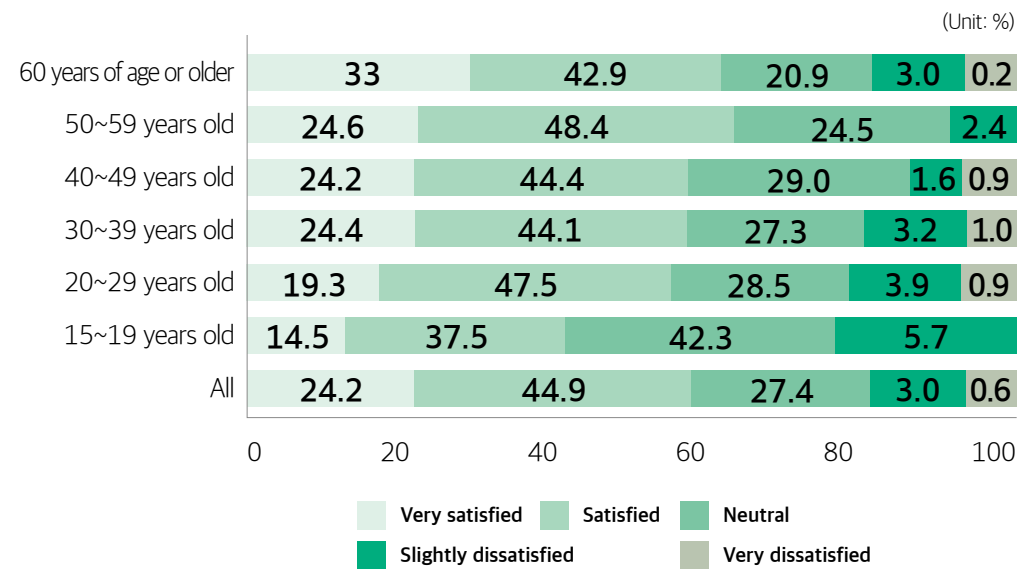
Park Users by Age Group (2018)



Source: Data on park users, the Report for the Suwon Society (2018)

61.9% of Suwon citizens are park users and they are evenly distributed across all age groups.

Satisfaction Rate by Age Group (2018)



Source: Satisfaction Rate by Age Groups, the Report for the Suwon Society (2018)

As of 2018, 69.1% of park users were satisfied with their experiences at parks while 3.6% of them were dissatisfied. The users' satisfaction rate tends to increase as the respondents' age increases.

Target 9-2
Guaranteeing Citizens' Right to Housing and Promoting Public Rental Housing

Target 9-3
Mitigating the Burden of Housing Expenses and Promoting Social Housing

As of 2020, the number of housing units in Suwon is enough to accommodate 101% of the total households. So, the demand for its quantitative growth of housing is low, while there is a need for replacing old and abandoned houses. According to the Report for the Suwon Society, most citizens were satisfied with housing and the dissatisfaction rate was only 11.6% in 2019. However, for low-income households with monthly income of less than 2 million won, the dissatisfaction rate still reached about 19.7%. Given that, there is a need for increasing the supply of affordable public rental housing to help low-income families be more satisfied with their residential conditions.

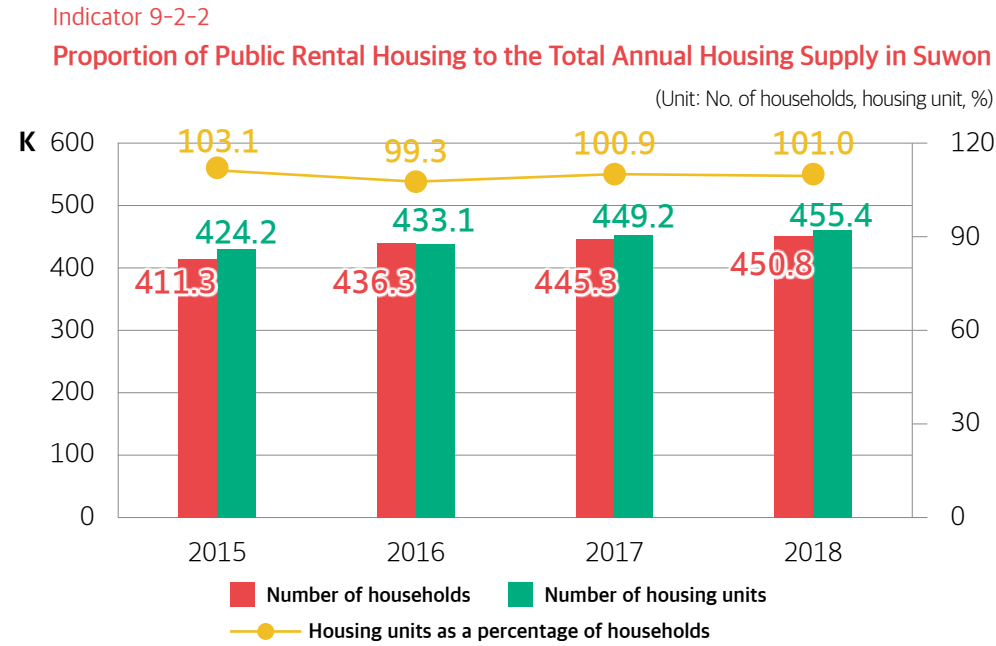
Under the circumstance, Suwon City has been promoting public rental housing at the local government level in addition to the central government's initiative to promote public rental housing. Such local action bears significant meaning since they belong to Suwon's own housing and welfare policies. In fact, Gyeonggi Province has built, supplied, and operated public rental houses since 2018 through housing projects such as the 'Gwanggyo New Town Development Project', which was carried out in Suwon. As for Suwon, the city government purchased private buildings and converted them into public rental housing to directly supply and manage such housing. Suwon City expects the housing satisfaction rate of Suwon citizens to be further increased with its more localized approach for public rental housing.



Human Housing Provided to Multi-child Families in Suwon as Part of its Social Housing Policy / Source: Suwon City Photo Bank, photographed by Kim Kisoo



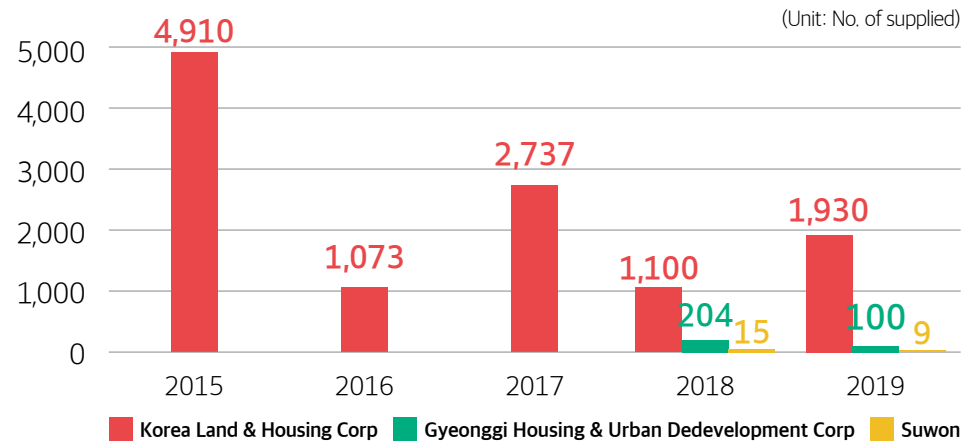
Housing Supply in Suwon



Source: Basic statistics on the status of housing and the housing supply rate in Suwon and Gyeonggi Province

Suwon has enough housing units to accommodate over 100% of the city's total households since 2015, so the quantitative supply of housing seems to have reached a sufficient level. However, the housing supply rate decreased in 2016 due to the change in the statistical standards for multi-family housing.

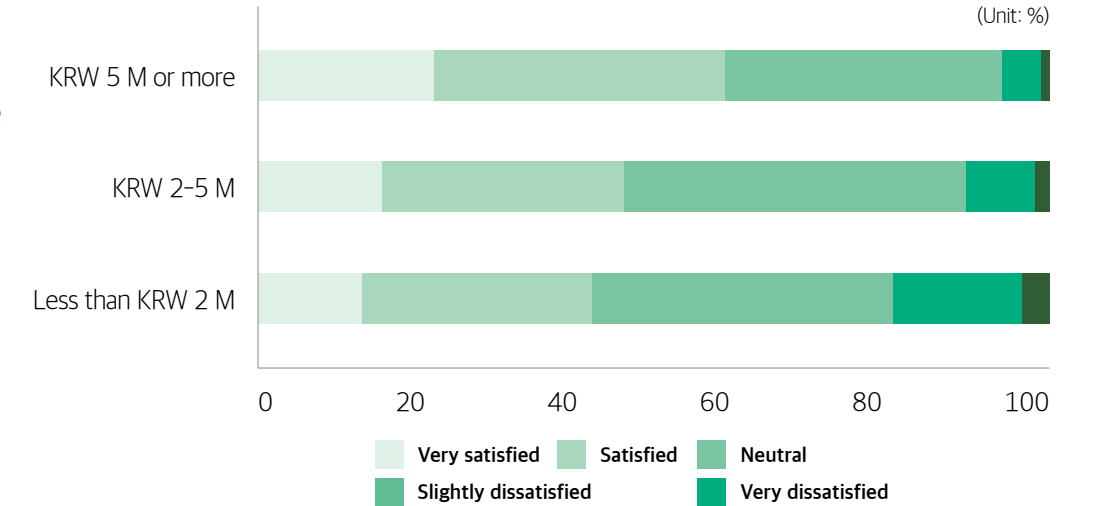
Number of Public Rental Housing Units Supplied by Year in Suwon



Source: Current status of public rental housing in Suwon from internal data of Suwon City, and data on the 'Happy Housing Project' of Gyeonggi Housing & Urban Development Corp.(as of September 2020)

Korea Land & Housing Corporation, a government-owned corporation, is responsible for the supply of public rental housing across South Korea. However, with local governments have paid more attention to housing for low-income families, Gyeonggi Province and Suwon City have directly supplied and operated public rental housing since 2018.

Housing Satisfaction Rate in Suwon (by Households' Monthly Income Level as of 2019)



Source: Housing and residential satisfaction, the Report for the Suwon Society (2018)

Most of Suwon citizens were satisfied with houses and the dissatisfaction rate was only 11.6% as of 2019. However, the lower the income level, the higher the dissatisfaction was. Especially for low-income households under 2 million won, the dissatisfaction rate reached 19.7%, 8.1% higher than the average. Therefore, there should be more substantial measures to increase the housing satisfaction rate among low-income families.



Source: imagetoday



Target 9-4 Ensuring Citizens' Access to Cultural Resources through Sustainable Cultural Policy

Target 9-5 Engaging Citizens in Cultural Activities and Revitalizing Culture by Citizens

- Cultural facilities: Enough cultural facilities shall be secured to make them more accessible for citizens.
- Engaging citizens in cultural activities: Cultural facilities shall be effectively managed to encourage more citizens to participate in cultural activities.

