

Toyota City

Voluntary Local Review
2022



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1 Opening Statement

Toward the Realization of a "Smart City that Connects Everyone to the Future"

Toyota City is a world-leading manufacturing city, a green city with forests and rice paddies, and a city of history and culture where the uniqueness of each region shines through. With such diverse faces, Toyota City has always been a city that anticipates the future.

Toyota City's strengths are its world-class automotive industry production base, its rich natural environment and diverse culture, and its communities and residents who actively work together to address local issues. Prolonged, the COVID-19 pandemic infections have severely restricted daily life and business activities, resulting in a dramatic paradigm shift in civic life and the industrial sector. Even under these circumstances, Toyota City still strives to realize a sustainable and resilient city by leveraging its strengths and responding flexibly to anticipated changes.



We celebrated the 70th anniversary of our municipal organization in 2021 and promised to continue to build our hometown based on the philosophy of "WE LOVE TOYOTA," mobilizing the power of our citizens and carefully utilizing the rich resources we have inherited from our predecessors. "WE LOVE TOYOTA" indicates that the citizens of Toyota should rediscover the attractiveness of Toyota City. While doing so, we will seek to deepen ties and trust with one another,

act lovingly toward our hometown with civic pride, pass on a city full of attractions to the next generation, and operate with the belief that people and communities are connected by kindness, respect and diverse experiences at the forefront. This philosophy of "WE LOVE TOYOTA" has been widely accepted by the citizens as a fundamental part of the city government. We will continue to promote the development of a sustainable city full of vitality and attractiveness through municipal management that further strengthens civic, regional, corporate, and administrative capabilities.

The implementation of the Voluntary Local Review (VLR), will be a major step for Toyota City to go to the next stage. Through the VLR process, Toyota City has learned to continuously evaluate and monitor, objectively understand its current status, and apply it to future city growth strategies. Our efforts that have focused on public awareness and stakeholder networking are now shifting to concrete actions for sustainable community development.

We would like to thank the United Nations Centre for Regional Development (UNCRD) for its continued leadership in the development of the SDG monitoring and evaluation tools for local governments and for its generous support in our publishing of the VLR report. Toward 2030, Toyota City will further accelerate its contribution to achieving the 2030 Agenda and the SDGs and continue to develop into a sustainable city with diverse stakeholders.

June 2022

豊田市長 太田 総彦

Toshihiko Ota

Mayor of the City of Toyota

2 Message from Director of the United Nations Centre for Regional Development (UNCRD)

On behalf of the United Nations Centre for Regional Development (UNCRD), of the UN Department of Economic and Social Affairs (UN DESA), I would like to congratulate the City of Toyota for issuing the VLR. In 2019, governments and other stakeholders were called upon to take a "Decade of Action" until 2030, the target year of the Sustainable Development Goals (SDGs). In addition, governments and other stakeholders were called upon to take "SDG Acceleration Actions" in 2019. This VLR is the culmination of Toyota City's SDG efforts, to date, and will open the door to the next stage.



In each region of Japan, activities contributing to the achievement of the SDGs are becoming more prominent. Localizing the SDGs is now an indispensable perspective for local governments. In parallel with the increase in the number of diverse and unique SDG initiatives around the world, there is a rapidly growing need for frameworks and mechanisms to follow up, monitor and review the progress of initiatives to achieve the goals in each region. In this respect, VLR is very important as a process to promote SDG management in a more systematic and effective manner.

UN DESA supports local governments around the world by providing the "Global Guiding Elements for Voluntary Local Reviews (VLRs) of SDG implementation" and a series of

workshops on VLRs. The website of UN DESA lists examples of VLRs implemented in 76 cities and regions around the world as of December 2021. In 2020, UNCRD, in partnership with local governments and companies that are willing to work on the SDGs, started to develop monitoring and evaluation tools for promoting the SDGs by local governments. The tools are useful for understanding the progress of the SDGs in local governments and for disseminating information.

The relationship between Toyota City and UNCRD has been ongoing since before the adoption of the SDGs at the UN Summit in September 2015. We have jointly conducted various projects including co-organizing SDGs related international events and developing the abovementioned monitoring and evaluation tools. The Mayor of Toyota City has continuously encouraged and facilitated those projects. We are confident that Toyota City's VLR is a proof of the effectiveness of the SDG monitoring and evaluation tools. We strongly encourage many other municipalities to take advantage of our tools and begin the VLR process. We also certainly believe that it will be very helpful to municipalities in developing countries that are currently working on VLR, or are about to do so. Local driving forces are crucial to achieving the SDGs.

We hope that Toyota City will continue to lead the efforts to achieve the SDGs in Japan.



Kazushige Endo
Director
United Nations Centre for
Regional Development (UNCRD)

3 *Foreword

The Role of Regions and VLRs toward Achieving the SDGs

The Sustainable Development Goals (SDGs) are the global goals for 2030, set in the 2030 Agenda for Sustainable Development (2030 Agenda), adopted at the UN Sustainable Development Summit in September 2015, as the successor to the Millennium Development Goals (MDGs) formulated in 2001. The SDGs consist of 17 goals and 169 targets to achieve a sustainable and better world, and pledge to ensure that "no one will be left behind." The SDGs are universal, not only for developing countries but also for developed countries, and all stakeholders, including businesses, communities and citizens, must work together to achieve them.

In adopting the 2030 agenda, UN member states have committed to work closely with local governments in implementing the SDGs. Therefore, in response to calls from the international community and national governments, cities and regions worldwide are actively localizing the 2030 Agenda, encouraging local governments to educate people about the SDGs, and moving toward concrete planning and actions.

One of the initiatives that are currently being implemented by local governments in the world is VLRs. They are based on the framework of the Voluntary National Reviews (VNRs), which is a periodic review presented at the ministerial meetings of the UN High Level Political Forum (HLPF). The VNRs are positioned at the center of the process at the HLPF for countries to share their experiences in implementing the SDGs, and confirm and promote progress. The VNRs review the efforts of national governments from five main perspectives: (a) institutional mechanisms; (b) incorporation of the SDGs into national frameworks; (c) mainstreaming the principles of the 2030 Agenda; (d) creating ownership of the SDGs; and (e) an overview of priority issues related to the SDGs and good practices. In Japan, the review was conducted at the HLPF in 2017 and 2021.

As Director of UNCRD has already mentioned in his message, UN DESA supports local governments by providing the "Global Guiding Elements for Voluntary Local Reviews (VLRs), of SDG Implementation" and organizing a series of workshops on the VLRs. In a workshop on the theme of "Monitoring, Data and Indicators" conducted in January, 2021, UNCRD gave a presentation titled: "Monitoring and Evaluation Tools for SDG Local Actions in Chubu, Japan". The United Cities and Local Governments (UCLG) and UN-HABITAT have published the first volume of "Guidelines for Voluntary Local Reviews" in 2020, conducting a comparative study on the contents of VLRs in cities around the world. In the report, while there are some challenges

to be addressed to make VLRs more desirable at this stage, including the collection and organization of data and indicators, it is hoped that a VLR will not only be a report for progress management, but will also be a powerful tool for political dialogue, citizen participation, and policy implementation. It also shows the VLRs' potential for sharing various case studies and knowledge, through the involvement of a broader range of cities and regions.

With an accurate grasp of these global trends, Toyota City embarks on VLR implementation and explores how we can contribute to the 2030 Agenda and what strategic policies should be implemented for its continued development into a sustainable city by 2030.

*This chapter is based on quotes from the "Handbook for SDG Monitoring by Local Governments" by the UNCRD Research Group on SDG Monitoring for Local Governments.

4 Highlights

Under the slogan of "Achieving Tomorrow's Standards" Toyota City is taking on the challenge of realizing an "SDGs Future City Toyota" where everyone can enjoy life in a spiritually rich way. The "Tomorrow's Standards" that Toyota City is aiming for refers to things that will be taken for granted in the future, when we will be approaching a sustainable society. Its future-oriented concept is truly a back-casting idea. Toyota City is promoting advanced efforts to realize this goal.

Toyota City has received various designations from the Japanese government, including "Eco-Model City" and "SDGs Future City," and has promoted advanced environmental and energy-related initiatives with the cooperation of government financial support and deregulation. Our goal is to create a comfortable, low-carbon lifestyle that is easy, comfortable and without waste.

And since the adoption of the 2030 Agenda, Toyota City's efforts have clearly taken the SDGs into account, and the philosophy of sustainable urban development has become part of the foundation of the city's policy. Toyota City's vision for the future is "Connect and achieve a fun city to live in, Toyota". We aim to create a society in which every citizen can enjoy their lives by deepening connections between people, people and regions, people and nature, and by creating diverse values and possibilities while recognizing and making the most of one another's efforts.

Another characteristic of Toyota City is that, all the stakeholders, including the citizens, private companies and other organizations, are connecting and cooperating with one another to take concrete actions toward achieving the SDGs.

(1) Three Major Platforms for Promoting the SDGs

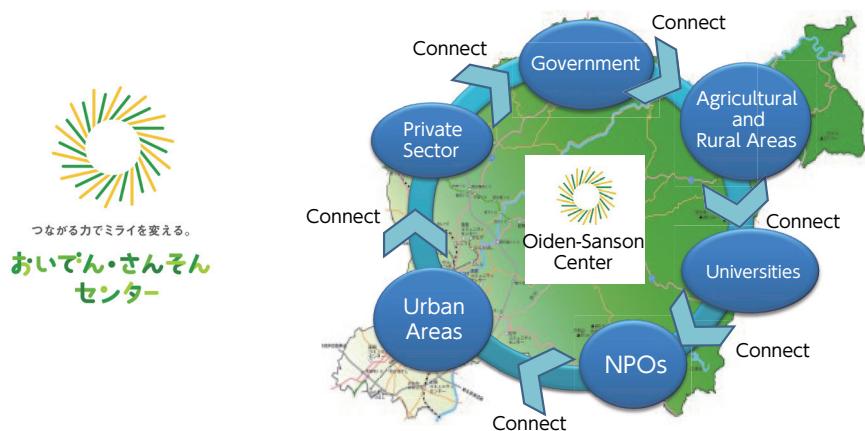
The Toyota SDGs Partners play the most important role in promoting the SDGs in Toyota City. This is an original registration system for companies, organizations, etc. that aim to solve local issues and spread awareness of the SDGs through initiatives and activities in cooperation with Toyota city government toward achieving the SDGs at the local level. As of April, 2022, 417 organizations have registered on this platform, which was launched in 2019. This platform has led to the enhancement of the value of the initiatives of registered companies and organizations by taking advantage of their meaningful partnerships and participating in events, seminars, and work organized by Toyota City.



