

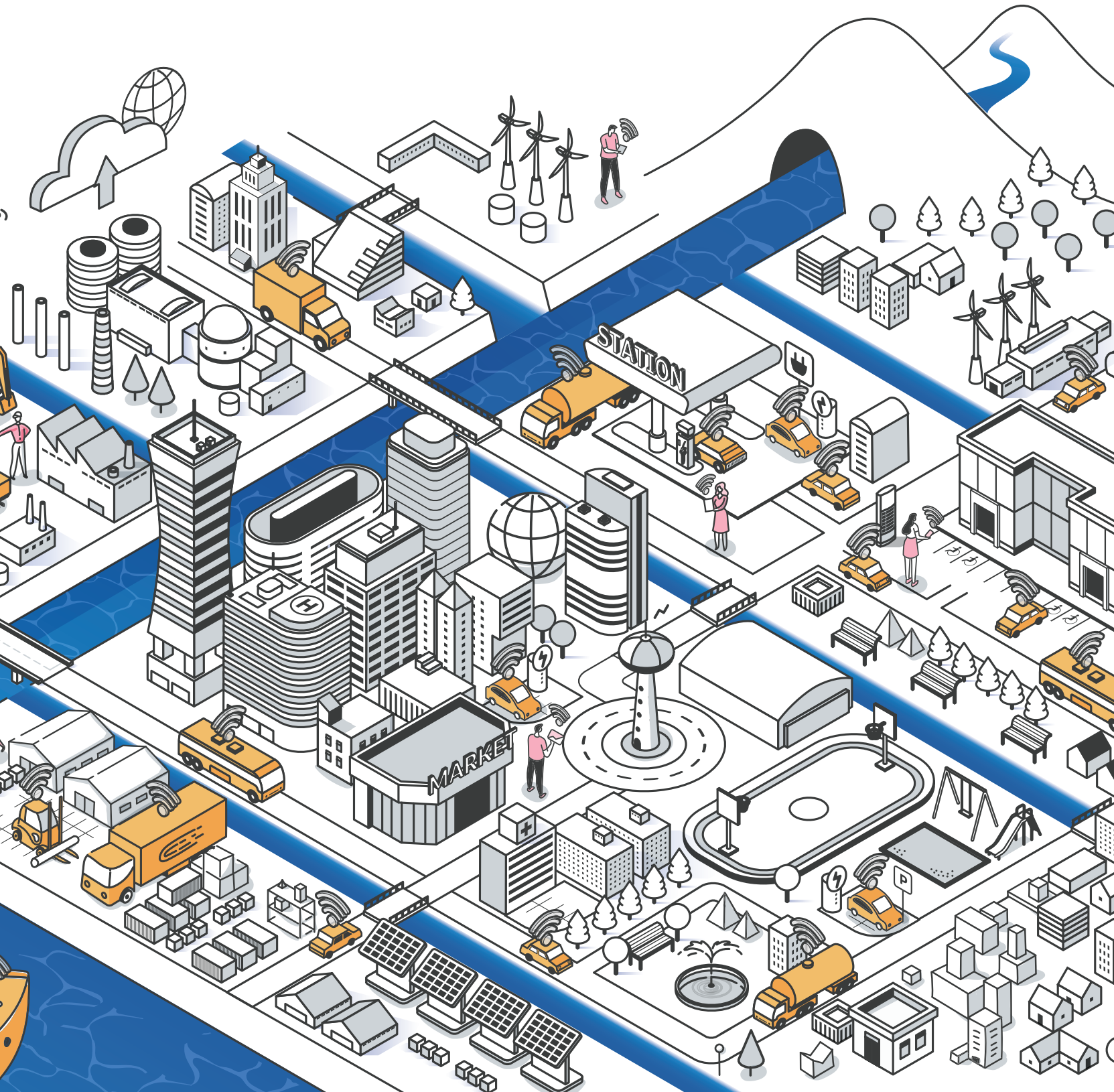


TOYOTA TECHNICAL DEVELOPMENT CORPORATION

Corporate profile

Your closest and best development partner

Making world-class technical development a reality





TOP MESSAGE

Amid global calls for carbon neutrality and the fundamental changes affecting society as a whole, such as the advent of smart cities, the growing application of technologies aiming to accelerate digital transformation (DX), as well as connected, autonomous, shared, and electric (CASE) technologies, the needs of customers for even more efficient and speedy product development are also undergoing profound, far-reaching, and rapid changes.