Suwon City manages and operates various arts centers and exhibition halls to help citizens enjoy and benefit from culture and arts. As of 2018, the combined total floor areas of such facilities reached 258,662m². However, such increase in the number of cultural facilities has not kept up with the city's population growth.

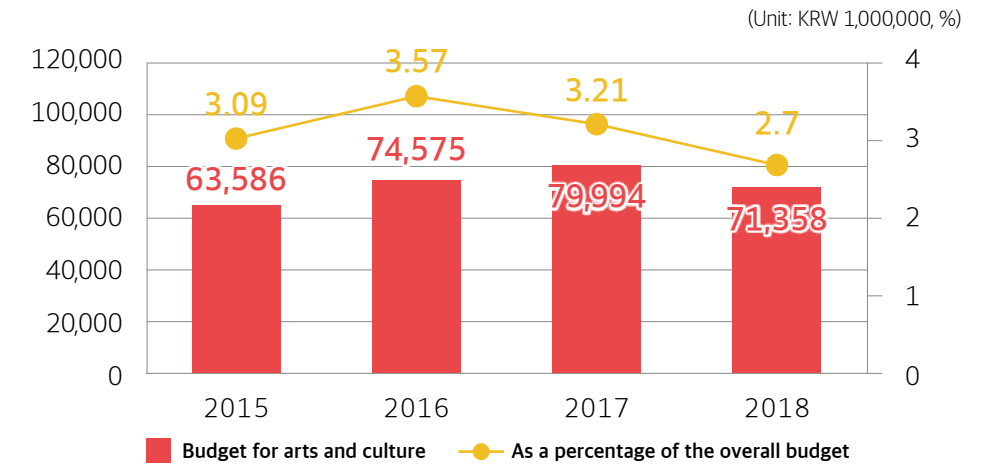
The annual number of visitors to Suwon's major cultural facilities is maintained at more than 300,000 every year. According to the Report for the Suwon Society, more than 60% of Suwon citizens visit cultural facilities and sports venues, and the average annual number of visits per capita had increased rapidly since 2015 and reached 7.3 in 2019.

The Suwon Cultural Foundation has been promoting cultural and artistic activities by carrying out projects funded through open competitions, and the Culture and Arts Division of Suwon City has been directly supporting individuals and organizations in the arts and cultural fields since 2016. As of 2019, the Suwon Cultural Foundation provided 720 million won for 100 projects, while and the Culture and Arts Division provided 1.18 billion won for 32 projects.

Although the Suwon City's budget for the promotion of arts and culture gradually increased, its proportion compared to the total municipal budget moved into the opposite direction. Actually, the amount of the budget decreased by 8.64 billion to 71.35 billion in 2018. All in all, there shall be a comprehensive review for the promotion of arts and culture.

Proportion of the Budget for Promoting Arts and Culture to the Total Municipal Budget

Indicator 9-4-1
Budget for the Promotion of Arts and Culture: Total Budget and Budget by Sector and District (the Proportion of the Arts and Culture Budget Compared to the Total Municipal Budget)



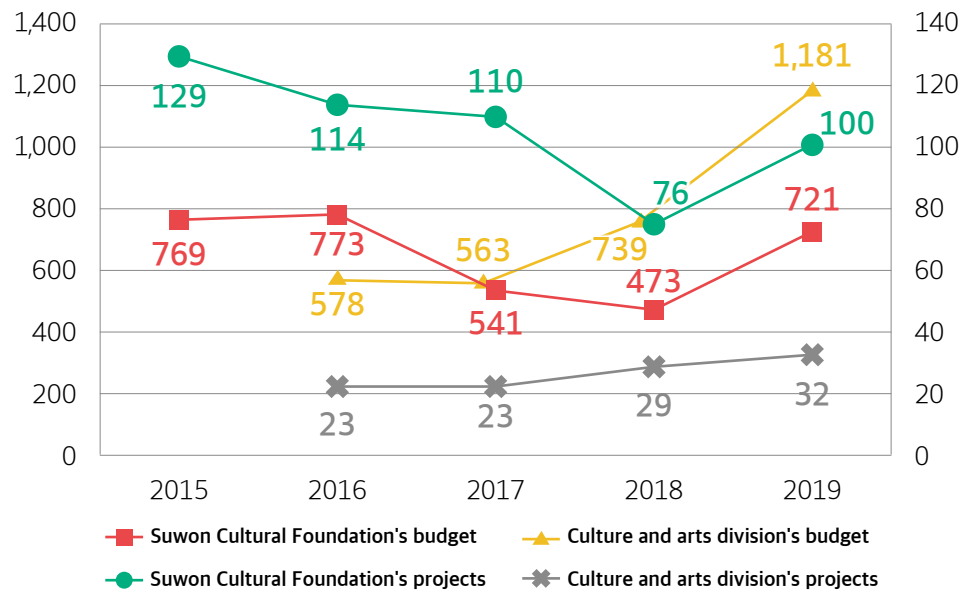
Source: Suwon City's budget bill (the Arts Team's subsidy for arts and cultural organizations), and internal data of the Suwon Cultural Foundation

The absolute amount of Suwon's budget spent for the promotion of arts and culture had gradually increased until it dropped in 2018, accounting 2.7% of the total municipal budget.

I-Park Museum of Art, a Representative Cultural Space in Suwon City / Source: Public Affairs Office of Suwon City



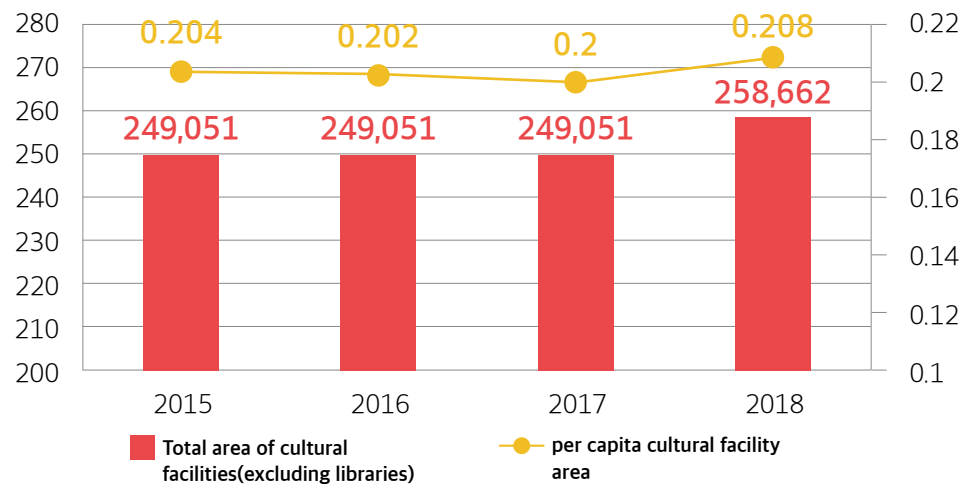
Indicator 9-4-2
Number of Cases of Support for Individuals and Organizations in Arts and Cultural Fields and the Total Amount of Support
 (Unit: KRW 1,000,000, Number of cases)



Source: Suwon City's budget bill (the Arts Team's subsidy for arts and cultural organizations), internal data of the Suwon Cultural Foundation

The Culture and Arts Division of Suwon City started to directly support individuals and organizations in arts and cultural fields in 2016, in addition to the Suwon Cultural Foundation's supports for arts and cultural projects through open competitions. While the cases supported by the Suwon Cultural Foundation and relevant budget have been falling, the number of cases supported by the Culture and Arts Division have been steadily increasing.

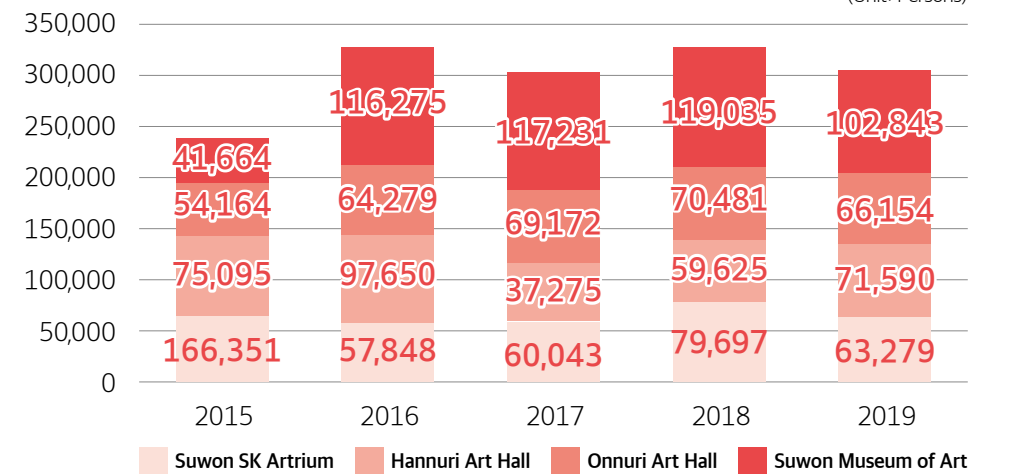
Indicator 9-4-3
Per Capita Cultural Facility Area
 (Unit: m², m²/person)



Source: Overview of National Cultural Infrastructure

The total area of Suwon's cultural facilities such as art museums and art centers in Suwon has remained almost unchanged since 2015. On the other hand, the per capita cultural facility area declined slightly due to the city's population growth. And then it went up again to 0.208m² in 2018 as the total cultural facility area increased by 9,611m² to 258,662m² in 2018.

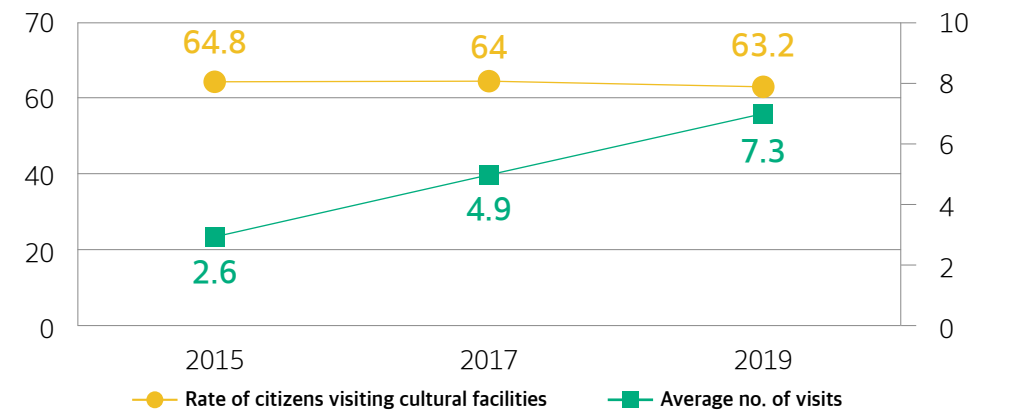
Indicator 9-5-2
Number of Visitors to Arts and Exhibition Halls of Major Cultural Facilities
 (Unit: Persons)



Source: Data collected by the Suwon Cultural Foundation

The number of visitors to Suwon's major cultural facilities has been maintained at a certain level. However, the number of visitors to the Suwon Museum of Art was the lowest in 2015 because the museum opened in October of the year.