Toyota City, famous for the location of the headquarters of Toyota Motor Corporation, is also a city with rich nature, covering 70% of the city area with forests. Toyota City has established two other platforms to maximize these local resources of the city and mountain villages.

Toyota City Connected Society Verification Promotion Council, which operates mainly in urban areas, is a platform for citizens, private companies, financial institutions, universities, and government agencies to collaborate with each other to promote the demonstration and implementation of new technologies and social systems. We propose various solutions to regional issues such as local production for local consumption of resources and energy, coping with a super-aging society, and promoting traffic safety, utilizing advanced technologies such as AI and IoT.

The *Oiden-Sanson* Center, based in a rural area, is a platform for coordinating exchanges between the urban and mountain villages, connecting people to people and communities to businesses and civic activities. “*Oiden-Sanson*” means “come one and all to the mountain village area” in Japanese. This platform supports the creation of diverse lifestyles, businesses, and new regional attractions by matching urban companies with rural communities and supporting migration to depopulated areas.



Case 1: National Convention for Food Loss Reduction in Toyota

Related Goals:



Toyota City organized a nationwide event in October 2021 to consider the reduction of food wastage from the perspective of the SDGs. We held a quiz rally related to the issue, created several monster characters, and devised other ways to raise awareness for

the reduction of food wastage, especially among kids. In addition, a unique competition combining picking up trash and sports (Spo-GOMI), in which teams compete by picking up trash in the central city area, was held, contributing to the excitement at our national convention. 26 Toyota SDGs partners participated in this competition and collected 108 kg of trash. These events were planned and managed by the Toyota SDGs Partners, who endorsed the call of the Toyota City administration.

Case 2: C+walk T

Related Goals:



As the home town of a robust automotive industry, Toyota City has been leading the way in mobility initiatives. The Toyota city government is constantly taking on the challenge of introducing new EVs. The "C+walk T," which can move as smoothly as walking, is a compact, three-wheeled, next-generation EV developed by Toyota Motor Corporation. Toyota City is the first municipality to introduce this mobility system. As an initiative of the Toyota City



Connected Society Verification Promotion Council, we have conducted a series of demonstrations since 2018 at public facilities and medical institutions in the city, toward the practical application of new mobility options in the walking domain, and the effectiveness of the system was verified, leading to its introduction.

Case 3: Tsuku-rasserusu

Related Goals:



The former Tsukuba Elementary School, located in the mountain area of Toyota City, which was closed in 2012 due to the declining birthrate, was re-launched in 2018 as “Tsuku-rasserusu”; a human resource creation center for community development. The concept of “Tsuku-rasserusu” is “to gather, work, and create,” and its meaning derives from the honorific expression of the Japanese verb “to create” (*tsukuru*). There are rental offices, co-working spaces, shared offices, open meeting rooms, and a café, and the grounds are equipped with a mallet golf course and a multi-purpose plaza. Since FY2020, it has become a popular place for approximately 3,000 people yearly. For local residents, this place provides more lifestyle options.



(2) Collaboration with UNCRD

The United Nations Centre for Regional Development (UNCRD) is the only UN organization with UN headquarter functions located in the central area of Japan. Since its establishment in 1971, UNCRD has contributed to regional development and capacity building through training programmes for bureaucrats in developing country governments. In addition, since UNCRD belongs to the Division for Sustainable Development Goals (DSDG) of the United Nations Department of Economic and Social Affairs (UN DESA), it has played a central role in promoting the SDGs in Japan since 2015.

Toyota City has collaborated with UNCRD through hosting UNCRD trainees and co-organizing international events aimed at raising awareness of the SDGs. One of the most significant impacts was the hosting of an international conference: "The High-Level Symposium on Sustainable Cities: Connecting People, Environment and Technology" in January, 2015, co-organized with UN DESA, and the "Toyota Declaration" adopted at that time contributed as an important input to the 2030 agenda and the SDGs. Since then, we have convened two more international events with UNCRD, in 2019 and 2021. These achievements have been an opportunity to showcase Toyota City's efforts to the world, as well as to make significant progress in achieving the SDGs at the local level.

Case 4: "Think SDGs 2021" International Conference in Toyota



Toyota City, in collaboration with UNCRD, convened an international conference titled: "Think SDGs 2021" in March, 2021. Although the event was held entirely online, considering the spread of the COVID-19 infection, the event was a success with over 3,500 participants from all 47 prefectures in Japan and 20 countries from around the world. Stakeholders from different industries were connected through this event, which gave birth to new ideas and initiatives.

"Think SDGs 2021" International Conference in Toyota

Smart and Sustainable Communities with COVID-19

5 Introduction

(1) Background



ミライのフツーをつくろう



未来都市とよた

Toyota City was selected as an "Eco-Model City" by the Japanese government in 2009. In Japan, cities that aim, through advanced initiatives, to realize a low-carbon society by significantly reducing greenhouse gas emissions, a cause of global warming, are selected by the Cabinet Office as "Eco-Model City." Currently, 23 cities throughout Japan have been selected.

Since its selection as an "Eco-Model City," Toyota City has formulated the "Hybrid City Toyota Plan" and has promoted various initiatives in the five areas of "transportation," "industry," "forests,"

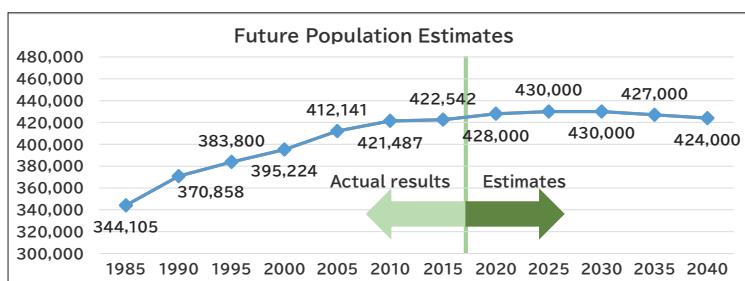
"urban centers," and "consumer affairs," aiming to become an environmentally advanced city that integrates people, environment, and technology.

Toyota City has been selected by the Cabinet Office of the Japanese government as an "SDGs Future City," one of the municipalities that are leading the way in efforts to achieve the SDGs, and is focusing on the three areas of "energy," "mobility" and "wellness." As of 2022, 124 cities nationwide have been selected as "SDGs Future Cities."

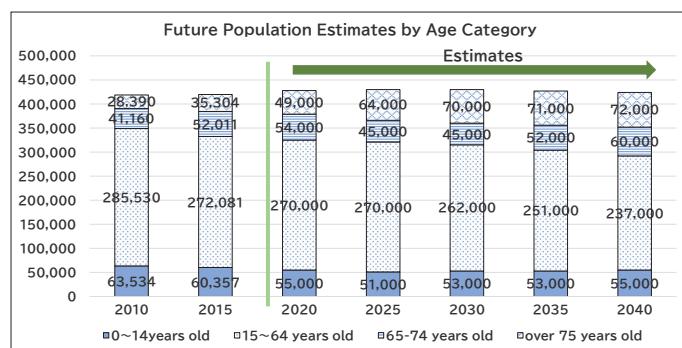
As a starting point of this selection, the city has taken a new step toward becoming an even more sustainable city. Since then, the city has been further focusing its efforts on spreading awareness about the SDGs and working with private sectors and citizen groups, to solve local issues to realize sustainable city development.

(2) Population Frame

According to the results of the National Census, conducted in 2015, released by the Statistics Bureau of the Japanese government's Ministry of Internal Affairs and

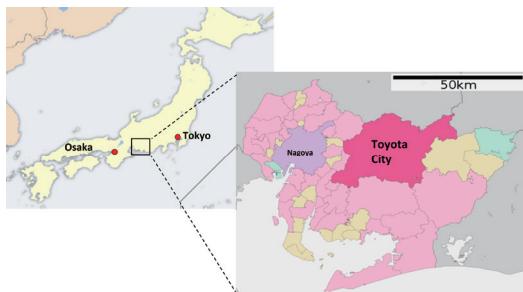


Communications, Toyota City has a total population of 422,542, a slight increase from the previous survey. The population is expected to continue to increase for some time in the future, reaching 430,000 by 2030, after which, it is expected to peak and begin to decline.



In addition, the population of the elderly, people aged 75 and over, is expected to increase sharply from about 35,000 in 2015 to about 70,000 by 2030, accounting for about one in six of the total population.

(3) Features of the City of Toyota



Although Toyota City is generally regarded as a "Motor Town," it is also blessed with many sightseeing resources, and visitors can enjoy a variety of beautiful natural sceneries throughout the four seasons. This means that Toyota City has two faces: "the face of a city" and "the face of a rural village." Forests cover 70% of the city area, which is the same ratio as the land area of Japan. Therefore, we truly call our city "A microcosm of Japan."