Toyota Technical Development Corporation (TTDC) is built on the expertise we have accumulated and nurtured through vehicle development in partnership with Toyota Motor Corporation. Our Intellectual Property (IP) and Measurement & Simulation (*Keisoku*) business fields will help you build the optimum development environment by identifying and combining the latest information and state-of-the-art technologies, so that you can develop ever-better products and create new value for your customers.

We will supply the oxygen and water to help create your development planet, and protect you from meteorites that fall out of the blue.

Our role can be likened to the protective atmosphere wrapped around a planet like a blanket.

As well as vehicle development, our technologies and expertise are just as applicable to the wider field of mobility, robotics, urban development, and other areas. To help build a more prosperous and sustainable society, TTDC is dedicated to pursuing ever-higher levels of expertise and leading the way to a future that nurtures and protects the well-being of all.

Yoshiyuki Kagawa, President

Company Outline

Company name
Toyota Technical Development Corporation (TTDC)

Headquarters
1-9 Imae, Hanamoto-cho, Toyota, Aichi 470-0334, Japan

Tel
+81-565-46-7500 (main switchboard)

Founded
April 1, 2006

President
Yoshiyuki Kagawa

Capital
550 million yen

Equity ratio
100% held by Toyota Motor Corporation

Main customers
Toyota Motor Corporation, etc.

Main bank
Sumitomo Mitsui Banking Corporation



Business Fields

Intellectual Property (IP)

- Patent searches and technical trend analysis
- Global filing and rights acquisition (patents, designs, and trademarks)
- Translation and interpretation

Measurement & Simulation (*Keisoku*)

- Development and manufacture of measurement instruments and systems
- System and facility planning
- Proposal and provision of model-based development (MBD) solutions
- Calibration, inspection, and repair of measurement instruments
- Support for next-generation business development

Corporate Philosophy

Always moving toward creating new value.



TTDC Philosophy

The TTDC Philosophy was established as the central pillar of our company's vision to guide and create a shared sense of purpose for every TTDC team member.

To help our team members continue their personal growth and to help build a more prosperous society, TTDC is dedicated to pursuing ever-higher levels of expertise and leading the way to a more harmonious future.

Basic Philosophy

We are dedicated to enhancing the quality of life as a team of professionals leading the creation of new value.

- TTDC is a team of professionals dedicated to taking on challenges. Our goal is to help build an ever-more prosperous society by using our know-how to drive development and create more value for our customers.

We will act as a good corporate citizen trusted throughout the community.

- As a member of the local community, TTDC will respond to the trust and expectations of society through continuous activities to become an ever-better corporate citizen.

We will continually grow as a company and pursue the happiness of our team members.

- At TTDC, people are our most valuable asset. We respect the diversity of our team members and place the highest value on their happiness.
- We will continue to move forward as a company by bringing out the best in our team members.

Guiding Principles

1. We are professionals committed to *genchi-genbutsu*.

We work with a sense of professionalism based on world-class expertise, technologies, and skills. We commit ourselves steadfastly to *genchi-genbutsu*.

2. We are always looking for ways to improve ourselves and build the capabilities of our team.

We are dedicated to improving ourselves without limitation across a wide range of fields. We strive to enhance the skills of the team by raising our own awareness and understanding the sensibilities of others.

3. We are quick and compact in everything we do.

We make rapid conclusions, come to swift decisions, and take decisive actions.

4. We are dedicated to the creation of new value.

With high aspirations, we are committed to constantly creating new value without fear of failure.

5. We act with integrity and sincerity.

We respect others and take responsibility for our actions.

6. We are a trusted partner that puts the customer's perspective first.

We act with empathy on behalf of our customers' interests.

Corporate Philosophy

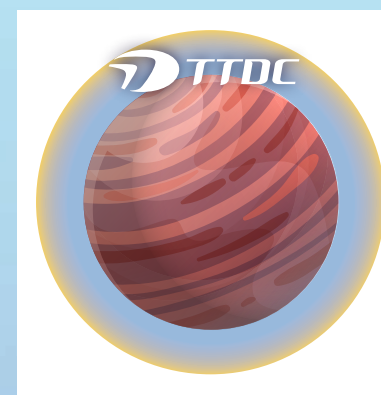
Our Mission

We will create the protective atmosphere to foster your research and development planets

To construct the optimum environments for product development through comprehensive solutions driven by cutting edge information and technology.