Indicator 9-5-3
Rate of Visitors and the Number of Visits to Arts Centers/Museums and Sports Venues
 (Unit: %, time/s)



Source: Rate of visitors and the number of visits to arts centers /theaters and sports venues, the Report for the Suwon Society (2015, 2017, and 2019)

As of 2019, 63.2% of Suwon citizens visited arts centers and sports venues. While the number of visitors increased, the proportion of such visitors compared to the total population decreased along with the city's population growth. However, the average number of visits per person increased from 2.6 in 2015 to 7.3 in 2019.





장안
사랑채
Jangan Sarangchae

"장안사랑채"는 수원화성을 찾는
손님을 맞이하는 장소라는 의미입니다.

- 서동진의 커피숍
- 이채휴 우리옷
- 관광기념품점
- 쌀베어링연구회 쿠키라인

수원시

Suwon Center for Traditional Culture
/ Source: Public Affairs Office of
Suwon City



10

Suwon SDGs Action Report

in line with UN 2030 Agenda
for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020

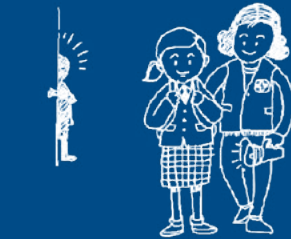
Citizen=Administration

Create better communities through citizen's
participation and self-governance



Transparent administration

Transparent and clean administration
through information disclosure cooperation
between public officials and citizens



Safe city

A crime-free city, people feeling
safe to walk at night



Suwon 2030 Sustainable Development Goal 10: Suwon Pursues All Forms of Citizens' Participation for Self-governance and Decentralization

Suwon Aims to Realize All Forms of Citizens Participation in Pursuit of Self-governance and Decentralization

Suwon City has been opening the local government's administrative information to the public and providing support to improve citizens' capacity for participatory governance by dong, which is the most basic administrative unit of a city where everyday life of citizens take place.

In addition, Suwon has been developing measures for combating corruption and promoting integrity at public offices to improve the trust of citizens in the administration, which would be the basis of participatory governance. Along with such efforts, there has been ongoing discussion about criteria for setting indicators regarding self-governance by administrative unit (or dong) and citizens' capacity for participatory governance.

With regard to opening the local government's administrative information, Suwon has been running a system for information disclosure request, and the city has made original documents signed by the deputy mayor level or higher available to the public without any request. As of 2019, 73.9% of these documents were open to the public and the city aims to increase the disclosure rate of such documents to 100% by 2030.

The number of committees, as representative forms of citizens' self-governance activities, has been steadily increasing since 2015, and the gender ratio of commissioned members has been managed not to be biased towards one side. In 2019, 2,009 commissioned members were active in 179 committees.

Suwon City has been recognized as an exemplary city by obtaining grade 2 or higher in the Anti-Corruption Initiative Assessment (AIA), which is conducted to promote the integrity of public officials. While Suwon City failed to achieve such grade in the Integrity Assessment (IA) for public institutions in 2017-2019, the city obtained grade 2 in the Integrity Assessment(IA) in 2020.



Target 10-1 Strengthening Self-governance Capacity by *Dong* (Administrative Unit)

- Education hours for building self-governance capacity by *dong*:
Sufficient education hours should be provided to promote self-governance and strengthen capacity by *dong*.

As part of an effort to implement effective self-governance policy, Suwon has been promoting a community-based self-governance system by *dong*, the basic administrative unit of a city. The system is mainly concerned with policies closely related to daily life of residents. Recently, the Residents' Association was launched as part of a pilot project to create a *dong*-based collaborative system.

To help busy residents smoothly fulfill their role as administrative partners, capacity-building in terms of policy making, implementation process, consultation, and organizational activities is essential.

Given that, Suwon City has been providing educational services to members of the Residents' Associations and resident representatives through the School for Civic Autonomy.

As of 2020, it is agreed that education hours shall be measured as an indicator of community-based self-governance capacity. However, opinions vary on the types of education and education targets, and the discussions on the criteria for setting indicators are still ongoing. Such indicators and appropriate levels shall be set based consensus.



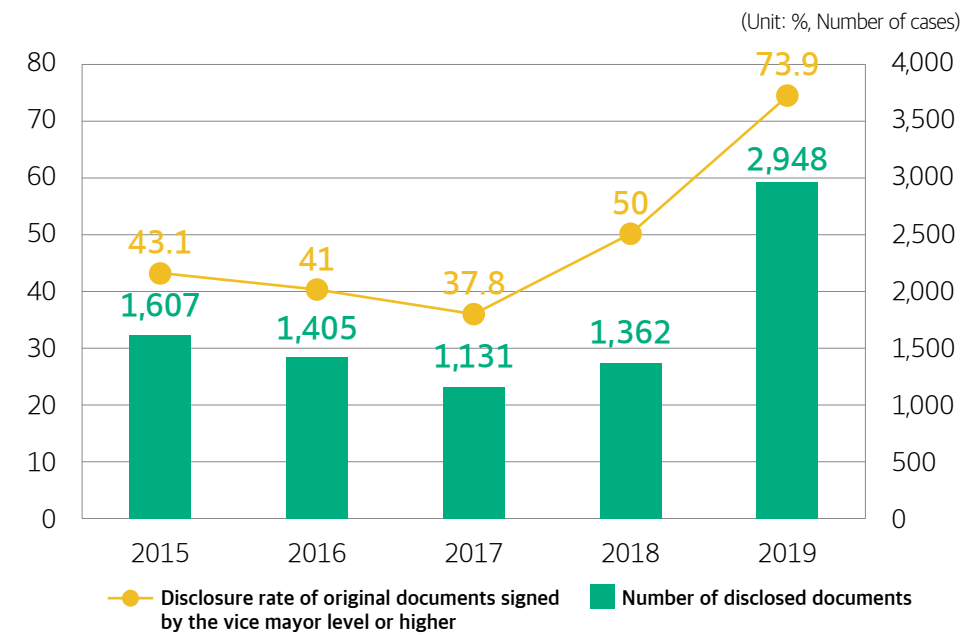
Members of the Suwon Residents' Association Appointed
/ Source: Press Office of Suwon City

Target 10-2 Ensuring Access to Administrative Information

- Disclosure rate of original documents signed by the vice mayor level or higher: Original documents signed by the vice mayor level or higher are required to be disclosed by law without any request and shall be made available to the public as much as possible.

Transparent disclosure of administrative information is important to facilitate participatory governance. In South Korea, any person can make a request for the disclosure of administrative information, except for cases that have considerable grounds for remarkably obstructing the fair performance of duties according to the 'Official Information Disclosure Act.' Local governments are required to voluntarily disclose original documents signed by the deputy mayor level of higher without any request for information disclosure.

Indicator 10-2-1
Disclosure Rate of Original Documents Signed by the Deputy Mayor Level or Higher



Source: Open public records portal (www.open.go.kr)

The disclosure rate of original documents signed by the deputy mayor level of higher steadily decreased in 2015-2017 and then has increased since 2018, reaching 73.9% or 2,948 documents as of 2019. The city aims to increase the public information disclosure rate to 100%, except for the special cases specified by the Official Information Disclosure Act.

Education for Public Officials on the Disclosure of the Original Documents/ Source: Public Affairs Office of Suwon City





Target 10-3 Inclusive Governance for All

- Promoting the operation of committees: The number of administrative committees, as organizations for promoting self-governance, and the number of citizens participating as commissioned members shall be increased. At the same time, gender equality shall be promoted in the committees.
- Strengthening participatory budgeting: Participatory budgeting is a form of citizen participation in which citizens are involved in discovering and deciding projects in the budgeting process and shall be further promoted.

In order to realize inclusive governance (or participatory governance) for all, it is important to provide citizens with more opportunities to participate in the policy decision-making process, and such citizens' participation can be represented by activities of committees,* and such committees shall be managed in a gender-balanced way.

In Suwon, the number of committees¹⁾ and their commissioned members have increased steadily since 2016, and 2009 commissioned members of 179 committees participated in governance activities in 2019. The gender ratio of male to female commissioners was 1124(63%) to 661(37%) in 2016, and it became more gender-balanced in 2019 with the ratio of 1,144 males (56.9%) to 865 females (43.1%).

Participatory budgeting²⁾ allows residents to directly develop projects and decide priorities through discussion. Suwon enacted the Ordinance for Operation of Participatory Budgeting in 2009 and has been implementing the participatory budgeting system since 2011. As of 2019, 122 projects (4.71 billion won) were decided through participatory budgeting. However, recently such activities have somewhat slowed down due to the city's limited fiscal resources. Given that, there seems to be a need for more funding and active supports to revitalize participatory budgeting.

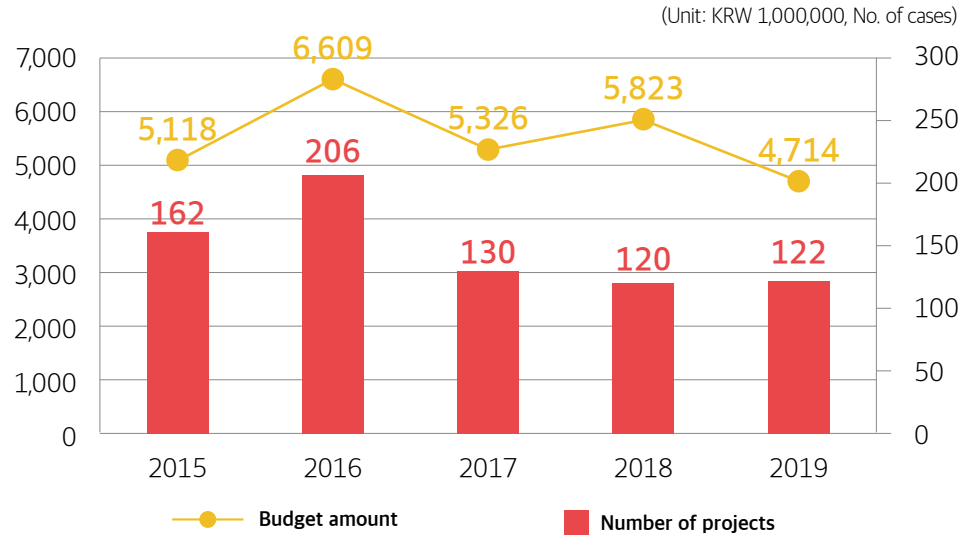
1) A committee refers to a consensus-based organization in which members have equal positions, make consensual decisions, and taking responsibility for the decisions they made. A committee promotes democratic decisions and coordination that can be easily neglected in a hierarchical or centralized organization.