(3-a) A City that has Developed as a Hub for the Global Automotive Industry

Throughout the West-Mikawa region, centered on Toyota City, there is a concentration of production bases for the automotive industry, centering on Toyota Motor Corporation and its group of companies, which are world-renowned for the "TOYOTA" brand. In addition, Toyota City has developed into a global center for the automotive industry, with many automotive-

related research projects and demonstrations being conducted in the city. This industrial concentration has attracted an influx of young job-seekers from all over Japan to Toyota City, resulting in a younger age structure than in other cities. In addition, a high percentage of the population is employed by companies related to the automotive industry, and this culture has permeated the lives of the citizens and the community.

(3-b) A City with Rich Nature, and a Diverse History and Culture

Toyota City has developed through a series of municipal mergers. As a result, diverse regions coexist within the city's vast area.

While Toyota City is one of the world's leading manufacturing bases, particularly in the automotive industry, it is also one of the largest agricultural producers in the prefecture, and has a variety of natural, historical, and cultural resources, including abundant forests and water sources. The city also has a wide range of public facilities for culture and sports, and has hosted world-class events such as fixture of the Rugby World Cup 2019™.



(3-c) A City of 400,000 Citizens with Diverse and Well-rounded Bearers

In Toyota City, there are over 300 self-governing communities where residents take the initiative in carrying out a variety of community activities, and approximately 80% of all households are members of these communities. Various community activities are being carried out based on the community ties that have been cultivated over the years. In particular, although the population is declining in the rural regions, there are several activities, and new initiatives have begun along with an increase in the number of *I-turn and U-turn residents.

Since 2005, an advanced regional autonomy system has been developed to promote intra-city autonomy, and public-private partnerships are being promoted to create communities with rich individuality. In addition, various organizations such as corporations, health insurance unions, labor unions, and consumer cooperatives are actively engaged in social contribution activities. Other factors include the presence of civic groups, students from universities and technical colleges, and foreign citizens, all of which contribute to the city's diverse human resources.

*An I-turn resident refers to a person born and raised in an urban area, who goes to a rural area to work or change jobs. On the other hand, a U-turn resident refers to a person born and raised in a rural area, finding a job and working in the city, and then resettling in the rural area where he or she was born.

6 Methodology and Process for Preparation of the Review

(1) Circumstances Leading to the VLR

Toyota City has participated in the UNCRD Research Group on SDG Monitoring for Local Governments since its inception in May, 2020, contributing to the development of the tools on SDG evaluation and monitoring at the local level. Discussions were held among the research group members on the establishment of indicators and their relationship to each goal, and local governments, private companies, and UNCRD shared their experiences and knowledge. Through this process, we have come to recognize the importance of the review to be applied to future growth strategies for local governments.

The research group then published the "Handbook for SDG Monitoring by Local Governments" in May, 2021, successfully advocating a specific SDG achievement and governance assessment methodology.

Toyota City's VLR is the first one conducted using the methodology developed by this research group based on the "Handbook for SDG Monitoring by Local Governments." Our methodology is objective and valid, so we strongly recommend it to other local governments.

In implementing our VLR, we referred to the "Global Guiding Elements for Voluntary Local Reviews (VLRs) of SDG implementation" by UN DESA. The structure and content of this report include all of its topics in their entirety.

Toyota City believes the VLR is an extremely effective tool for localizing the SDGs and tracking their progress globally. We also believe that the sharing of learning and experiences among countries and cities, will serve as a way to promote their own initiatives internationally, and to facilitate learning among municipalities. This will ultimately lead to progress toward achieving the 2030 Agenda.

(2) Introduction of Monitoring Methods

This monitoring method is divided into two main parts. The first is the "SDG Achievement Evaluation", which can be monitored by means of localized outcome indicators, narrowed down to 56 or 49 indicators, depending on the size of the municipality, for targets in the 2030 Agenda that can be addressed at the local level and for which numerical values are available from open data. With its numerical basis, the results of the evaluation can be expressed as 0 to 100 percent achievement for each goal, allowing the municipality to understand the status of its own SDG achievement and the strengths and weaknesses of the region.

The second is a review using governance indicators from the perspective of building a system to promote the SDGs in the municipality. To achieve the SDGs at the local level, it is not enough for the government alone to take action, and it is also important to build a system that involves the private sector and the citizens. In addition, the output of a project depends

on the initiative of the government, the organizational structure within the government, and the institutional, financial, technical, and other environmental arrangements that support the promotion of the project. The SDG governance indicators enable us to organize these elements as indicators and grasp the current status.

In addition to these two aspects, comprehensive monitoring is now possible by managing the progress of project outputs to be included in the comprehensive plan and the SDGs Future City Plan, and by rolling out the plans.

For detailed methodologies, please refer to Part A and Part B of the "Handbook for SDG Monitoring by Local Governments" published mainly by UNCRD.

"Handbook for SDG Monitoring by Local Governments" and related information on projects available:

<https://www.uncrd.or.jp/index.php?page=view&type=13&nr=1212&menu=327>

<https://sdgs.un.org/events/uncrd-50th-anniversary-commemorative-symposium>

7 Policy and Enabling Environment

(1) Engagement with the National Government on SDG Implementation

Toyota City was selected as one of the SDGs Future Cities which were taking the lead in efforts to achieve the SDGs by the Cabinet Office of the Japanese government in 2018. In accordance with this framework, Toyota City developed an SDGs Future City Plan and has been implementing measures to achieve the SDGs in accordance with the plan. The cities selected as SDGs Future Cities, are required to report their progress to the Japanese government annually, in addition to the development of their SDGs Future City Plan. Toyota City also reports to the Japanese government on its efforts and progress every year. The reports serve as a mechanism for the Japanese government to manage the progress and encourage local governments in Japan to work on the 2030 Agenda and the SDGs.

The Japanese government has also established a Public-Private Partnership Platform to Promote the SDGs, and Toyota City is a member of this platform. As of the end of April, 2022, the platform has 6,450 member organizations, including more than 1,000 municipalities nationwide, that are playing an important role in promoting the SDGs in Japan.

(2) Creating Ownership of the Sustainable Development Goals and the VLRs

(2-a) Future Experience and Information Hub on the SDGs: Toyota Ecoful Town

In 2012, the public facility, "Toyota Ecoful Town", was opened as a base for disseminating information on the efforts to realize a low-carbon society in Toyota City, as an Eco-Model City,



and in 2019, on the occasion of the selection as an SDGs Future City, it was renovated as a facility where children and adults can learn about and gain experience on the SDGs, not only in the environmental field but also as a center for advanced technologies. In the 10 years since its opening, approximately 330,000 people from 119 countries and regions have visited the facility.

Case 5: Toyota Ecoful Town

Related Goals:



The pavilion includes "Touch the Earth," to experience real-time Earth and global social issues; "Toyota Mapping Vision," to introduce Toyota City's environmental efforts, history and culture; "SDGs BOX," to introduce examples of Toyota City's efforts as an SDGs Future City; "Toyota Time Trip," through which visitors can take a peek into the future at Toyota City using tablets and AR technology; and "Project Zone," which is available for holding exhibitions and seminars related to demonstration experiments of advanced technologies. Meanwhile, the outdoor area showcases next-generation smart houses and hydrogen stations.

There are many free contents to enjoy, in terms of the future of access and mobility, such as the MIRAI fuel cell vehicle, the C+Pod electric vehicle, and electric mobility test rides. Concierge-guided tours, available both in-person and virtual, are also offered.



(2-b) Disseminating Information on our SDG Initiatives

Various projects that contribute to the implementation of the 2030 Agenda in Toyota City are compiled into our "Concept Book" and "Toyota SDGs Good Practices," which are published as free booklets to disseminate information widely. In addition, several other booklets, such as

brochures introducing Ecoful Town's facilities, have been published. Most of the booklets are available in both Japanese and English, making them accessible to people all over the world. Those booklets are introduced on the official website of Toyota City.



Concept Book:

https://www.city.toyota.aichi.jp/_res/projects/default_project/_page_/001/025/483/202108/01.pdf



Toyota SDGs Good Practices:

https://www.city.toyota.aichi.jp/_res/projects/default_project/_page_/001/025/483/202108/02.pdf

(2-c) Engagement with Stakeholders in Conducting the VLR

A meaningful VLR in Toyota City cannot be realized without the "Toyota SDGs Partners", who are our good understanding co-practitioners of SDGs promotion in Toyota City. Therefore, in the course of explaining the VLR and holding workshops, the opportunity to hear the opinions of diverse stakeholders was one of the important steps in the VLR process. Recently, at the workshops held in April 2022, we were able to establish an understanding of the VLR, among our SDGs Partners, and obtain input from a cumulative total of 178 organizations. In this process, the Toyota City government, especially the Advanced City Promotion Division, which is in charge of SDG promotion, has always taken the initiative.

(3) Incorporation of the Sustainable Development Goals in Local and Regional Frameworks

(3-a) Relevance with the Toyota City Comprehensive Plan

The Toyota City Comprehensive Plan is the most fundamental plan for us to clarify the direction of the city's future urban development goals and to promote efforts toward their realization in cooperation with the citizens. Currently, the Toyota City 8th Comprehensive Plan is in progress. This plan covers the period from FY2017 to FY2024, with the future city vision of "Connect and achieve a fun city to live in, Toyota." The plan also consists of two elements: a "basic concept," that looks ahead to the year 2040, and a "implementation plan" that outlines measures to realize this concept. In order to realize the plan, it outlines a financial path for the duration of the plan, as well as the approach to evaluation and progress management of the measures employed. In promoting the plan, in addition to the spirit of "learning together" and

"WE LOVE TOYOTA," the concept of SDGs Future City was also emphasized. The Toyota City Comprehensive Plan shares the same back casting approach as the SDGs, in that, it sets a long-term goal of what the city aims to become, looks back at the present from that starting point, and sets goals to be realized in the short (in four years) or medium term (in eight years).