Intellectual Property (IP)

Our mission is to read the automotive development trends of the future and lead the next-generation of development through our core competencies of language, IP information, and legal know-how.



Measurement & Simulation (Keisoku)

Our mission is to lead digital development through measurement environments and simulation technologies that anticipate the next generation of product development.



Vision 2030

TTDC is dedicated to becoming a globally competitive driver of comprehensive information- and engineering-based solutions.

The principle strength of TTDC is our capability to comprehensively integrate a wide range of information, objects, and actions as a team of professionals. Our vision is to maximize and further develop this capability, and evolve into a company capable of resolving the challenges faced by our customers from a global standpoint.

Long-term Business Policy

We are transforming TTDC to realize the Vision 2030 business plan while fostering our customers' development planets and contributing to sustainable growth in harmony with our community and the global environment.

Foster research and development planets.

Market-oriented:

We will work creatively with our customers to build value and maintain the luster of their research and development planets.

New development frontiers:

We will create connections with the development planets of new business fields and global partners.

Live in harmony with the community.

SDGs:

We will act as a model company and strive to achieve the SDGs.

Become a globally recognized company.

Competitive superiority:

We will realize and maintain a competitive advantage so that the name of TTDC becomes synonymous with comprehensive solutions.

Proposal and communication capabilities:

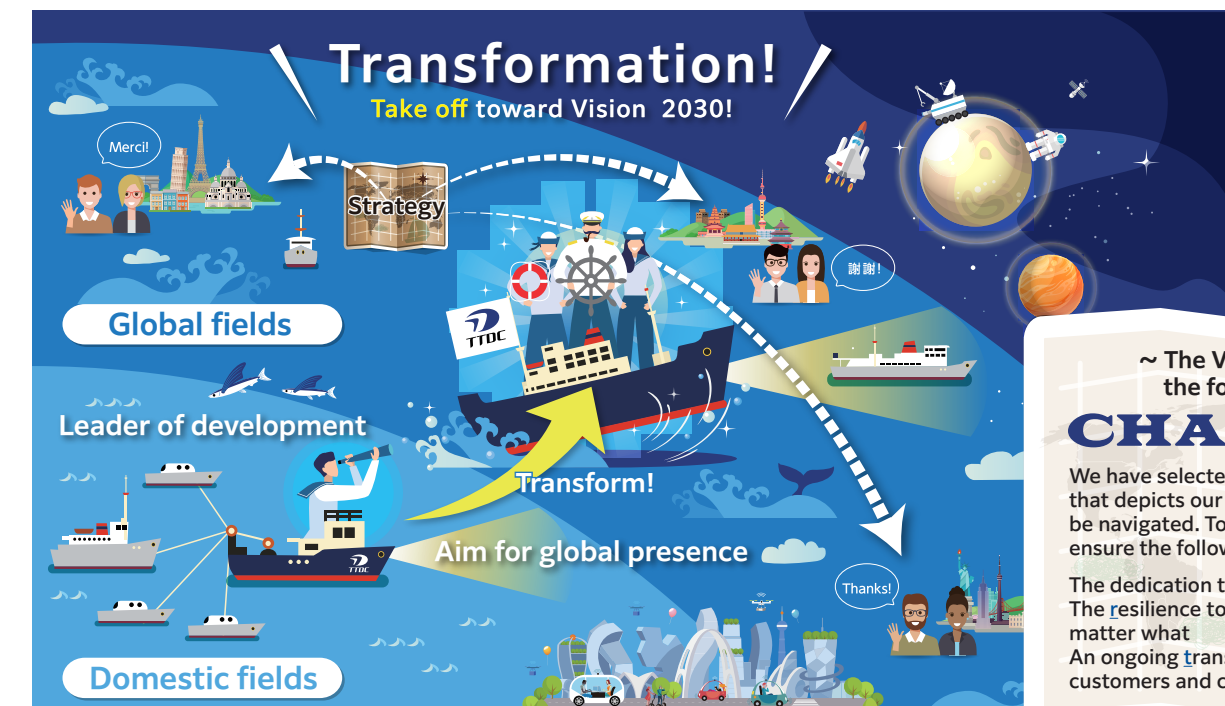
We will be a source of world-leading solutions.

Attractive company:

We will utilize the diversity of our team members and work with ongoing joy and passion.

The CHART 2025 Mid-term Business Plan

As the world undergoes profound changes, we are working to transform TTDC into a company that will lead our customers' development.