2) Participatory budgeting refers to a system in which residents directly participate in the local government's budgeting process. Participatory budgeting promotes transparency and fairness of the local government's fiscal management by engaging citizens in the budgeting process. The introduction of the participatory budgeting system has become mandatory for local governments since March 2011 with the revision of the Local Finance Act.



Status of Suwon's Participatory Budgeting System

Indicator 10-3-2
Amount of Yearly Budget Allocated by the Participatory Budgeting System



Source: The report on operational results of the participatory budgeting system, the Budget and Finance Division of Suwon City

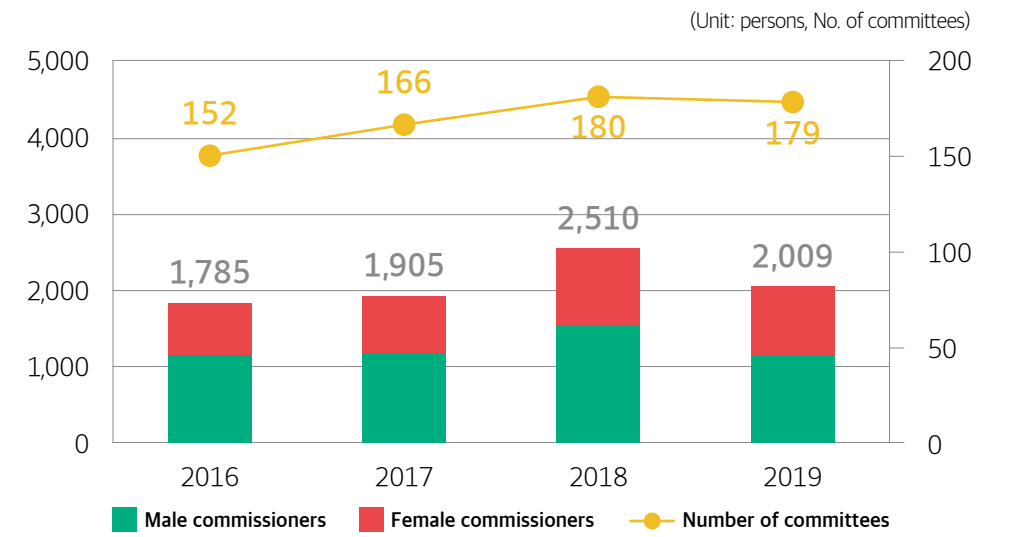
The amount of budget allocated for local projects through the participatory budgeting system has shown yearly fluctuations since 2012. While the amount has generally decreased since 2015, 4.71 billion won was provided for 122 projects as of 2019.

Source: imagetoday



Status of Committees in Suwon

Indicator 10-3-4
Proportion of Women, People with Disabilities, the Elderly, Adolescents, People with Multicultural Backgrounds in Administrative Committees of Suwon City



Source: Data on the status of committees by year, Policy Planning Division of Suwon City

The number of administrative committees under Suwon City had increased since 2016 and reached 179 committees as of December 2019. The ratio of male to female commissioners became more gender-balanced, changing from 63:37 in 2016 to 57:43 in 2019.

※ In 2019, as South Korea commemorated the 100th anniversaries of the March 1st I Movement, a nonviolent independence movement of 1919, and the establishment of the Provisional Government of the Republic of Korea, the 'Committee for Preparing the 100th Anniversary of the March 1st I Movement and the Founding of the Provisional Government of the Republic of Korea' stopped functioning after the 100th anniversary events. The number of committee members significantly decreased in 2019 because of the committees related to the 100th anniversary events and the 56th Suwon Hwaseong Cultural Festival were dismantled or saw a significant reduction in their members.



Target 10-4 Promoting Integrity at Public Offices

- Number of corruption-related cases involving public officials by year: Mutual trust between the administration and citizens is a basic element of good governance, and corruption of public officials such as bribery shall be strictly prohibited.
- Anti-Corruption Initiative Assessment (AIA) grade: The city shall manage its grade in the Anti-Corruption Initiative Assessment (AIA) conducted by the Anti-Corruption & Civil Rights Commission, to obtain grade 2 or higher.
- Integrity Assessment (IA) for public institutions: The city shall manage its grade in the Integrity Assessment (IA) for public institutions conducted by the Anti-Corruption & Civil Rights Commission, to obtain grade 2 or higher.

The number of corruption-related cases involving public officials recorded 1 in 2017, 3 in 2018, and 1 in 2019. Corruption shall be strictly prohibited not to allow any single occurrence.

Suwon has been evaluated to be 'excellent' in the Anti-Corruption Initiative Assessment(AIA),¹⁾ by obtaining grade 2 or higher. While the city once received the lowest, grade 5 in 2019 in the Integrity Assessment (IA) for public institutions,²⁾ it obtained grade 2 again in the Integrity Assessment (IA) in 2020.

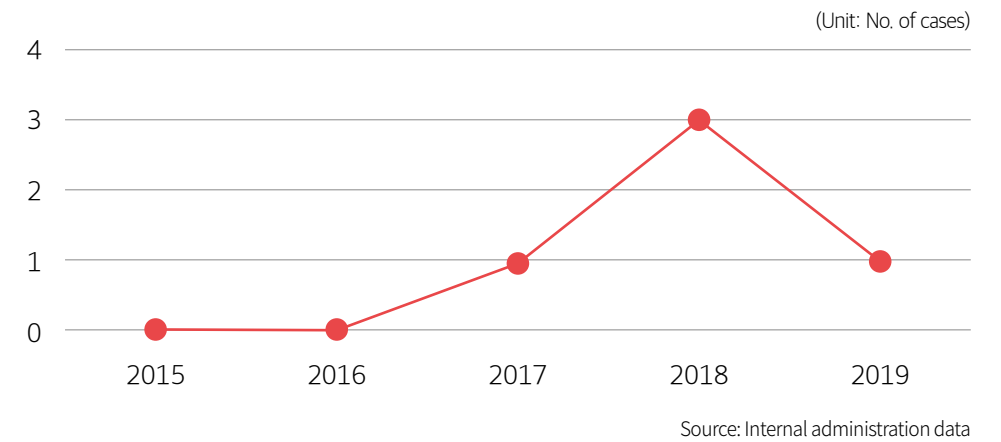
The results of the Anti-Corruption Initiative Assessment (AIA) and the Integrity Assessment (IA) of public institutions are published on the website of the Anti-Corruption & Civil Rights Commission(ACRC)

1) Anti-Corruption Initiative Assessment (AIA): The Anti-Corruption Initiative Assessment (AIA) has been conducted since 2002 to evaluate public agencies' voluntary anti-corruption efforts and help them effectively build their anti-corruption capacity. The Anti-Corruption & Civil Rights Commission conducts yearly evaluation on the adequacy and effectiveness of public agencies' voluntary anti-corruption efforts and publishes the results to promote anti-corruption capacity and share exemplary anti-corruption practices across the public sector. The grades of Anti-Corruption Initiative Assessment are classified into grade 1-5, and agencies obtaining grade 1 or 2 are considered 'outstanding' or 'excellent' while those receiving grade 4 or 5 are considered 'below average' or 'poor.'

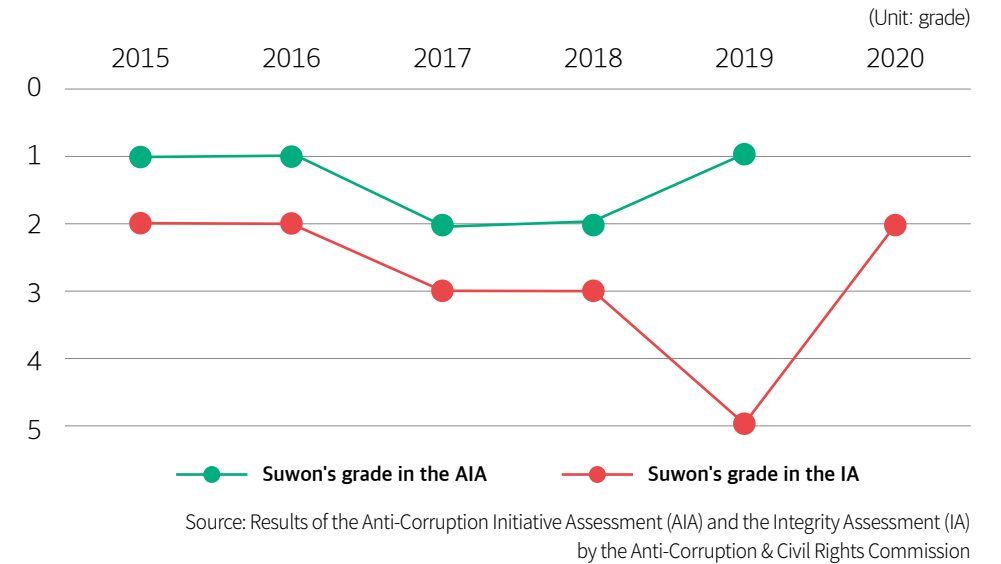
2) Integrity Assessment (IA) for public institutions: The Integrity Assessment (IA) serves as a motivational tool for public institutions to voluntarily promote integrity by providing objective evaluations based on surveys of public service users and data on corruption cases. The evaluation consists of the following 4 factors.

- External integrity: Public officials or citizens who experienced public services evaluate the integrity levels of major public institutions.
- Internal integrity: Public officials evaluate the integrity level of the public institution that they work for.
- Policy evaluation: Experts, residents, parents, and other concerned parties assess the overall integrity of public institutions. ※Residents participate in the evaluation of local governments and parents take part in the evaluation of municipal offices of education.
- Scoring system based on actual corruption incidents

Indicator 10-4-1
Number of Corruption Cases Involving Public Officials by Year



Indicator 10-4-2
Results of the Anti-Corruption Initiative Assessment (AIA) and the Integrity Assessment (IA)



Suwon has been considered 'excellent' in the Anti-Corruption Initiative Assessment by obtaining grade 2 or higher. However, in the Integrity Assessment (IA) for public institutions, the city received grade 3 in 2017 and 2018 and once received the lowest, grade 5, in 2019, but to its relief, Suwon was able to obtain grade 2 again in 2020.





Conclusions

Conclusions

Suwon City, with its vision of creating a people-friendly human city, has been committed to achieving sustainable development for harmonious living based on UN 2030 SDGs. Suwon's policy approaches towards these goals can be defined by the following two characteristics.

First, it is 'participatory governance'. Suwon citizens have been directly participating in various policy fields, going beyond the passive and formal practices where citizens just presented opinions on the administration's plans. Examples of such participatory governance can be seen from all phases of the city's policy from developing and selecting programs to monitoring and evaluating the progress and results.