The principles of the SDGs are clearly stated in the "Background" section of the comprehensive plan. It introduces the icon for each of the 17 goals and explains each goal so that citizens can read and understand the SDGs, even if they have had no prior knowledge of them. In addition, the page introducing each measure, incorporates the SDGs by linking the measure to the goal, using the relevant icons to show which specific goal each measure contributes toward achieving.

In addition, the departmental plans developed or revised after 2017, incorporated the principles of the SDGs and linked each measure to the relevant goals. The Advanced City Promotion Division has strongly been recommending this approach to all the departments in the Toyota City government.

(3-b) Integrated and Specific Approach to the Economy, Society and Environment

None of the 17 goals of the 2030 Agenda can be isolated and treated as an individual target to be achieved. A sustainable world will be achieved only by linking and integrating each of the goals to one another. The foundation of sustainable development is a rich natural environment. We should thank the bountiful nature of the earth that our society, our economy, and our lives are so enriched.

Toyota City is taking an integrated approach to the three aspects of economy, society, and environment, based on the belief that a rich natural environment supports both society and the economy.

Economy We have further upgraded production and research functions, as a future industrial base, by encouraging investment in promising growth areas and further strengthening research and development functions, as well as inducing and attracting start-ups from outside the city. In addition, we are promoting the discovery of livable rural areas, as well as the migration and settlement of people to these areas.

Society With the issue of the rapidly aging population, we are aware that the number of people certified as requiring support and care has been increasing and is expected to further increase. Therefore, it is necessary to further strengthen efforts related to healthcare promotion, healthcare need prevention, and the prevention of frailty. In addition, as the number of elderly people possessing diverse ideas and values increases, matching them to civic activities and

employment that meet their needs should also be promoted.

Furthermore, in the achievement of the SDGs, community-based education for children, and new community development in rural villages, through the creation of a relevant population, a platform that connects diverse players helps to efficiently resolve regional issues.

Environment Understanding the crisis of global warming, the citizens and businesses work together to reduce carbon dioxide emissions, and practice environmentally conscious actions such as climate change adaptation measures, in order to realize a decarbonized society. In addition, we ensure the absorption of carbon dioxide by forests by keeping them healthy, and effectively use the abundant forest resources in the region.



Case 6: Asahi Burger *Gibier* (game venison burger)



Asahi Burger *Gibier* is a product born out of a comprehensive learning experience at Asahi junior high school, in the mid-mountain region of Toyota City. The students learned about the damage being caused by the animals in their community and the fact that game killed there are disposed of instead of being used. The project has become a role model for reducing food waste in an environmentally friendly way, by transforming one of the problems of rural areas and converting animal meat to game dishes.



(4) Leaving No One Behind

The pledge to "leave no one behind" is the most important and powerful stance of the 2030 Agenda. Toyota City has always been providing administrative services in the spirit of equality to citizens who are generally perceived as vulnerable groups, regardless of age, gender, disability, race, economic or other statuses. In addition, the city has effective mechanisms to ensure that the views of all its citizens are reflected in the city government policy. For example, the E-Monitor System allows anyone who registers to express their opinions directly to the Toyota City administration. In other instances, when major policy decisions are made by the Toyota City administration, such as the comprehensive plan and other sectoral plans, it is a normal process to receive public comments. These comments are also made available to all of the citizens, including the vulnerable groups.

Other support for the adoption of a universal design and communication is also available. Sign language is required to be employed at city hall's reception counters and at large scale events. This is guaranteed by Toyota City's own communication ordinance.

In this VLR, the most important premise of "leaving no one behind" is included in the setting of indicators for both the SDG achievement evaluation and the governance evaluation. In other words, we can confirm Toyota City's attitude toward "leaving no one behind," from both the governance perspective of building a promotion system, and the outcome perspective of directly indicating the degree of achievement of the SDGs.

(5) Structural Issues

This section reports on the social and environmental changes that Toyota City is experiencing in implementing the 2030 Agenda that are having a significant impact on achieving the SDGs, as well as the structural issues and barriers that the city faces.

(5-a) Evolving toward a Super-Aged Society

It is feared that a rapid increase in the number of elderly people will lead to an insufficient supply of medical and nursing care services, increased social security costs, the transformation of suburban estates into old towns, and depopulation and the weakening of village functions in rural areas.

(5-b) A Major Shift in Industrial Structure

In the automotive industry, which is a key industry in Toyota City, the traditional industrial structure and business models may change, and shift significantly due to the shrinking domestic market and intensifying international competition. This is caused by the declining birthrate, aging population, and young people's shift away from automobiles, as well as the development

of CASE, which includes electric vehicles, and MaaS, a new concept of mobility, where fierce competition in development is unfolding due to a succession of entrants from different industries.

(5-c) Large-Scale Natural Disasters and Climate Change

Japan is frequently hit by huge earthquakes. In particular, Toyota City has been designated as a Nankai Trough Earthquake Disaster Prevention Promotion Area, where significant damage could occur if a Nankai Trough earthquake were to occur. As climate change progresses, the risk of extreme temperatures and heavy rainfall, is projected to further increase, requiring both adaptation measures, such as disaster prevention and mitigation measures, including curbing carbon dioxide emissions.

(5-d) Increasingly Severe Financial Situation

Even if the economy and the exchange rate remain stable and strong due to impacts of the Japanese government's tax reforms, that made a portion of the corporate citizens' tax a national tax, and the termination of the special merger exception for local allocation tax, a permanent decrease in revenue is inevitable, and expenditures, maintenance and repair costs for aging public buildings and infrastructure and social security costs are expected to increase.

(5-e) Impact of the COVID-19 Pandemic

The COVID-19 pandemic has undone decades of development efforts, and it is said to have set back prospects for achieving the SDGs everywhere. As the new coronavirus infection raged around the world, it also had a devastating impact in Japan. The first Japanese case was confirmed in January, 2020, followed by the rapid spread of the disease from March onward and the declaration of a state of emergency under the Law Concerning Special Measures against New Strains of Influenza and Others, among other measures, resulted in the loss of lives daily. The situation also severely restricted daily life and socioeconomic activities.

The impact on the economy was particularly noticeable. In Toyota City, not only the manufacturing industry, which is vulnerable to the impact of overseas economies, but the service industry also, which was affected by the economic downturn caused by the spread of the infectious disease, experienced a significant decline.

In order to escape this crisis, Toyota City launched new measures for the corona disaster earlier than any other municipality, and in May, 2020, the "Achieving Tomorrow's Standards Project" was launched, combining the SDGs and a new lifestyle.

Case 7: Social Impact Bond (*SIB)

Related Goals:



The spread of the COVID-19 has restricted the activities of the elderly and increased the risks associated to long-term care. The impacts of long-term care are as follows.

Long-term impacts:

- Increased problems in the home, such as caregivers leaving the workforce and increased pressure on family finances
- Shortage of resources, such as caregivers and care facilities
- The amount of Long-Term Care Benefit Expenses (LTCBEs) will increase as the number of service users increase.

The impact of the COVID-19 pandemic has resulted in a worsening economic situation that has led to a decline in tax revenues for local governments. This has made it difficult to budget for new projects.

By utilizing the SIB mechanism, which enables efficient and wise spending by making payments to the private sector as pay-for-performance, Toyota City is able to extend healthy life expectancy and reduce social losses such as nursing care, thereby reducing the burden on the elderly. We aim to maintain good health and good governance.



*SIB: Innovative social-issue-solving projects utilizing private sector funds, with the aim of using the project results and the efficiency portion of social costs as the source of payment. SIBs, in which the initial investment is financed by private funds and the project is implemented on a pay-for-performance basis, are particularly effective when the government designs the project as a multi-year venture and undertakes preventive projects that require a substantial initial investment.

Case 8: T+CAGO

Related Goals:



This on-demand delivery service demonstration experiment, using ultra-compact BEVs, is the first step in the "SDGs x New Lifestyles: Achieving Tomorrow's Standards Project" to address delivery needs, which are among the problems reported by citizens. The project was launched in May, 2020, and it aims to promote a new lifestyle during the corona disaster. It is being used by many people for both lunch and dinner deliveries during circumstances that discourage excessive outings.

Participating restaurants have also expressed their appreciation for this delivery service, as it accounts for more than 10% of their total sales.