~ The Vision 2030 reflects the following ideals. ~

CHART 2025

We have selected a slogan called **CHART 2025** that depicts our goals and journey as a sea to be navigated. To achieve these goals, we must ensure the following:

The dedication to take on **challenging** goals
The resilience to achieve those goals, no matter what
An ongoing **transformation** in line with our customers and communities

We use state-of-the-art technologies to support the development of more prosperous and sustainable communities.

Utilizing the know-how nurtured through developing and producing vehicles with Toyota Motor Corporation, our Intellectual Property (IP) and Measurement & Simulation (*Keisoku*) business fields will help you build the optimum development environment by identifying and combining the latest information and state-of-the-art technologies, so that you can develop ever-better products and create new value for your customers.



Proposal of development processes through pioneering basic development technologies

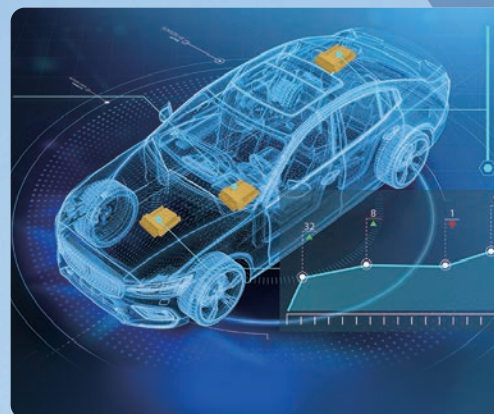
Our specialist fields include autonomous driving technology development, virtual smart city environments, and air mobility evaluation methodologies. We promote joint projects with industry and academia toward the development of the latest technologies (AI, MBD, controls) for the realization of Society 5.0, and propose digital transformation (DX) environments.

Comprehensive solutions that help build the optimum development environments through technologies that combine the virtual and real worlds



Japan's leading calibration service in line with international standards

Increasingly stringent international quality requirements are accelerating the need for stricter management of instrumentation. We are widely certified and hold accreditation under ten categories defined by the Japan Calibration Service System (JCSS) and two categories of the Accreditation System of National Institute of Technology and Evaluation (ASNITE). We provide high quality calibration services with short lead times.



Provision and building of xILS development environments matching our customer's needs

We are promoting innovative approaches to development through comprehensive MBD-based engineering from the development of physical models to the automatic generation of evaluation scenarios and the construction of xILS environments in line with the development phase.



Enhancement of development efficiency using AI and cloud-based technology

We apply values to every item of data obtained through evaluations and provide strategic decision support to all users through cloud-based technologies. We provide fully digital development environments to facilitate drastic innovations in development processes.



Test facility consultation to support the workplace from installation to operation

We provide a full range of test facility consultation services from discussions about the evaluation environment to actual construction work, and the proper utilization of equipment after installation. We will help you concentrate on product development.



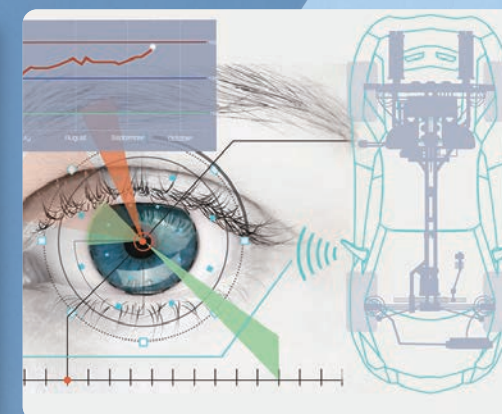
Data science

We utilize AI to analyze technical information from patents and other sources as well as various types of actually measured data to predict the characteristics and performance of products under development and to realize solutions for detecting abnormalities and malfunctions.



Sophisticated synchronization and rapid processing of large volumes of data

We can simultaneously measure and analyze real-time data from vehicles, people, and the surrounding environment. We can help you speed up development by sharing results both locally and remotely.



Visualization of a wide range of measurable phenomena through compact and wireless technologies

We can help increase the precision of CAE and simulations by realizing virtually interference-free measurement through our original telemetry technologies that are among the most compact available in Japan, and by providing highly reliable data.



Searches and analysis

We can visualize the technical trends of your competitors by collecting enormous amounts of technical information for your product development. We can help you build an industry-leading business strategy.