Second, it is about 'building ecological environment that reaches everyday life'. Rather than separating and preserving the ecological environments away from the daily life of residents, the city helped citizens to carry out daily activities in harmony with nature by creating urban green areas connected to forests and rivers; keeping the ecological environments as intact as possible; and preventing fragmentation of ecological mobility. In addition, Suwon City has been promoting biodiversity in its forests and rivers while citizens are encouraged to spend their free time in natural green areas. Furthermore, the city has been emphasizing eco-friendly low-carbon transport modes as an important pillar of its transportation policy.

We documented the results of Suwon City's policy efforts and summarized them into Suwon 2030 Sustainable Development Goals(SDGs) based on the UN 2030 SDGs to share them with the international community.

Suwon 2030 Sustainable Development Goals(SDGs) are intended to be achieved by the year 2030. As the results of the cooperation between the administration and citizens, the 10 Sustainable Development Goals are based on public consensus on the current status of Suwon City and were organized from the perspective of 'participatory governance', led by the Suwon Council for Sustainable Development, and they include indicators to measure the progress in achieving each goal.

This report summarizes the progress Suwon City has made

in achieving its 10 Sustainable Development Goals as well as remaining challenges based on major indicators.

The indicators in this report are based on statistical data that have been built by the city administration and are available to civil society without additional expenditure.

Suwon City adopted the goal of **'Responding to Climate Change with Good Energy for All (Goal 1)'**. With this goal, the city has been striving to promote its power self-sufficiency by increasing the proportion of renewable energy in total energy use and reducing greenhouse gases. The city also has been supporting programs designed to provide hands-on knowledge/experience on climate change to get citizens more involved in relevant activities.

Suwon City pursues **'Healthy and Harmonious Biodiversity' (Goal 2)**. Under this goal, the city has been monitoring eight flagship species and regional indicators for climate change and expanding/managing wildlife conservation areas and urban forests. In terms of promoting civic engagement, Suwon made biodiversity as one of topics covered in the school curriculum and has been supporting citizens' habitat conservation efforts.

Suwon City aims to create a **'City with Transparent and Clean Water Cycle' (Goal 3)**. To that end, the city has been managing the level of water quality and preserving the river ecosystem. In addition, the city has been striving to raise water self-sufficiency rate by saving and reusing water resources while supporting educational programs on water environments and water circulation.

Suwon City pursues **'Healthy and Sustainable Agriculture and Food' (Goal 4)**. Under this goal, the city government established the Basic Plan for Food and has been monitoring the rate of implementation. The city has been revitalizing urban agriculture by expanding public food services and helping food producers get better returns. In addition, the city has been operating direct marketplaces and local food outlets to get citizens more involved in achieving the goal. Suwon City also has been supporting education and food safety inspec-

tions to ensure citizens' healthier dietary life.

Suwon City promotes **'Quality Jobs and Industrial Innovation' (Goal 5)**. In this regard, the city has been monitoring the employment rate and managing basic wages and working conditions. In addition, the city established the Basic Plans for Social Enterprises and Cooperatives and has been monitoring the rate of the implementation. The city also has been allocating the budget for the purchase of products/services from SMEs and supporting technological development and start-ups.

Suwon City pursues 'Sustainable Consumption and Production' (Goal 6). To this end, the city has been encouraging public institutions to purchase green products and supporting certified green businesses and green marketplaces. The city has also been monitoring the volume of discharged/recycled household wastes to save resources and reduce household wastes. The city has been supporting educational programs to raise public awareness of resource circulation.

Suwon City is committed to **'Promoting Happiness through Welfare, Health and Education' (Goal 7)**. Under this goal, the city has been working on the Citizens' Happiness Index and has been monitoring the number of citizens living in poverty and the implementation rate of the Local Social Security Plan for ensuring a minimum standard of living and eradicating poverty. With regard to citizens' health, the city also has been striving to increase the number of public sports facilities; encourage citizens to practice physical activities of moderate or higher levels; increase the number of citizens getting general health check-ups. As for education, Suwon City has been increasing the scope and quality of universal and compulsory education by supporting programs for adolescents both inside and outside of school education and lifelong education programs.

Suwon City is committed to **'Gender Equality and Multicultural Society'(Goal 8)**. Under this goal, the city has been promoting education on gender equality in public offices and schools, while monitoring the percentage of female public officials in leadership positions. The city also has been monitoring the number of domestic and sexual violence cases and supporting survivors of such violence. As for raising people's awareness of a multicultural society, Suwon has been support-

ing educational programs in schools and public institutions.

Suwon City aims to create a **'Sustainable City and Culture for All (Goal 9)'**. For this, Suwon has been committed to appropriate population and residential environment; affordable and enjoyable public transport; adequate green spaces and ecological environment; and universal cultural environment for all citizens.

Suwon City is committed to **'Promoting Justice, Peace and Harmony through Self-governance (Goal 10)'**. In this regard, the city has been carrying out educational programs to strengthen each dong(administrative unit)'s capacity for self-governance. Suwon has been monitoring the level of accessibility to administrative information by checking the disclosure rate of original documents signed by the deputy mayor level or higher. The city also has been monitoring the implementation rate of Suwon's flagship governance policies such as participatory budgeting; the cases and evaluations related to the integrity of public officials; and the number of violent crimes and fatalities.

The information contained in this report will serve as a useful reference for developing or adding indicators for tracking the progress in achieving the 17 SDGs adopted by the UN.

Suwon City has been committed to developing Suwon 2030 Sustainable Development Goals(SDGs), finding the right indicators to evaluate the progress, and confirming their effectiveness in the implementation and monitoring process, in order to create a more sustainable city of Suwon.

We would like to share the city's current status and progress to help other municipalities develop their own Sustainable Development Goals and indicators that reflect their local conditions and can be recognized at the global level.

This report contains Suwon City's belief that sustainability can be achieved by promoting peace and the quality of life around the world and that global cooperation to achieve sustainable development shall be based on sustainable diversity, the respect for diversity of cities, not uniformity, and also sustainable development goals tailored to the situation of each city.



Suwon 2030 Sustainable Development Goals

Suwon 2030 Sustainable Development Goals

Vision	Sustainable City with Harmonious Co-existence of People and Nature				
3 Areas	Environment		Economy		Society
	Bright and Clean Urban Environment		Prosperous Economy for all		Friendly Social Communities
Goals	No	Goals		Targets	Indicators
	1	Responding to Climate Change with Good Energy for All		7	15
	2	Healthy and Harmonious Biodiversity		5	11
	3	City with Clean Water Cycle		5	14
	4	Healthy Food and Sustainable Agriculture		4	11
	5	Quality Jobs and Industrial Innovation		6	17
	6	Sustainable Consumption and Production		7	8
	7	Citizens' Happiness through Welfare, Health and Education		7	21
	8	Gender Equality and Multicultural Society		5	12
	9	Sustainable City and Culture for All		5	16
	10	Justice, Peace and Harmony through Self-governance		6	16
	Total				57
Evaluation system	Mayor of Suwon	Suwon Commission on Sustainable Development	Suwon Council for Sustainable Development	Suwon City Council	External experts and civil society
	Sustainability Report				
How to implement	Execution	Suwon City, civil society, Suwon Chamber of Commerce and Industry			
	Evaluation and monitoring	Sustainable Development Committee, Suwon Council for Sustainable Development			
	System	Basic Law on Sustainable Development, Suwon City Basic Ordinance on Sustainable Development, Establishment of Suwon Council for Sustainable Development and ordinance for the operation of the council			

3 Areas, 10 Goals and 57 Targets
With 141 Indicators

57
SUWON
SUSTAINABLE
DEVELOPMENT
GOALS

※There may be a difference from the current evaluation index as it is a draft of the Suwon City 2030 Sustainable Development Goal made through the working process between the parties.



Goal 1

Responding to Climate Change with Good Energy for All

Target 1-1. Energy Independence and Good Energy Production

By 2030, achieve energy independence rate of 25%.

Indicator 1-1-1. Suwon's electricity independence rate(%)

1-1-2. Renewable energy generation (%) compared to annual electricity generation of Suwon

1-1-3. Number of citizen participants in power generation

Target 1-2. Energy conservation and smarter urban design

Reduce energy consumption and improve demand management by saving energy and promoting efficiency.

Indicator 1-2-1. Suwon's power consumption per capita

1-2-2. Number of green village households (number of villages)

Target 1-3. Realization of energy welfare

Share energy and benefit communities.

Indicator 1-3. The yearly accumulated value of energy that is generated by "Sunlight Sharing Solar Power Plant" and shared with communities

Target 1-4. Spreading eco mobility and improving air quality

Reorganize Suwon City's transportation system to be more ecological and eco-friendly and drastically improve air quality

Indicator 1-4-1. Number of registered electric vehicles (number of registered eco-friendly vehicles)

1-4-2. Share of public transportation (%)

1-4-3. Number of days exceeding particulate matter(PM) 2.5 standards a year($\mu\text{m}^3/24\text{h}$)

Target 1-5. Reducing carbon emissions

By 2030, Suwon will drastically reduce the city's total energy consumption and per capita carbon emissions.

Indicator 1-5. Greenhouse gas emission of Suwon

Target 1-6. Reducing temperature of the city and improving Suwon's capability to adapt to climate change

By 2030, reduce the average temperature of Suwon by 1 °C, create a map indicating heat island intensity levels across the city and manage areas vulnerable to heat.

Indicator 1-6. Number of days with extreme climate events (i.e., heat wave, tropical nights, average annual temperature, etc.) in Suwon

Target 1-7. Responding to climate change and promoting citizen participation

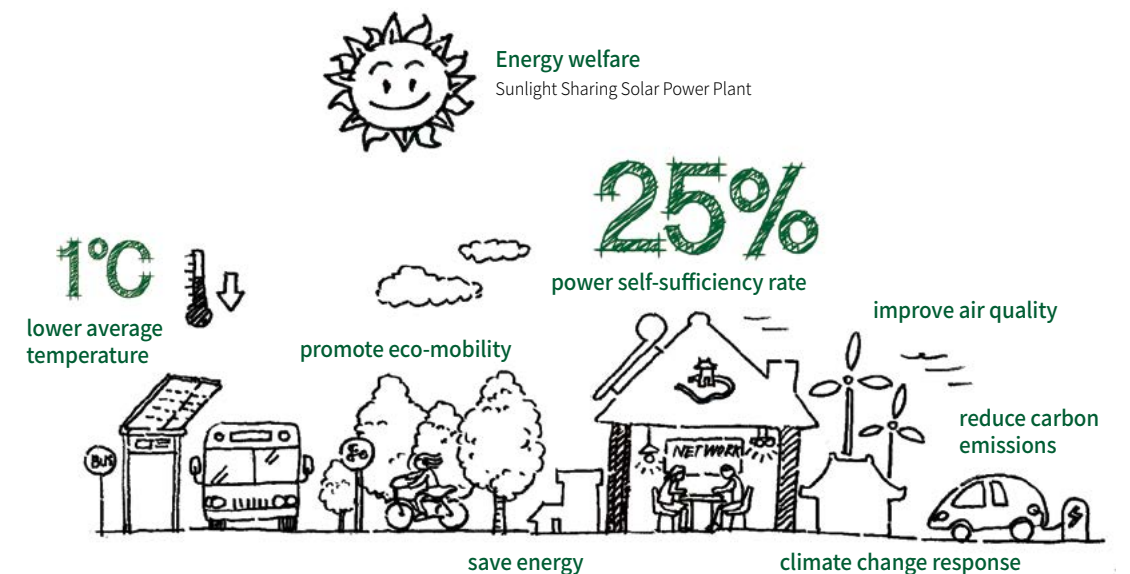
Establish climate change mitigation and adaptation plans with citizens, create communities to respond to climate change, made of schools, institutions, villages, and businesses, and build networks of communities to work on climate actions.