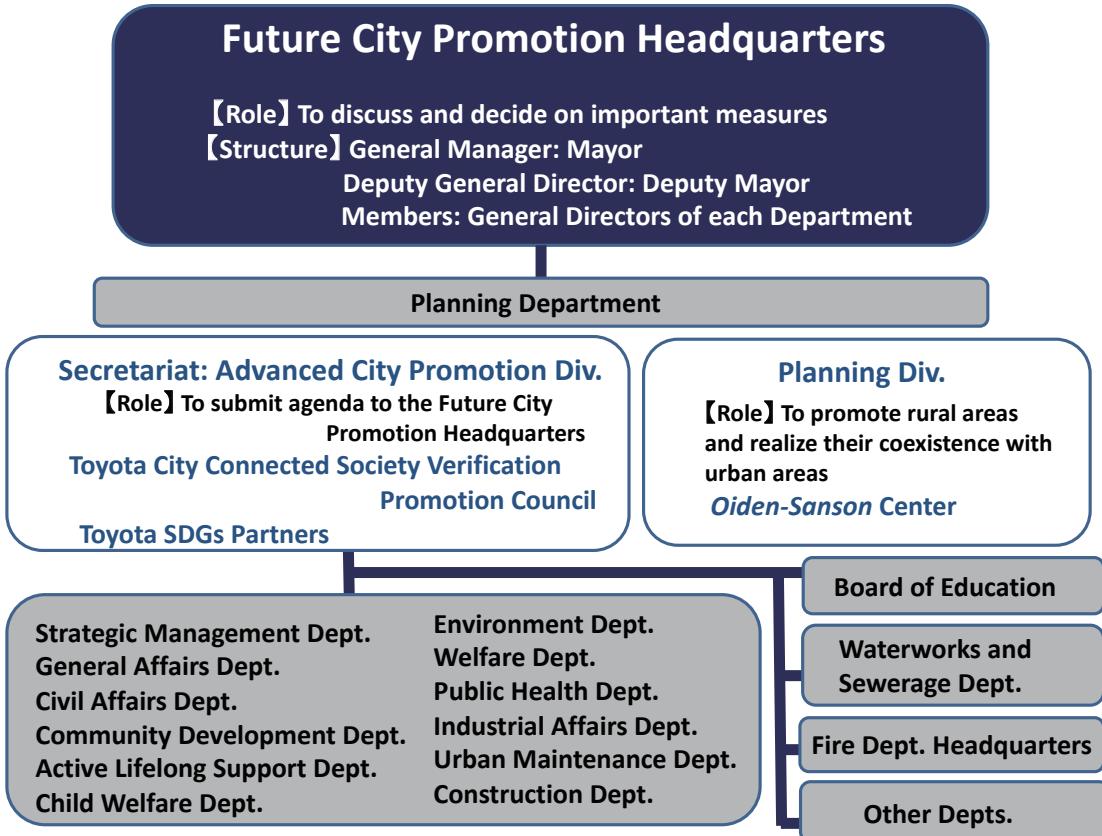


8 Means of Implementation

(1) Institutional Mechanisms

Toyota City has established the Future City Promotion Headquarters within its administration in order to vigorously implement its contribution to the 2030 Agenda. The headquarters is headed by the Mayor of Toyota City, with the Deputy Mayor as its deputy director, and the General Directors of each department are its members. Matters discussed and decided here are immediately disseminated to all departments within the Toyota City government. The Advanced City Promotion Division, which is responsible for the overall control of the SDGs, serves as the secretariat, and when necessary, working groups are set up with the involvement of related departments to discuss issues.

This executive structure in Toyota City also ensures complete, comprehensive, and meaningful citizen participation. In other words, this promotion headquarters is centered on three partner platforms: the Toyota SDGs Partners, the Toyota City Connected Society Verification Promotion Council, and the *Oiden-Sanson* Center. We are promoting efforts to achieve the SDGs with stakeholders at all levels involved in these goals.



Toyota City also focuses on networking with surrounding municipalities and the private sector. The Central Japan SDGs Platform is an organization that provides support for efforts to achieve the SDGs, and was jointly established by four organizations: the United Nations Centre for Regional Development (UNCRD), the Regional Centre of Expertise on Education for Sustainable Development (RCE Chubu), Japanese Association of the Club of Rome, and Chubu SDGs Promotion Center, organizations directly connected to the world regarding the SDGs. We participate in training sessions and seminars organized by this platform, and actively utilize networking among members, including local governments and companies, to share information, which is utilized for collaboration and activities around the central region of Japan.

(2) Strategic Measures

Adapting to a Super-Aging Society ... Society

Ideally, everyone should be able to live safely, healthily, and in their own way in their own neighborhoods, regardless of age, physical condition, or family environment, while maintaining social relations.

This means a city where people can live a full life span of happiness.

- **Promotion of lifelong activity**
- **Strengthening the community comprehensive support system to ensure a safe and secure life**

Investment in a future where people thrive ... Economy

As a center of industry for the next generation, Toyota City is a hub for active business activities and progressive initiatives, and a center for the development of the next generation. As the town of choice for the child-rearing generation, we will create a state that generates vitality for the community toward the future.

- **Strengthening the functions of the industrial base**
- **Creating a town where people want to continue to live**

Strengthening the ability to solve local issues ... Society + Economy

Diverse actors such as people to people, people to community, and companies to the city government, etc., connect and support each other while leveraging their respective strengths effectively to solve various community issues.

- **Creation of affluent lifestyles through diverse "Connections"**
- **Sustainable regional management**

(3) *Management Status of Initiative Promotion: Governance Evaluation

This section provides an objective assessment of the creation of a system to promote the SDGs in Toyota City.

The results of this evaluation are also treated as a case study in Part B of the "Handbook for SDG Monitoring by Local Governments."

Toyota City, which has been selected as one of the “SDGs Future Cities” since 2018, is building a city-wide system to promote the SDGs, in accordance with the SDGs Future City Plan formulated in the same year and is strengthening its efforts.

SDG governance evaluation results in Toyota City (2019)

	Sub-category	Indicators	Numerical Values	Breakdown/Change	Source/Note
Institutional Mechanisms	Leadership of Mayor	Number of mayor's mention of the SDGs in her/his statements	4 times	Policy speech: 1 Press conference: 3/10	City website: information on city administration
	Responsible departments and personnel	Existence of an SDG department and number of personnel	2 persons		SDGs Future City Plan
	Collaboration between industry, government, academia and citizens	Number of platforms and consortia for collaboration on the SDGs	6 platforms/consortia		SDGs Future City Plan
	Level of interest of city councilors	Number of parliamentary questions regarding the SDGs	11 questions	14 (2018) 7 (2017) 4 (2016)	City council meeting minutes
Goal Setting	Policy and plans regarding the SDGs	Existence of basic policies / plans and number of goals to be addressed	10 Goals		SDGs Future City Plan
	Positioning of the SDGs in existing plans	Reflection of SDGs in comprehensive city plan	Yes		Comprehensive Plan
	Setting numerical targets related to SDGs	Number of numerical targets which correspond to each SDG goal	24 indicators SDGs Future City Plan	222 indicators Comprehensive Plan	SDGs Future City Plan
	“No one will be left behind”	Number of parliamentary questions regarding policy measures for vulnerable groups	1,534 questions	1,458 (2018) 1,205 (2017) 1,242 (2016)	City council meeting minutes
Monitoring	Data Collection for the SDGs indicators	Number of open data provided	101~500		CIO Portal: questionnaire on open data initiatives in Mar 2019
	Participation in external accreditation	Number of participation in external accreditation	1	only for SDGs City Plan	Japan Accreditation Board
	Dissemination of information to citizens	Number of seminars held for citizens and participants	2 seminars with 1000 participants	4 seminars with 506 participants (2018)	City website: city documents
	Dissemination of information domestically and internationally	Number of press releases on the SDGs	5 press releases		City website: press releases
Partnership	Citizens' understanding and penetration	Citizens' awareness proposition of the SDGs	45.5%	surveyed in Jan 2020	Citizens' survey results on awareness
	Corporate partnership	Number of corporate partnerships for the SDGs	126 partnerships		SDGs Future City Plan and city website
	Partnerships with universities and activity groups	Number of activity groups/ organizations collaborating on SDGs	45 groups/organizations		SDGs Future City Plan and city website
	International partnership	Number of international organizations, institutions, sister cities collaborating on the SDGs	9 organizations/sister cities	5 organizations 4 sister cities	SDGs Future City Plan and city website

The mayor's leadership is strong in the building of “Institutional Mechanisms,” and he has been extremely enthusiastic, even mentioning the SDGs in his policy speech in 2019 and in three out of ten press conferences. The SDGs have also been mentioned in his policy address in 2021, demonstrating his continued leadership. The Advanced City Promotion Division of the Planning Department is in charge of coordinating and promoting the initiatives of the entire government. In terms of collaboration between industry, government, academia and the private sector, consortiums of Toyota SDGs Partners, the Toyota City Connected Society Verification Promotion Council and the *Oiden-Sanson* Center are utilized to promote the three priority

fields of “energy,” “mobility” and “wellness.” The institutional mechanisms are now in place to promote collaboration between the private sector and the public sector. The number of parliamentary questions on the SDGs also shows a growing interest, with 11 questions in 2019.

In terms of “Goal Setting,” the SDGs Future City Plan (2018-2020), includes Goals 5, 8 and 9 for the economy, Goals 3, 11 and 17 for the society and Goals 7, 12, 13 and 15 for the environment. In 2021, the SDGs are clearly positioned as a prerequisite for the basic concept in the latter-half implementation plan of the Toyota City 8th Comprehensive Plan. In terms of setting numerical targets, 24 KPIs, including duplicated ones, have been set for progress management in the SDGs Future City Plan (2018-2020).

For “Monitoring” initiatives, we are progressively releasing data that can be made publicly available, as the “Toyota City Open Data Catalogue.” Although not necessarily active in participating in external certification and evaluation, it has been active in disseminating information on the SDGs to citizens, with a total of 1,000 seminar participants as of 2018, as well as five press releases.

Regarding the “Partnership,” citizens' awareness proposition of the SDGs was 44.9%, nearly half of the total, according to the results of a survey conducted at the end of 2020. As for partnership with the private sector, the Toyota SDGs Partners initiative was established ahead of other municipalities, with the increasing number of member organizations from 126, at the end of 2019, to 380 by the end of 2022, and concrete initiatives have also been created by them. A wide range of partnerships with universities and activity groups have also been approved, including partnerships with 45 organizations, including municipalities and universities. Nine international partnerships have also been recognized. In March, 2021, the "Think SDGs 2021" International Conference was organized on-line by Toyota City government, where a wide range of discussions were held on Toyota's SDG priority areas of energy, mobility and wellness, together with international organizations, various cities and regions around the world, companies and associations.

Toyota City has been actively promoting initiatives as an “Eco-Model City” even before the city was selected as one of “SDGs Future Cities”. As of 2022, Toyota City has reached the stage where concrete initiatives are being promoted on these foundations, and the foundations for “Monitoring” are also being laid through international initiatives.

*This section is based on quotes from the "Handbook for SDG Monitoring by Local Governments" by the UNCRD Research Group on SDG Monitoring for Local Governments."

9 Progress on Goals and Targets

(1) Future Vision: What Toyota City should look like in 2030

The following is a universal vision shared by citizens and the government, based on the perspectives of citizens, regions, and the city.