Support, training, and IP administration for corporate IP practices and the acquisition of patent rights inside and outside Japan

Our experienced corporate IP staff and patent attorneys can support every aspect of your IP practices. We can help you to acquire IP rights in accordance with your IP strategy in 190 countries around the world.



Translation, interpretation, and multi-language localization

We provide translation and interpretation services closely tied to the needs of our customers through a team of highly professional technical and patent translators, which includes experienced native speakers and holders of the highest grade of the practical English Technical Writing Test. We provide translation services in more than 30 languages.



We are dedicated to enhancing the quality of life as a team of professionals leading the creation of new value. We take full responsibility in facing up to issues affecting the environment and our community, with the aim of making an effective contribution to efforts to leave a more abundant and happier planet for future generations.

Exploring the future through ingenuity and technology

We foster the technical development of our customers through our integrated solutions, and contribute to enhancing the quality of life.

- We read the automotive development trends of the future through our core competencies of intellectual property information, legal know-how, and languages.
- We anticipate the next generation of product development through measurement environments and simulation technologies.



Responsibility for the global environment

We exercise corporate social responsibility through activities to protect and preserve the global environment for future generations.

- Switched to electricity derived from renewable energy
- Switched to carbon-neutral city gas
- Promoting paper-less working environment
- Introduced sustainable seafood cafeteria menu



Active participation by diverse employees

We value diversity and create a work environment in which every employee can demonstrate his or her ability and work enthusiastically and productively.

- Support for women's careers
- Support for child and family care
- Emphasis on healthy work/life balance
- Initiatives for better health and productivity management



In harmony with local communities

As a member of local communities, we aim to realize a healthy and prosperous society and its sustainable development.

- Contribution to the community, care, and assistance
- Traffic safety activities
- Donations



Trustworthy company

We work toward maintaining the trust of society by enhancing governance and always behaving ethically.

- Statement of responsibility to our stakeholders
- Actions for information security
- Initiatives for sustainable purchasing





Our Initiatives for Achieving the SDGs

We appreciate the ethos and values of the sustainable development goals (SDGs) for helping to realize a sustainable society. Through this appreciation, we will continue to cultivate a workplace culture and mindset, and promote the creation of new values capable of contributing to our planet, civilization, and communities.

Understanding the spirit and values of the SDGs and aiming for a brighter future

The five Toyoda Principles are at the core of the whole Toyota group. The first of these principles (contributing to the overall good) expresses the importance of production to benefit society. Faithful to the spirit of this ideal, the focus of our business activities is to help build a more prosperous society, an approach that we have built into our Basic Philosophy. To help realize a sustainable society, every country, company, and individual must take full responsibility to, first, **realize** the issues facing the world, before then **thinking** how to address them and **changing** themselves to achieve this goal. Everyone at TTDC takes personal responsibility for implementing this approach through our business.



TTDC's Progress toward its SDGs

United efforts launched in 2020

Each one of our employees began by taking full responsibility for understanding the issues around us as the first step toward a sustainable future. Together, we learned about the basics and significance of the SDGs, deepening our understanding of the SDGs while orienting ourselves toward issues affecting the environment and communities around the world.

Second-year initiatives in 2021

Our target is to encourage all our employees to feel personally responsible for achieving the SDGs. We applied the **realize/think/change** approach to encourage our employees to take responsibility for reducing plastic waste. Initiatives like this can make a small but important contribution to making a brighter future. We raised awareness of issues facing our communities and provided opportunities for our employees to change their behavior.

<p>STEP 01 Communication of video message from top management</p> <p>Understanding the significance of the SDGs</p>	
<p>STEP 02 Online learning courses</p> <p>Understanding an outline of the SDGs</p>	
<p>STEP 03 Communication of SDGs-related content and in-house events</p> <p>Quiz focusing on global-scale issues and example initiatives for each of the 17 SDGs. We asked our employees to submit their individual initiatives for the SDGs and awarded prizes for the best entries.</p>	
<p>STEP 04 SDGs team badge</p> <p>We distributed badges that express our support for the SDGs and our desire to carry on working toward these goals.</p>	