Indicator 1-7-1. Amount of Green Climate Fund and number of communities for climate actions

1-7-2. Number of participants in programs related to education on climate change

1-7-3. Number of programs participated by Suwon citizens and supported by Suwon City

1-7-4. Implementation rate of action plans of Suwon's climate change adaptation measures





Goal 2

Healthy and Harmonious Biodiversity

Target 2-1. Monitoring 8 major flagship species and indicator species in Suwon

Monitor 8 major flagship species in all villages in Suwon and indicator species in climate change affected areas and create reports on changing trends.

Indicator 2-1. 8 major flagship species of Suwon and available monitoring points for indicator species in climate change affected areas

Target 2-2. Protecting and expanding landscape conservation areas to protect their ecosystems

Increase the rate of wetland conservation areas and ecological conservation areas, conduct study on habitats of species including wetlands and create reports on changing trends.

Indicator 2-2-1. Total size of landscape conservation areas of Suwon (including wetland conservation areas)
 2-2-2. Number of landscape conservation areas of Suwon (including wetland conservation areas)
 2-2-3. Number of areas with plans for recovery of species in Suwon

Target 2-3. Expansion of natural areas

By 2030, increase the rate of natural areas and per capita urban forest area to meet the nationally recommended levels and strive to increase the rate of first-grade areas in terms of the status of ecological nature.

Indicator 2-3-1. Rate of natural area in Suwon (%)
 2-3-2. Per capita urban forest area in Suwon (%)

Target 2-4. Education on biodiversity and promotion of citizens' awareness

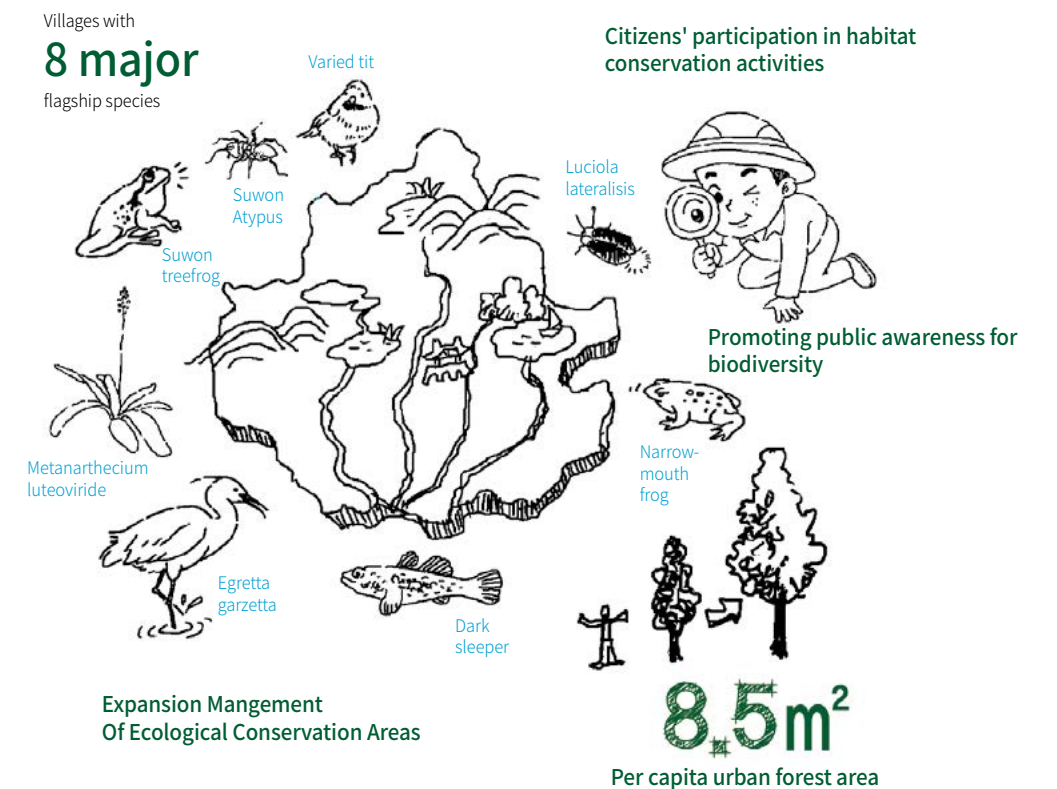
Raise citizens' awareness for biodiversity of Suwon's unique and historical areas, help children and teenagers, who will lead the efforts of protecting Suwon's ecosystem in the future, have ecological experiences and build a better system for environmental education.

Indicator 2-4-1. Number of schools with educational programs on biodiversity in Suwon
 2-4-2. Number of facilities and organizations supported by Suwon City regarding promotion of biodiversity awareness

Target 2-5. Civic engagement and governance for conservation of biological habitats

Keep developing citizen participation programs for conservation of biological habitats and promote private-public governance for biodiversity.

Indicator 2-5-1. Number of Suwon citizens involved in conservation activities a year
 2-5-2. Number of policy proposals annually adopted by the private-public governance regarding biodiversity in Suwon





Goal 3

City with Clean Water Cycle

Target 3-1. Ensuring healthy river ecosystems and monitor life in water environments

Secure longitudinal-horizontal connectivity to ensure healthy river ecosystems, continue assessing conditions of river ecosystem and increase number of monitoring points.

- Indicator 3-1-1. Stream Naturality Grade of Suwon's four major streams
- 3-1-2. Amount of Suwon city's budget for biological survey on streams
- 3-1-3. Rate of increase in biodiversity with regard to species in Suwon's four major streams
- 3-1-4. Number of official monitoring points (hot spots) for evaluation of streams' ecosystem

Target 3-2. Improving water quality of streams and lakes

To reduce non-point pollution sources in Suwon, cut its pollution load to meet the national criteria and implement given tasks related to non-point pollution sources.

- Indicator 3-2-1. Rate of reduced pollution load
- 3-2-2. Water quality of 4 major streams and lakes

Target 3-3. Promoting public awareness to build a water management system with civic participation

Conduct education on ecological viewpoints of water environment and urban rivers to build a water management system, participated by citizens.

- Indicator 3-3-1. Number of education programs on water environment and circulation by target group
- 3-3-2. Number of education programs on water environment and circulation in Suwon

Target 3-4. Increasing water self-sufficiency and conserving water

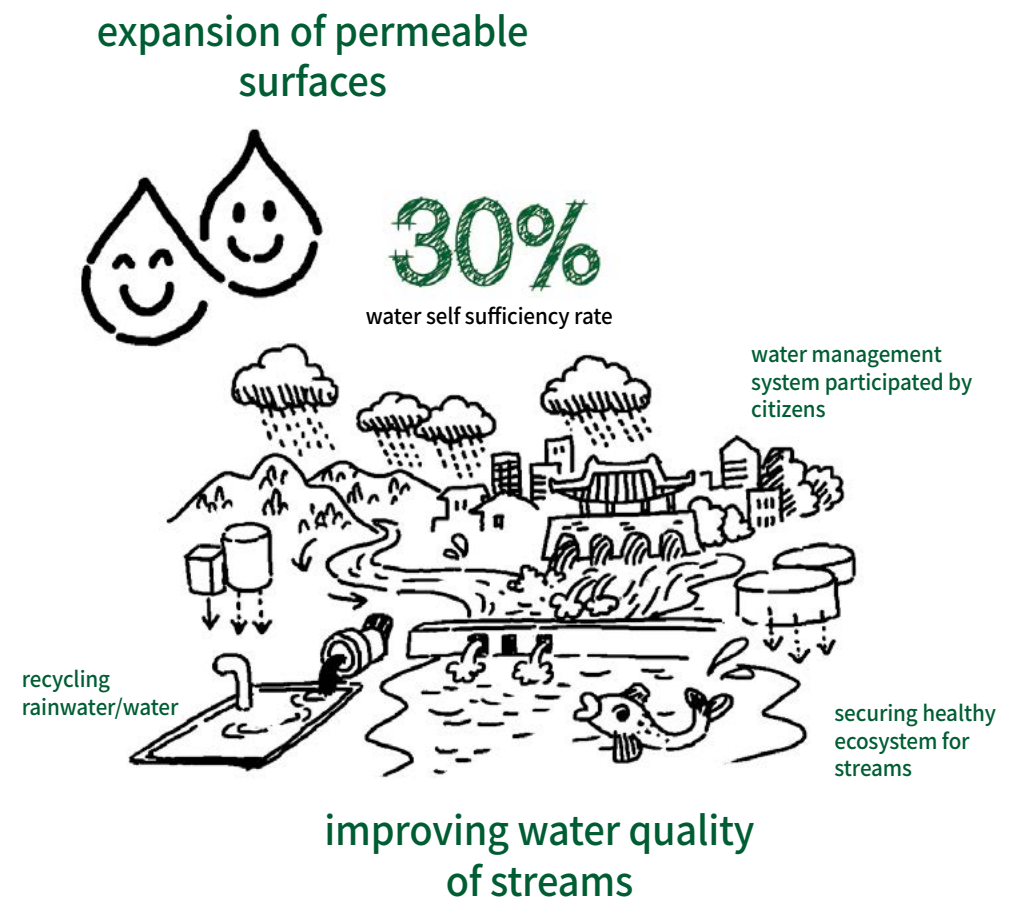
Increase water self-sufficiency rate from 10.9% in 2010 to 30% by 2030 and continue to implement policy regarding rainwater use, water recycling and water conservation to be water self-sufficient.

- Indicator 3-4-1. Water self sufficiency rate of Suwon
- 3-4-2. Per capita water consumption in Suwon

Target 3-5. Increasing areas with permeable surfaces for rainwater infiltration

Reduce the rate of areas with impervious surfaces to improve the water circulation system.

- Indicator 3-5-1. Proportion of areas with permeable surfaces out of the total area of Suwon
- 3-5-2. Annual average groundwater level in Suwon





Goal 4

Healthy Food and Sustainable Agriculture

Target 4-1. Establishing local food system and governance

Establish a sustainable local food system based on fairness, safety, health and care for others to contribute to saving the planet. To achieve the goal, promote the values of eco-friendly, slow, local food in the whole process of production, distribution, consumption and food recycling. Also, establish and implement the "Basic Plan on Food for Citizens" as Suwon's own food and agriculture strategy. Along with citizens, create a committee on food or a council on food policy to monitor the progress in implementing the basic plan and submit annual reports on the progress to the public.