Citizens → A secure and personal life in connection with society

-We aim to realize a society in which every citizen is able to exercise his or her individuality and abilities while recognizing and learning from one another in the context of diverse connections, and in which the ability to support one another is fully utilized.

Community → An attractive, diverse, and unique region

-We aim to realize communities with rich individuality where community development that takes advantage of regional characteristics is proactively undertaken and diverse lifestyles are made possible.

City → A vibrant city that anticipates the future

-We aim to realize a city that creates new values and communicates them to the world by making the most of the manufacturing and diverse local resources cultivated by the automobile industry.

(2) Priority Goals and Targets, and Managing Progress of Actions

Working toward the ideal state of Toyota City in 2030, we are incorporating SDG perspectives into each of our policies, while aiming for an organic linkage among policies, i.e., a city where a virtuous circle is sustained through collaboration among the private, industrial, financial, and administrative sectors, using advanced technology, and we are working together to solve regional issues in Toyota City.

Toyota City has established "Energy," "Mobility," and "Wellness" as priority areas from its own perspective, and is further accelerating the achievement of the SDGs, by promoting urban development that connects diverse entities across sectors, which is one of Toyota City's strengths.

The KPIs and target year (2030), figures for each project, are excerpted from the Toyota City 8th Comprehensive Plan.

(2-a) Energy: Convert to a more comfortable low-carbon lifestyle without strain and waste

In November, 2019, we announced our Zero Carbon City goal of virtually zero CO₂ emissions in 2050. Leveraging our pioneering knowledge as an Eco-Model City, we are further accelerating our efforts to date, promoting renewable energy and energy conservation in

cooperation with private companies and citizens, and taking the initiative in introducing new technologies that will help curb CO₂ emissions.

Goal and target number	KPI ※ Target year values are those of FY2024 in the Toyota City 8 th Comprehensive Plan	
 7, 2 Percentage increase in renewable energy	Indicator: Total renewable energy generation capacity (city installed and involved)	
	FY2019: 104,333kW	FY2024: 117,000kW
	Indicator: Total number of smart houses supported (as of the end of the fiscal year)	
	FY2019: 689 cases	FY2024: 965 cases
	Indicator: Next-generation vehicle penetration rate in the city	
	FY2019: 26.6%	FY2024: 47%
 12, 3 Waste reduction and reuse	Indicator: Promotion of weight reduction and resource recycling; Amount of resources contained in combustible waste per citizen	
	FY2019: 135g / day	FY2024: 131g / day
	Indicator: Promoting environmentally conscious behavior; Number of new subscribers to Toyota SDGs Points Members	
	FY2019: N/A	FY2024: More than 500 people each fiscal year
 17, 17 Partnership	Indicator: Number of SDG-related promotion projects	
	FY2019: 5 cases	FY2024 : More than 3 cases each fiscal year

(2-b) Mobility: Freedom for everyone to move to and from anywhere

We are promoting, in cooperation with related organizations, the support of deregulation in order to boost demonstration and the social implementation, and the active use of AI, IoT, and Big Data in Toyota City as a field.

Goal and target number	KPI ※ Target year values are those of FY2024 in the Toyota City 8th Comprehensive Plan	
 3, 6 Traffic fatality	<p>Indicator: Number of fatalities and injuries in traffic accidents in Aichi Prefecture as a whole *Source: Figures released by the Aichi Prefectural Police Headquarters</p>	
	FY2019: 1,637 people	FY2024: Reduction from the previous year
 8, 3 Entrepreneurship and innovation support	<p>Indicator: Open Innovation Promotion Project; Number of initiatives for new business development</p>	
	FY2019: N/A	FY2024: 40 cases
	<p>Indicator: Number of innovators trained (cumulative total)</p>	
	FY2019: N/A	FY2024: 60 people
 9, 4 Resource use, technology and industrial processes	<p>Indicator: Number of demonstration projects related to mobility utilizing advanced technology</p>	
	FY2019: 5 projects	FY2024: More than 4 projects each fiscal year
	<p>Indicator: Number of new demonstration projects by the Toyota City Connected Society Verification Promotion Council</p>	
	FY2019: 10 projects	FY2024: More than 10 projects each fiscal year

(2-c) Wellness: Healthy body and mind, with a sense of fulfillment and satisfaction in life

In order to promote the revitalization of mountain and rural areas by local residents, we connect urban and rural areas, disseminate their attractions, and jointly implement projects that take advantage of local resources and regional characteristics, as well as nurture leaders who can support the region.

In addition, the program not only explores working methods and workplaces, but also provides support for skill development, to help people find new jobs, including in business related projects.

Goal and target number	KPI ※ Target year values are those of FY2024 in the Toyota City 8th Comprehensive Plan	
3, 8 Medical, healthcare	Indicator: Percentage of persons certified as requiring support or nursing care ① 65 years old, ② 70 years old, ③ 75 years old Apr. 2020: ① 1.51%、② 3.62%、③ 7.73%	
5, 5 Women's participation	Indicator: Number of participants in efforts to support women's employment, etc. 2019: 282 people	2024: Decreasing in each certification rate 2024: 500 people
8, 5 Employment, job satisfaction	Indicator: Total number of employment decisions by the Toyota City Career Support Center for Women (cumulative total) Mar. 2020: 420 people	2024: 1,680 people
11, a Urban and rural villages	Indicator: Number of coordinated exchanges between cities and mountain villages (cumulative total) 2019: N/A	2024: 200 cases
	Indicator: Number of new organizations applying for the "Wakuwaku (exciting) project" in rural village areas (cumulative total) 2019: N/A	2024: 60 cases
17, 17 Partnership	Indicator: Number of projects to support demonstrations using advanced technologies in rural villages, etc. (cumulative total) 2019: N/A	2024: 4 cases

Case 9: SAKURA Project

Related Goals:



We are working to promote the appeal of next-generation vehicles not only from an environmental perspective but also from multiple perspectives, by positioning next-generation vehicles with external power supply functions as "Running Generators" and expanding the possibilities of vehicles, including their use as emergency power sources in times of disaster. We have established a partner system to promote next-generation vehicles, and we are collaborating with companies and organizations that support this project from the following three perspectives. We think this will increase the ripple effect of our efforts and spread them from Toyota City to all over the world.

- 1 Increase: To promote the spread of the external power supply function of vehicles
- 2 Connect: To expand production of car models with external power supply functionality and optimal placement in times of disaster
- 3 Use: To provide a place where people can experience and learn how to use the external power supply function



Case 10: *Mikawa-no-Yamazato Community Power Co., Ltd.*

Related Goals:



Mikawa-no-Yamazato Community Power Co., Ltd. started its business in 2019, utilizing the "community power" system to promote various solutions to issues impacting various rural communities. By investing profits from its electricity retail business toward solving local issues, the company contributes to the development of a sustainable community.



The "*Tasukeai* (mutual help) Project" provides health monitoring, mobility support and outing promotion for the elderly. The goal of the project is to deepen parent-child relationships, mutual support among local residents, and to extend a healthy life expectancy to each person in the community as a whole. We are providing services that leave no one behind.

Case 11: Automatic Driving Vehicle

Related Goals:



Through public-private partnership efforts, utilizing the Toyota City Connected Society Verification Promotion Council, Toyota City has been supporting the verification of a driving support technology that contributes to traffic safety and mobility facilitation, rather than just automated driving, i.e., hands-off driving technology. In the future, we will continue to conduct more demonstrations of automated driving technology with a view of realizing more advanced automated driving services, aiming to establish a society in which everyone can move safely and freely.



Case 12: T+CAGO

Related Goals:



*previously referenced

Toyota City is conducting an on-demand delivery demonstration experiment using ultra-compact BEVs. A 5-km radius around Toyota City Station in the city center, is defined as the delivery target area, and a smartphone application is used to centrally manage everything including: store selection, ordering, order receipt, payment, and delivery. The number of registered members has reached more than 4,000. The delivery dispatch management utilizes the know-how of a local cab company to ensure smooth deliveries.



Case 13: Drone Utilization

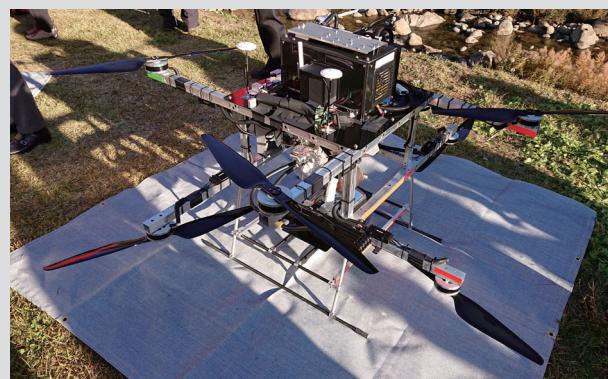
Related Goals:



Toyota City is also focusing on drone technology to contribute to solving administrative issues.

As one of the initiatives of the Toyota City Connected Society Verification Promotion Council, in 2021, a hybrid drone equipped with an external power supply, which has a gasoline engine and a battery, is flown over rural areas in the effort to assess possible disruptions to the road network and power grid due to large-scale disasters.

Japan is currently in the midst of a gradual relaxation of drone-related laws and regulations, and drone technology is expected to see even greater use in the future.