<p>STEP 01 Realize</p> <p>We held online broadcasts of the movie Microplastics Story for all our employees.</p>	<p>We understood the specific details of the problem and thoroughly learned about its severity.</p>
<p>STEP 02 Think</p> <p>Each of our employees thought for themselves what forms of plastic waste they could reduce.</p>	<p>We realized that our own actions can have a positive impact!</p>
<p>STEP 03 Change</p> <p>We worked to reduce plastic waste from drinking bottles, plastic bags, straws, and more.</p>	<p>Even something small is important! Next, we shared the activity with our families ↓</p>
<p>STEP 04 Results:</p> <p>362 employees participated in the activity over the course of a month.</p> <p>We reduced plastic waste by a total of approximately 88 kg.</p>	<p>We then shared our ideas for how to reduce plastic waste. Some of these ideas were unexpectedly effective!</p>

Registration as Toyota SDGs Partner in November 2021

We are pushing ahead with initiatives that contribute to the local community to help achieve the SDGs raised by Toyota City Hall and realize a sustainable city.



* Toyota SDGs Partners:
In partnership with Toyota City Hall, we are helping to promote sustainable projects and initiatives toward the resolution of issues affecting local communities, while raising public awareness about the SDGs.

Facing Up to Issues Affecting Our Communities

Predicting changes in the business environment, we are actively engaged in the creation of new businesses to help resolve issues facing our communities. We are taking on the challenge of creating new value through an emphasis on diverse connections. Through this approach, we want to be a company that has a significant positive impact on society.



External Recognition (Accreditations and Awards)

Our wide range of sustainability initiatives have been recognized by a number of external organizations and groups.

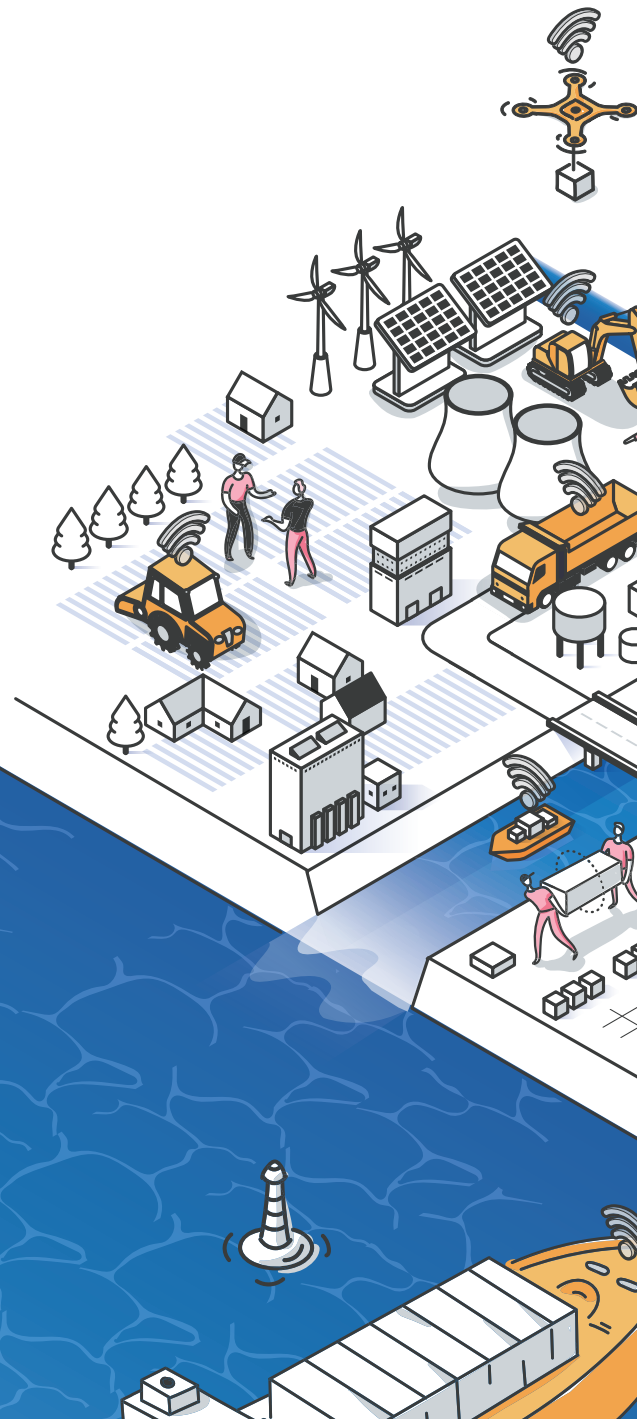




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<https://www.toyota-td.jp/en/>



Easy to read universal design fonts are used.

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This booklet was printed by a waterless process that uses no dampening solutions containing hazardous substances.