Indicator 4-1. Implementation rate of the Basic Plan on Food for Citizens

Target 4-2. Ensure citizens' right to food

Ensure access to healthy and adequate food for all citizens including vulnerable groups, the poor, and young population from infants to teenagers. To this end, implement public food service to low-income groups in the city. In addition, conduct the food service to young out-of-school population from infants to teenagers including teenage immigrants and expand it to kindergarteners and students of elementary and junior high schools. Make sure that no citizen suffers from social poverty or starvation.

Indicator 4-2. Number of Suwon citizens benefiting from public food service

Target 4-3. Increasing income of local farmers and food producers

Increase income of local farmers and producers of processed food. To achieve the target, expand direct markets and stores for locally produced agricultural products. Also promote the use of the smart label among local farmers and food products. Support local SMEs through local food processing and distribution while promoting consumption of

eco-friendly agricultural products and food. Lastly, actively support locally produced agricultural products to find new markets.

Indicator 4-3-1. Average income of farming households in Suwon

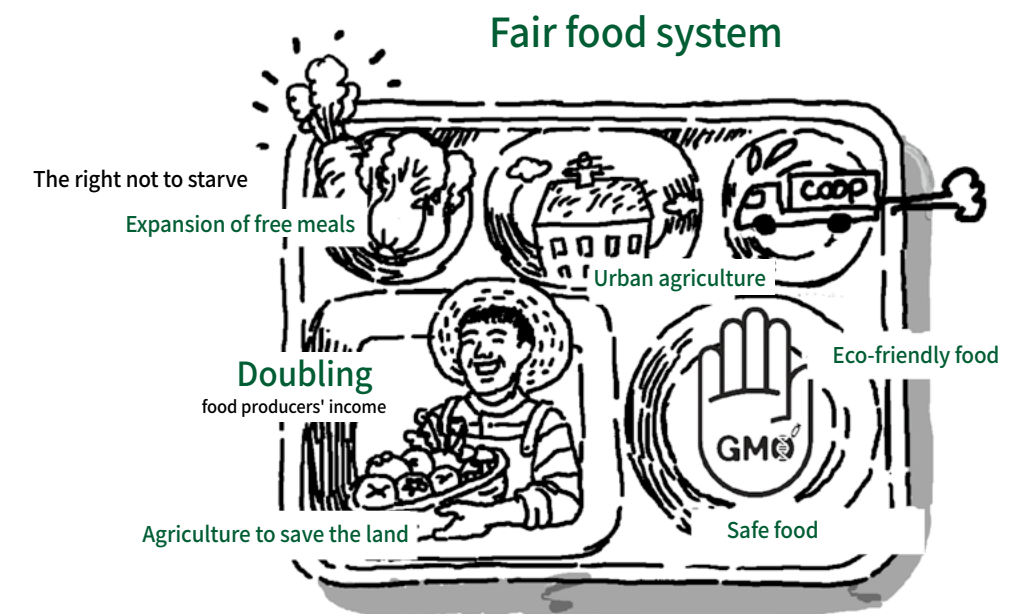
4-3-2. Number and annual turnover of direct local food markets and stores in Suwon

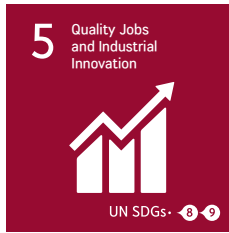
Target 4-4. Education on food for citizens and promotion of healthy eating culture

The sustainable local food system requires citizens' healthy eating and consumption habits. Healthy food consumption saves the earth with positive impact on land and food production while helping set principles on food distribution range and food circulation. Therefore, it is necessary to implement programs to provide education on healthy eating and the system to promote citizens' nutritional status. At the same time, well-functioning food inspection system, which covers the whole process from production to consumption should be guaranteed to provide safe food, free of radioactivity, chemicals, and GMOs.

Indicator 4-4-1. Number of participants in education on food

4-4-2. Amount of Suwon city's budget for inspection of food safety





Goal 5

Quality Jobs and Industrial Innovation

Target 5-1. Creating quality jobs

By 2030, increase the employment rate to 70% and reduce the proportion of temporary workers and day laborers to 15% compared to the end of 2016.

Indicator 5-1-1. Employment rate in Suwon (by different groups such as female, youth aged from 15 to 29, the middle-aged from 45 to 60, the elderly and people with disabilities)

5-1-2. Proportion of regular workers out of total wage workers

Target 5-2. Improvement of wages and working conditions

By 2030, increase wage levels of temporary workers to 80% and those of day laborers to 70% of regular workers based on the principle of "equal pay for equal work." In addition, reduce working hours to 32 hours per week and cut the number of deaths from industrial accidents per 10,000 population to 0.1.

Indicator 5-2-1. Weekly and annual working hours of wage workers in Suwon (by gender and by types of employment contract: permanent, temporary and daily)

5-2-2. Average income of wage workers in Suwon by gender and by types of employment contract: permanent, temporary and daily)

5-2-3. Number of deaths from industrial accidents per 10,000 population in Suwon

Target 5-3. A good city to start a business

Create a sound system and infrastructure for all entrepreneurs, in particular young people. Provide a variety of supports for start-ups, and create an environment where start-ups could bounce back after a business failure.

Indicator 5-3-1. Number of businesses that started with Suwon City's support

5-3-2. Survival rate of start-ups that went through business incubation centers in Suwon

5-3-3. Amount of the city's financial support for SMEs

Target 5-4. Building a complete ecosystem for the social economy

Reorganize the framework of governance to build a complete ecosystem for the social economy regarding funding, system, budgeting, and support for intermediary. Make sure that the social economy serves as a catalyst for creation of local jobs, social contribution, social innovation, and the overall circulation of the local economy.

Indicator 5-4-1. Number of (preliminary) social enterprises and cooperatives registered in Suwon

5-4-2. Number of employees in the social economy of Suwon

5-4-3. Implementation rate of the Suwon's Basic Plan on Social Economy

5-4-4. Employment rate of vulnerable groups in the social economy of Suwon

Target 5-5. Boosting the growth of small and medium enterprises

Build local infrastructure and a system to support SMEs' innovation and to increase their survival rate. Expand benefits for SMEs in the public procurement market of Suwon and increase the amount of budget allocated for nurturing talents in industries.

Indicator 5-5-1. Number of SMEs in Suwon

5-5-2. Rate of increase in the budget of organizations related to support for SMEs in Suwon

5-5-3. Rate of items purchased from SMEs in Suwon's public procurement market

Target 5-6. Establishing social infrastructure for industrial innovation in Suwon

To turn Suwon into a leading sustainable city and help industries utilize eco-friendly technology, Suwon is intended to systemically support industries through policy, system and financing, focusing on urban infrastructure, science research and industrial innovation. In relation to infrastructure required for industries, the right physical, institutional and economic conditions should be in place. For examples, more parking facilities and convenient public transportation facilitate the commute to industrial parks and other work places.

Indicator 5-6. The amount of the Suwon city government's annual financial support for industrial infrastructure and research on technology development

Weekly working hours

32 hours



A good city to start a business





Goal 6

Sustainable consumption and production

Target 6-1. Promoting the purchase of green products

By 2030, double the purchased amount of eco-friendly green products compared to the 2016 level in Suwon's public procurement market. In addition, steadily increase the purchased amount of such products every year, to cover all items used by administrative agencies such as paper, electronics, office supplies, etc.

Indicator 6-1. Rate of (eco-friendly) green products purchases in Suwon

Target 6-2. Supporting companies with green certification

Institutionalize supports and benefits to foster certified companies such as green companies and environment friendly producers at the local government level.

Indicator 6-2. Number of companies with green certification

Target 6-3. Responsible consumption and waster reduction

By 2030, set higher goals for waste reduction and recycling with changes in lifestyles of businesses and consumers and efforts of producers. (In case of EU, it committed to a 50% reduction by 2020 and a 70% reduction by 2030)

Indicator 6-3. Total waste generation and recycling rate of Suwon

Target 6-4. Activating green markets

By 2030, increase green market to more than triple (compared to the 2014 level)

Indicator 6-4. Number of flea markets and green markets in Suwon that contribute to resource circulation

Target 6-5. Promoting awareness of resource circulation

By 2030, promote education on sustainable consumption and production through schools, media, public institutions, and intermediary organizations.

Indicator 6-5. Number of eco tours and education opportunities on resource circulation

Target 6-6. Sustainable tourism

By 2030, establish action plans for building and discovering tourism infrastructure that affects sustainable tourism and maintain the governance for cultural tourism to contribute to promotion of local jobs and preservation of local culture.

Indicator 6-6. Amount of budget for supporting sustainable tourism and fair travel

Target 6-7. Social economy with priority given to social values

When purchasing, give priority to products and services from the social economy. Make sure that the bidding process in the public procurement market is conducted based on criteria that meet social values rather than lower prices. By 2030, increase the share of goods and services with social values in Suwon's procurement market every year.

Indicator 6-7. The amount of purchases from the social economy in Suwon's public procurement market

**Green technology
Green industry**

Using eco-friendly green products

Eco-friendly technology and industry, supported by Suwon

Recyclable waste

Reduce waste and promote recycling

Green Market

Promoting flea markets

Fair travel

Creating local jobs
Development of local culture
Environmental protection





Goal 7

Promoting happiness through welfare, health and education

Target 7-1. Promoting the level of citizens' happiness

Develop Suwon Citizens Happiness Index that indicates the quality of life based on indicators such as life expectancy, health, environment, housing, and employment, regularly conduct assessments and publish the outcomes.

Indicator 7-1. Suwon Citizens Happiness Index

Target 7-2. Guaranteeing the minimum living standards and poverty reduction

Resolve all poverty issues by guaranteeing the minimum living standards of Suwon citizens. Support low-income groups to help them stand on their own feet. Especially with special attention paid to elderly citizens of Suwon, help them enjoy a healthy and financially stable life to create a city, free of elderly poverty.

Indicator 7-2-1. Rate of implemented plans for guaranteeing the minimum living standards

7-2-2. Rate of population in poverty (relative poverty rate)

7-2-3. Rate of elderly population and elderly poverty

7-2-4. Default rate on public health insurance premiums caused by financial difficulties

7-2-5. Rate of recipients of the National Basic Livelihood Security System with regard to decile distribution ratio

Target 7-3. Promoting health services and preventive care

Promote physical and mental health services for the low-income and vulnerable groups as well as young women, children, people with disabilities and the elderly and strengthen preventive health care.



Healthy city

Indicator 7-3-1. Rate of visitors to medical institutions

7-3-2. Physical activity level of patients with severe abnormalities

7-3-3. Self-reported health status

7-3-4. Number of public sports facilities per 10,000 residents

7-3-5. Rate of people receiving general health checkups

7-3-6. Suicide mortality rate

Target 7-4. Application of universal design

By 2030, enter the stage of the full-scale application of universal design to create a city where the elderly, people with disabilities, children and women are happy and, in particular, promote designs that guarantee and strengthen the mobility rights of people with disabilities.