Case 14: “Zutto-Genki (keep staying healthy and energetic) Project” utilizing SIB

Related Goals:



*previously referenced

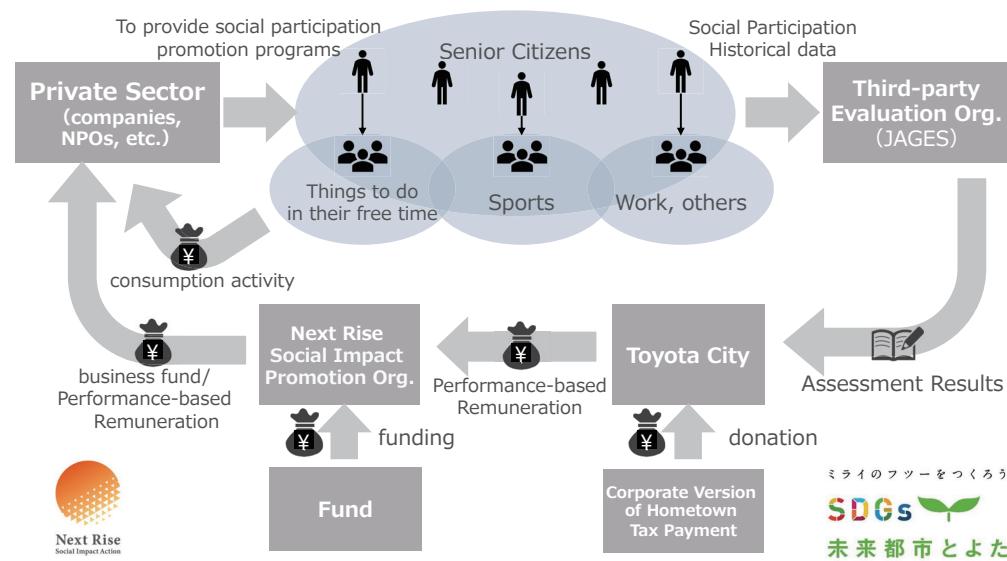
The Japanese baby boom generation, born between 1947 and 1949, who moved to Toyota City in large numbers to take up employment with automobile companies, will reach the age of 75 around 2025, when the risk of long-term care is expected to increase. In addition, the risk of long-term care is further increasing due to the impact of the COVID-19 infections, which is restricting people's outings.

In response, Toyota City is implementing innovative projects to solve social problems through the Social Impact Bond (SIB) mechanism, which leverages private-sector funds.

This project, funded by the expected reduction in future social costs, will reduce the risks associated to long-term care and maintain the health and good governance of the elderly. Specifically, based on the evidence that social participation and mutual communication can reduce the risks linked to long-term care, we provide a variety of ideas from the private sector as helpful services to the elderly. Toyota City achieves efficient and wise spending by paying the private sector on a pay-for-performance basis.

Scheme for the Toyota City Public-Private Partnership for Care Prevention “Zutto-Genki (keep staying healthy and energetic) Project”

Next Rise Social Impact Promotion Organization, commissioned by Toyota City, is promoting this project as a private-sector coordinating organization, utilizing the SIB mechanism.



Case 15: *Satomobi* (home town mobility) LIFE Project

Related Goals:



This project supports the elderly and others going out by themselves by modifying the ultra-compact mobility vehicle "COMS," to specifications suitable for driving in rural villages and using it as a means of daily transportation. This initiative is helping to improve the quality of life (QOL) and extend healthy life expectancy by promoting outings for the elderly, especially in depopulated areas, through the use of ultra-compact mobility vehicles for convenient transportation.



(3) *Evaluating the Achievement of SDG Local Actions

Following the governance assessment described in the previous chapter, in this section, as described in the Introduction of Monitoring Methods section of the Methodology and Process for Preparation of the Review, we are showing the review progress on the achievement of the SDGs using the outcome indicators introduced in the "Handbook for SDG Monitoring by Local Governments".

The results are also treated as case studies in Part A (the second edition) of this guide.

Achievement level for each goal



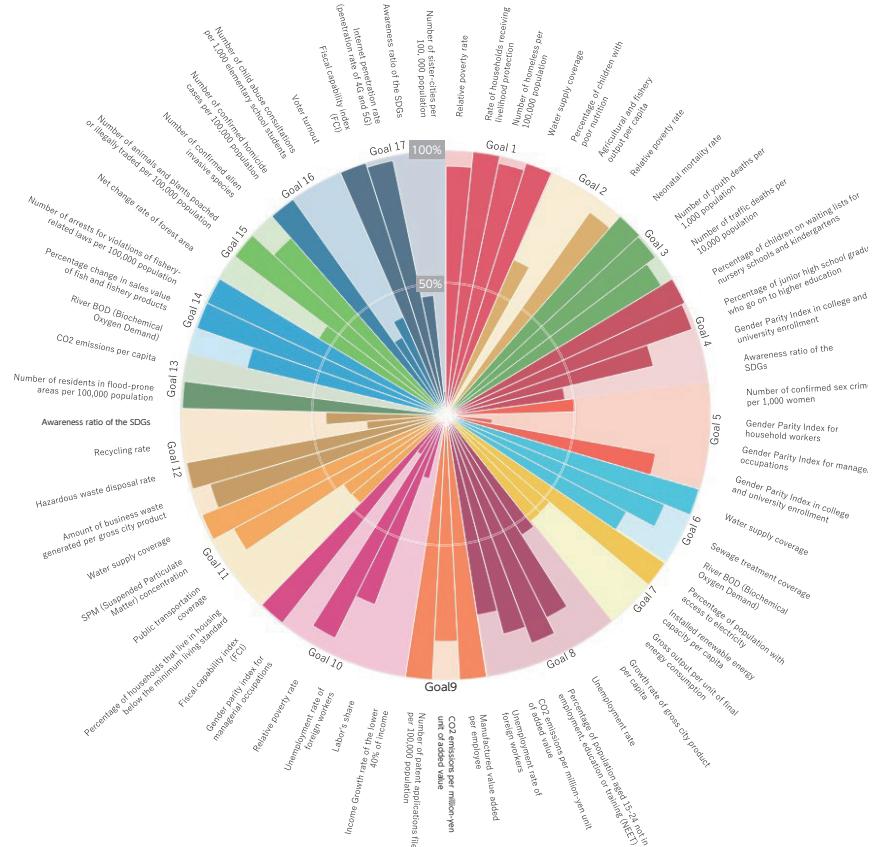
Difference from the national average



Changes since 2015



Achievement level for each indicator



(3-a) Achievement level for each goal

The results of the evaluation for Toyota City, Aichi Prefecture, are shown in the figure on the previous page, Goals 1, 3, 9 and 14, show a high level of achievement of over 90%, but as in the rest of the country, Goal 5 tends to have a low level of achievement.

(3-b) Difference from the national average

Looking at the difference from the national average, Goals 1 and 12 are listed as remarkably higher items than the national average, by more than 20 points. The significant achievement in Goal 1 was due to Toyota City's strong industrial and employment performance, which contributed to the low rate of relative poverty as well as a small proportion of households receiving livelihood protection in comparison with the rest of Japan. The achievement of Goal 12 may be influenced by the fact that hazardous waste is properly disposed of, and that the amount of business waste generated per gross municipal production is small. Furthermore, the city's wide range of rural areas and its active implementation of initiatives to link these areas together, to preserve biodiversity, has contributed to the high level of achievement of Goals 14 and 15.

On the other hand, the achievement on Goals 10 and 13 are lower than the national average. The large proportion of the manufacturing industry for Goal 10 may contribute to the city's lower labor share than the national average. This result is consistent with the high-level of achievement for Goal 1. For Goal 13, the large scale of the manufacturing sector is the significant factor for the high level of CO₂ emissions per capita.

(3-c) Changes since 2015

The data collected from 2015 shows that Goals 7 and 15 have shown a trend of improvement, but there are regressive trends in several goals, partly due to the impact of the COVID-19 pandemic. It is suggested that improvement in these items may be key to increasing the achievement of the SDGs in the future, over all.

*This section is based on quotes from the "Handbook for SDG Monitoring by Local Governments" by the UNCRD Research Group on SDG Monitoring for Local Governments."

10 Conclusion and Next Steps

Through the VLR process, we have described the path Toyota City has taken and the efforts it is currently focusing on, its future goals, and its current objective status, from the perspective of the SDGs, while introducing specific examples. Toyota City will continue to lead the way as an SDGs Future City. For example, a recent initiative by the Japanese government to establish a certification system for companies that contribute to the achievement of the SDGs has become a frequent topic of discussion in Japan. Toyota City has begun working with a private consultant to study the establishment of such a system. If this system works well, we expect that it will create a self-sustaining virtuous cycle of the economy in Toyota City and further accelerate the implementation of the SDGs. The new system under discussion is a further evolution of the current "Toyota SDGs Partner" framework.

It is also necessary to mention the relationship between the comprehensive plan, the most fundamental administrative plan for a local government, and the SDGs. The current Toyota City Comprehensive Plan started in 2017, and the 2030 Agenda was adopted in 2019. Therefore, the principles of the SDGs were not reflected in this comprehensive plan at its inception. However, later, when entering the period of its latter-half implementation plan from 2021, the work of tying each measure to the goals of the SDGs was done, as well as a demonstration of which of the goals each noted action contributes to achieving.

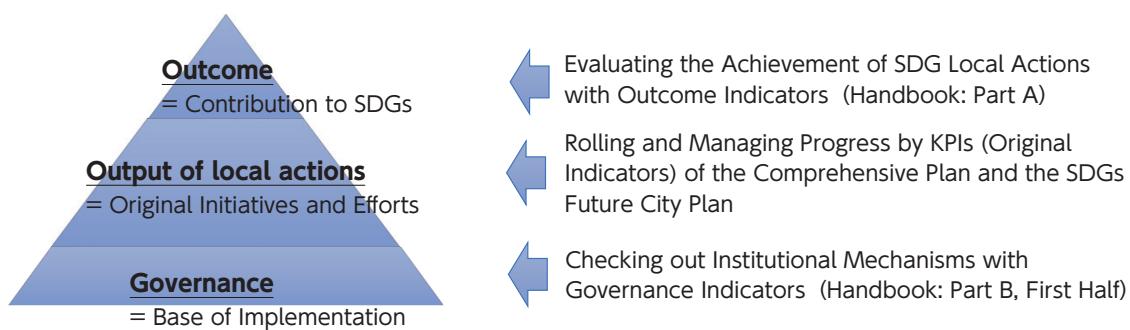
Toyota City will enter the next period of its 9th Comprehensive Plan in fiscal year 2025. As the year 2030 will be reached during that period, the comprehensive plan must be more informed than ever of the respective goals of the 2030 Agenda. It is important that the path Toyota City should take, as indicated in the comprehensive plan, and the trajectory toward achieving the SDGs point in the same direction, and continuous monitoring is a necessary task to confirm that.

The integration of SDG evaluation indicators and KPIs of comprehensive plans is often a subject of discussion. In the Handbook for SDG Monitoring by Local Governments, unified indicators are set for SDG achievement evaluation and governance, but the reality is that, it is difficult to evaluate outputs at the municipal level in a unified manner throughout the country, since each municipality has its own initiatives and KPIs are naturally unique to each municipality. However, the SDGs are not yet fully implemented in Japan. Nonetheless, while it is difficult to completely integrate SDG evaluation indicators and KPIs of comprehensive plans, it is possible to link them. In other words, when setting KPIs, it is possible to incorporate a perspective of how the achievement of each municipality's own KIPs interacts with the degree of contribution to

the SDGs. To sum up, for local governments to effectively implement the SDGs, it is extremely important to have localized municipal-level efforts and the relevance of KPI settings as outputs of those efforts.

We, Toyota City, believe that the implementation of the SDGs at the local level, can be promoted in the following ways. At the center of the implementation are various actions unique to the municipality that contribute to the achievement of the SDGs, and governance is the foundation for this. If the promotion system is not sufficiently built, actions would be poorly implemented. A well-developed governance system is necessary to support the implementation of numerous good practices. On the other hand, there are outcomes, meaning the degree of concrete contribution to the SDGs is proportionate to that of the outputs of the initiatives. By checking, managing progress, and evaluating the status of Toyota City's use of different indicators, in terms of governance, outputs, and outcomes, we are monitoring our SDG management comprehensively. This concept is represented in the diagram below.

Toyota City's Synthesized Monitoring Method of SDG Implementation at the Local Level



The SDGs are strongly linked to urban growth strategies. For a comprehensive plan, the 2030 Agenda is like a roadmap to guide its direction toward a sustainable society. The VLR of the SDGs, which defines what the future should look like and what will be done to achieve each goal, also provides suggestions on how cities can develop their growth strategies. If we promote a holistic and balanced approach to evaluation through comprehensive planning, future city planning, and localized monitoring indicators, our growth strategy will be more powerfully sustainable in the future.

11 Annexes

This chapter introduces the indicators used in the governance evaluation, which expresses the promotion of the institutional mechanisms in local governments, and in the evaluation of the achievement of the SDGs, respectively. Each indicator was set independently in the "Handbook for SDG Monitoring by Local Governments" by the UNCRD Research Group on SDG Monitoring for Local Governments.

The logic and process used to set the indicators are not described in detail here. In addition, the target and normalized values were set to evaluate the obtained values for the assessment of SDG achievement, which are also not described here. For more information on these details, please refer to the handbook.

(1) SDG Governance Indicators

	Sub-category	Indicators	Definition of Indicators
Institutional Mechanisms	Leadership of Mayor	Number of mayor's mention of the SDGs in her/his statements	Number of times the SDGs are mentioned in the mayor/governor's policy statements/addresses, or press conferences
	Responsible departments and personnel	Existence of an SDG department and number of personnel	Existence of a department in charge of the SDGs (number of staff)
	Collaboration between industry, government, academia and citizens	Number of platforms and consortia for collaboration on the SDGs	Number of platforms and consortia comprising industry, government, academia and the private sector working together to achieve the SDGs
	Level of interest of city councilors	Number of parliamentary questions regarding the SDGs	Number of parliamentary questions on the SDGs in regular and extraordinary assemblies
	Policy and plans regarding the SDGs	Existence of basic policies/plans and number of goals to be addressed	Existence of a plan describing initiatives to achieve the SDGs and number of priority goals in the plan
	Positioning of the SDGs in existing plans	Reflection of the SDGs in comprehensive city plan	Existence or non-existence of a description of the link between the initiatives in the comprehensive plan and the SDGs
	Setting numerical targets related to SDGs	Number of numerical targets which correspond to each SDG goal	Number of KPIs corresponding with the SDGs in the SDG Future City Plan or the Comprehensive Plan
Goal Setting	"No one will be left behind"	Number of parliamentary questions regarding policy measures for vulnerable groups	Number of parliamentary questions on addressing children, the elderly, women, gender, persons with disabilities, the poor and foreigners in regular and extraordinary assemblies
	Data collection for the SDGs indicators	Number of open data provided	Number of open data files provided
	Participation in external accreditation	Number of participation in external accreditation	Number of ISO certifications (ISO 9001, ISO 14001), JIS Mark certifications, etc.
	Dissemination of information to citizens	Number of seminars held for citizens and participants	Number of SDG-related seminars and events organized by local authorities and number of participants
Monitoring	Dissemination of information domestically and internationally	Number of press releases on the SDGs	Number of press releases on the status of SDG initiatives and related events, etc.
	Citizens' understanding and penetration	Citizens' awareness proposition of the SDGs	Percentage of citizens who have heard of the Sustainable Development Goals (SDGs)
	Corporate partnership	Number of corporate partnerships for the SDGs	Number of corporate partnerships on the SDGs
	Partnerships with universities and activity groups	Number of activity groups/ organizations collaborating on the SDGs	Number of associations/organizations that form partnerships on the SDGs with Toyota City
Partnership	International partnership	Number of international organizations, institutions, sister cities collaborating on the SDGs	Number of international associations/organizations that form partnerships on the SDGs with Toyota City

(2) SDG Achievement Indicators at the Local Level

Goal	Local Indicators for SDG Achievement	Preferred directions	Data unavailability at prefectoral level	Data unavailability at municipal level	Relevant Goals												
					1	2	3	4	5	6	7	8	9	10	11	12	13
SDG 1 No Poverty	Relative poverty rate	-															
	Rate of households receiving livelihood protection	-															
	Number of homeless per 100,000 population	-															
SDG 2 Zero Hunger	Number of deaths from malnutrition per 100,000 population	-		X													
	Percentage of children with poor nutrition	-															
	Agricultural and fishery output per capita	+						X									
SDG 3 Good Health and Well-Being	Food self-sufficiency rate (on a calorie basis)	+															
	Neonatal mortality rate	-															
	Number of youth deaths per 1,000 population	-															
SDG 4 Quality Education	Number of suicides per 100,000 population	-				X											
	Healthy life expectancy	+					X										
	Number of traffic deaths per 10,000 population	-															
SDG 5 Gender Equality	Percentage of children on waiting lists for nursery schools and kindergartens	-															
	Percentage of junior high school graduates who go on to higher education	+															
	Gender parity Index in college and university enrollment	N															
SDG 6 Clean Water and Sanitation	Average percentage of correct answers on academic assessments	+					X										
	Number of confirmed sex crimes per 1,000 women	-															
	Gender parity index for household workers	N															
SDG 7 Affordable and Clean Energy	Gender parity index for managerial occupations	N															
	Water supply coverage	+															
	Sewage treatment coverage	+															
SDG 8 Decent Work and Economic Growth	Domestic water use per capita (based on a consumption basis)	-				X											
	Percentage of population with access to electricity	+															
	Installed renewable energy capacity per capita	+															
SDG 9 Industry, Innovation and Infrastructure	Gross output per unit of final energy consumption	+															
	Growth rate of gross city/prefectural product per capita	+															
	Unemployment rate	-															
SDG 10 Reduced Inequalities	Percentage of population aged 15-24 not in employment, education or training (NEET)	-															
	Manufactured value added per employee	+															
	CO2 emissions per million-yen unit of added value	-															
SDG 11 Sustainable Cities and Communities	Number of patent applications filed per 100,000 population	+															
	Income growth rate of the lower 40% of income (Decrease rate of households with income of less than 3 million yen)	+															
	Labor's share	+															
SDG 12 Responsible Consumption and Production	Unemployment rate of foreign workers	+															
	Percentage of households that live in housing below the minimum living standard	-															
	Public transportation coverage	+															
SDG 13 Climate Action	SPM (Suspended Particulate Matter) concentration	-															
	Amount of business waste generated per gross city/prefectural product	-															
	Hazardous waste disposal rate	+															
SDG 14 Life Below Water	Recycling rate	+															
	Number of residents in flood-prone areas per 100,000 population	-															
	Number of people sent to hospital due to heat stroke per 100,000 population	-						X									
SDG 15 Life on Land	CO2 emissions per capita	-															
	River BOD (Biochemical Oxygen Demand)	-															
	Percentage change in sales value of fish and fishery products	+															
SDG 16 Peace, Justice, and Strong Institutions	Number of arrests for violations of fishery-related laws per 100,000 population	-															
	Net change rate of forest area	+															
	Number of animals and plants poached or illegally traded per 100,000 population	-															
SDG 17 Partnerships for the Goals	Number of confirmed alien invasive species	-															
	Number of confirmed homicide cases per 100,000 population	-															
	Number of child abuse consultations per 1,000 elementary school students	-															
SDG 18 Responsible Consumption and Production	Voter turnout	+															
	Fiscal capability index (FCI)	+															
	Internet penetration rate (penetration rate of 4G and 5G)	+															
	Awareness ratio of the SDGs	+															
SDG 19 Responsible Consumption and Production	Number of sister cities per 100,000 population	+															

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未来都市とよた

Achieving Tomorrow's Standards

Advanced City Promotion Division
Planning Department

Toyota City Government

Official Website
<https://www.city.toyota.aichi.jp>

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