Indicator 7-4. Suwon City Universal Design Index

Target 7-5. Improving the quality of universal mandatory education

By 2030, provide diverse educational programs and policies to improve the quality of universal mandatory education. Along with local community partners, create a variety of educational programs and alternative educational institutions for out-of-school teenagers to be educated.

Indicator 7-5-1. Number of cases where the number of students per class exceeds the standard in primary and secondary schools in Suwon

7-5-2. Number of cognitive tests provided for students' parents

7-5-3. Number of out-of-school teenagers in Suwon

7-5-4. Amount of Suwon city's budget for the support of out-of-school teenagers

Target 7-6. Promoting education for democratic citizenship and lifelong education

By 2030, incorporate curricula on human rights and democratic citizenship into programs of public education institutions and lifelong learning courses. Ensure educational programs, budget, spaces and institutions for lifelong education on a variety of topics such as social culture, physical education, humanities, and democratic citizenship.

Indicator 7-6-1. Democracy Index of Schools in Suwon by the Gyeonggi Provincial Office of Education

7-6-2. Amount of annual budget for lifetime education

7-6-3. Number of Suwon citizens participating in lifelong education programs

Target 7-7. Diversify, promote, and enhance access to libraries

By 2030, promote diversification of libraries and their programs, makes it easier for Suwon citizens' to access cultural and educational resources by increasing their accessibility to libraries and increase infrastructure and budget to achieve the target.

Indicator 7-7-1. Amount of budget for libraries in Suwon

7-7-2. Trends in budget for supporting small libraries



Goal 8

Gender equality and multicultural society

Target 8-1. Improving quality of education on gender equality

Conduct quantitative and qualitative assessment of gender equality education in Suwon every year and, based on the results, enhance quality of the education. In particular, strengthen education on gender equality and human rights for adolescents.

Indicator 8-1-1. Amount of budget for education on gender equality and human rights

8-1-2. Rate of public institutions that conducted education on gender equality

8-1-3. Number of gender equality education opportunities provided for teenagers

Target 8-2. Building governance for gender equality

Build governance for gender equality such as organizing and supporting a gender equality monitoring team and promoting gender equality for the elderly, people with disabilities, children, and migrants.

Indicator 8-2-1. Number of monitoring activities for gender equality

8-2-2. Percentage of women in chairman or vice-chair positions in various administrative committees in Suwon

8-2-3. Gender ratio of grade-5 or higher-level public officials in Suwon

Target 8-3. Ending sexual violence

Publish reports on cases of sexual violence, domestic violence, victims of sex trafficking and human rights cases, identify required improvements and incorporate them into policy.

Indicator 8-3-1. Number of counseling sessions provided for victims of domestic violence, sexual violence, dating violence, and sexual harassment at work

8-3-2. Amount of budget for victims of sexual violence

Target 8-4. Guaranteeing minimum living standards for foreign residents in Suwon

Establish a minimum social security system to help foreign residents in Suwon to meet their basic needs (regarding safety, housing, education and medical care) and provide help in case of emergencies

Indicator 8-4-1. Amount of Suwon city's budget allocated for the administrative team in charge of promotion of multiculturalism

Target 8-5. Improving Suwon citizens' awareness for multiculturalism

Create an inclusive social atmosphere for improving Suwon citizens' acceptance and awareness of multiculturalism

Indicator 8-5-1. Number of participants in educational programs provided by primary and secondary schools in Suwon to improve awareness for multiculturalism

8-5-2. Number of participants in educational programs provided by public institutions in Suwon to improve awareness for multiculturalism



Creating a safe city free of sexual violence and discrimination through

gender equality education



To help foreign residents to be treated like citizens
Provide education on multiculturalism

Multicultural society



Goal 9

Sustainable City and Culture for All

Target 9-1. Managing the city based on capacity of urban environment and helping citizens enjoy basic services

To be a sustainable and resilient city for all, ensure the adequate level of quality of life to be incorporated into the urban management with regard to various factors such as appropriate population, population density, population size, air quality, cheap and accessible transportation, quality of ecological environment and per capita green area. Conduct assessments on urban environment capacity for plans that guarantee the adequate quality of life for citizens. In addition, help every citizen to enjoy basic services through urban management.

Indicator 9-1-1. Population density in Suwon

9-1-2. Rate of population decline by *dong* (administrative unit)

9-1-3. Rate of decrease in the number of companies by *dong* (administrative unit)

9-1-4. Degree of aging of buildings in Suwon

9-1-5. Per capita park area of Suwon

Target 9-2. Guaranteeing citizens' right to housing and expanding public rental housing

To ensure citizens' right to housing, establish Suwon's own policies on public rental housing and guarantee citizens' right to living conditions. In particular, increase the supply of public housing for one-person and two-person households considering the restoration of the original city center and various locations.

Indicator 9-2-1. Proportion of public rental housing out of the total number of houses in Suwon

9-2-2. Proportion of public rental housing out of annual supply of housing in Suwon

Target 9-3. Mitigating the burden of housing expenses and promoting social housing

Especially, the young generation and the newlyweds are pressed by increasing rental fees, and such problem is undermining the overall happiness levels of Suwon citizens. Under the circumstance, Suwon is dedicated to strengthening welfare policies for provision of social housing such as youth rental housing, youth dormitory and rental housing for low income households, possibly through housing cooperatives, and the city aims to steadily alleviate the housing cost burden by 2030.

Indicator 9-3-1. Ratio of housing rental fees to income of Suwon citizens

9-3-2. Proportion of tenant households out of the total households

Target 9-4. Ensuring citizens' access to cultural resources through sustainable cultural policy

For local culture to thrive, it requires commitment and support of both the local government and citizens. Suwon aims to implement sustainable cultural policy by launching and operating the Culture and Arts Committee, which would be a public-private governance body and pursue consistent and sustainable policy to ensure citizens' access to cultural resources.

Indicator 9-4-1. Cultural budget: Amounts of total and sectoral budget (proportion of cultural budget out of the total local government budget)

9-4-2. Number of cases of supporting artists and cultural groups and the total amount

9-4-3. Number of cultural infrastructure per 100,000 people

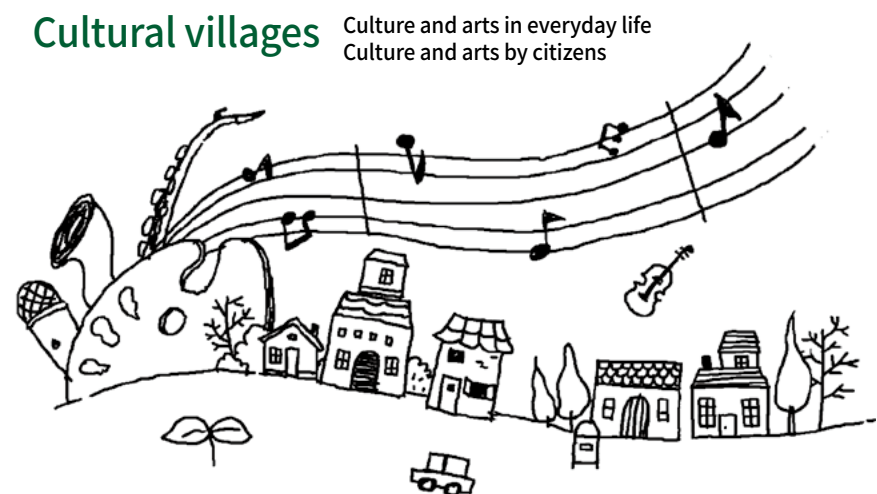
Target 9-5. Cultural enjoyment and revitalization of citizen culture

For the democratization of culture and the realization of cultural democracy, it is necessary to further promote cultural enjoyment of citizens and help them be actively engaged in cultural and arts activities as consumers and producers of culture.

Indicator 9-5-1. Number of cultural and arts exhibitions

9-5-2. Number of visitors to cultural facilities (number of open days and visitors of representative arts halls and exhibition halls)

9-5-3. Number of cultural and arts clubs and the number of their members





Goal 10

Justice, Peace and Harmony through Self-governance

Target 10-1. Strengthening self-governance capacity by *dong* (administrative unit)

Establish yearly plans for the organization and activities of residents' associations, assign them with more responsibilities and increase the budget to strengthen self-governance.

Indicator 10-1. Number of participants in educational programs on capacity building for self-governance of residents' associations by *dong*

Target 10-2. Ensuring access to administrative information

Ensure citizens' access to the information produced and received by the administration. The minutes of various committee meetings of Suwon City will be made public to improve transparency and accountability of operation.

Indicator 10-2-1. Rate of the full textual disclosure of documents produced and received by the administration (proportion of fully disclosed documents out of the total)

10-2-2. Number of cases of textual disclosure of the minutes of Suwon City's committee meetings

Target 10-3. Inclusive governance for all

Promote participatory democracy through citizens' participation in governance. Residents participating in budget planning or village projects or forming a team of citizen policy planners would be examples. Engage minorities and the weak in various governance bodies and committees to create a decision-making system that reflects diversity.

Indicator 10-3-1. Percentage of cases of consulting with stakeholders at the planning stage of official plans, major basic plans and key projects

- 10-3-2. Percentage of the yearly amount of the budget allocated by reflecting citizens' participation
- 10-3-3. Number of adopted policies proposed by civic governance organization (by category and sector)
- 10-3-4. Participation rate of women, people with disabilities, the elderly, and teenagers in civic governance organization
- 10-3-5. Citizen's satisfaction with public service
- 10-3-6. Suwon municipal government's credibility for policy decision making

Target 10-4. Ensuring transparency and integrity of public officials

Ensure transparency and integrity of Suwon's administration and strive to be a city without any corruption of public officials and companies providing bribery while media and civil society playing a vital role of monitoring corruption.

Indicator 10-4-1. Number of corruption cases involving public officials a year

10-4-2. Public Officials' Integrity Index of Suwon

Target 10-5. Build a safe city for everyone

Create a peaceful and safe city where every citizen believes that they are always safe, even at night. To this end, reduce all forms of violence and mortality from violence, promote the rule of law, and ensure equal access to the judicial system for all

Indicator 10-5-1. Number of violent crimes in Suwon

10-5-2. Number of crime-related deaths per 100,000 people

Target 10-6. Promoting administration, businesses, citizens' awareness of human rights and democratic citizenship

Promote Suwon city's administration, businesses, citizens' awareness of human rights and democratic citizenship.

Indicator 10-6-1. Number of education opportunities on human rights for citizens and public officials

10-6-2. Amount of Suwon city's budget for education on democratic citizenship

Citizens
= Key administrative ac-
tors

Villages with self-governance and citizens' participation



Suwon SDGs Action Report

in line with UN 2030 Agenda for Sustainable Development

The Implementation of the UN Sustainable
Development Goals in Suwon 2020

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