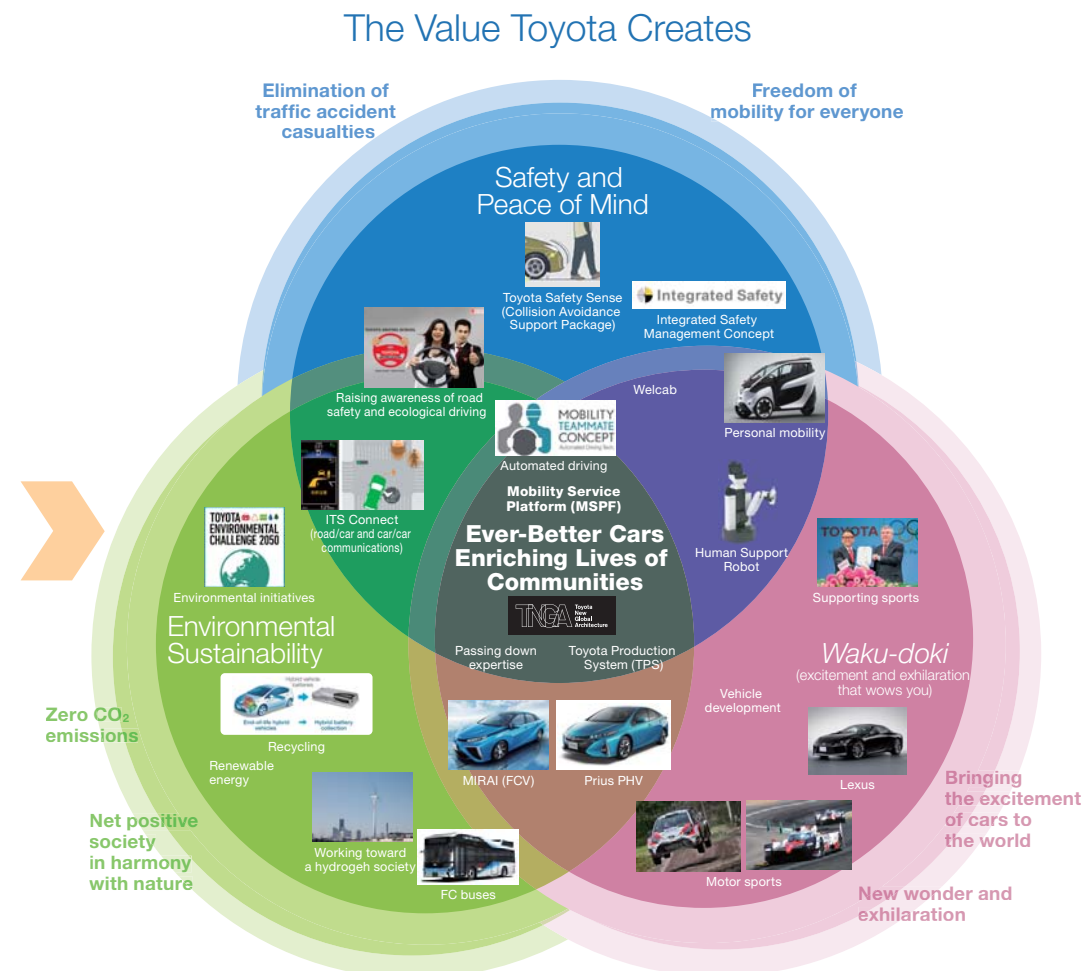
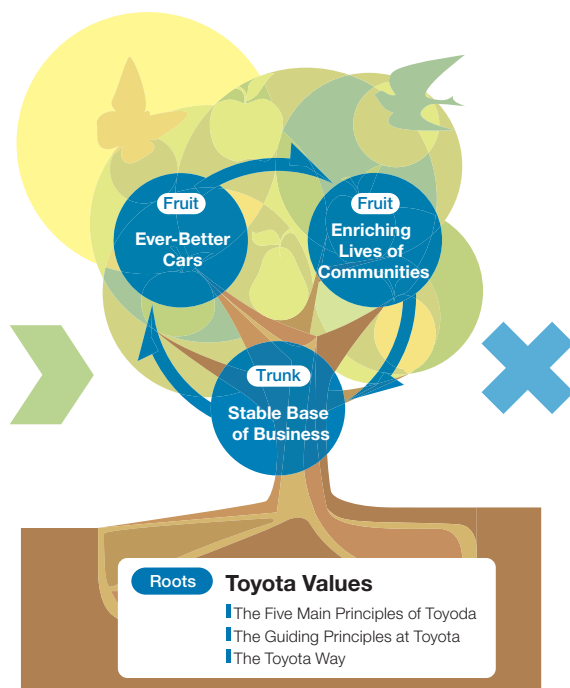
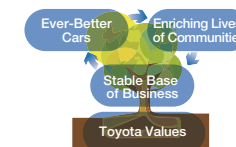


Even as the business environment transforms and new challenges arise, Toyota will leverage the qualities, honed over time, that make it unique as it shifts to a longer term strategic perspective in order to maintain and enhance this positive cycle. By doing so, we will provide value to society in the forms of safety and peace of mind, environmental sustainability and *Waku-doki* (excitement and exhilaration that wows you).

## Robotics





## Initiatives for Sustainable Growth

### Toyota's Approach to Sustainable Growth

Toyota has taken the initiative in contributing to the sustainable development of society and the planet through all its business activities. Cars have provided freedom of movement but have also had a wide range of other social and environmental consequences. Toyota bears this in mind and listens closely to customers and communities as it seeks to achieve harmony between individuals, society and the global environment through *monozukuri* (manufacturing).

Looking more closely at, for example, our environmental efforts, we are implementing initiatives under the Toyota Environmental Challenge 2050 as a top-priority management issue. Specifically, we are working to help resolve major global environmental issues, including climate change, water scarcity, resource depletion and biodiversity degradation. As part of this, we are aiming to not only achieve net zero CO<sub>2</sub>

emissions to help meet the Paris Agreement\* goal of keeping global warming below 2°C, but to have a net positive impact on the environment.

\* The Paris Agreement, reached in December 2015, was negotiated at the 21st yearly session of the Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change, held in Paris. The agreement set the long-term goal of limiting global warming to well below 2°C compared with pre-industrial levels and calls for net zero anthropogenic greenhouse gas emissions to be reached during the second half of the 21st century.

Toyota is also utilizing its strengths to help solve global social problems in line with the United Nations Sustainable Development Goals (SDGs), promulgated in January 2016. In addition to addressing climate change (in line with SDG 13), Toyota is working to reduce traffic accident injuries and deaths (SDG 3) and to promote sustainable community building and improved mobility (SDG 11). Furthermore, Toyota places value on all stakeholders in the management of its businesses and strives to maintain and develop

sound relationships with stakeholders through open, fair communication in order to contribute to the sustainable development of society and the planet. As our businesses develop, our communications with stakeholders also broaden and deepen. By working always hand-in-hand with stakeholders and growing together, Toyota consistently provides the three forms of value listed above.

Stakeholder Engagement  
(Sustainability Data Book 2017, p. 74)

### Toyota's Implementation Framework

Toyota's implementation framework for sustainable development includes the Corporate Planning Meeting and the Corporate Governance Meeting, which carry out their respective activities from a long-term, Company-wide perspective.

Toyota established a CSR Committee in October 2007 to coordinate and implement CSR activities. With guidance from this committee, Toyota works to

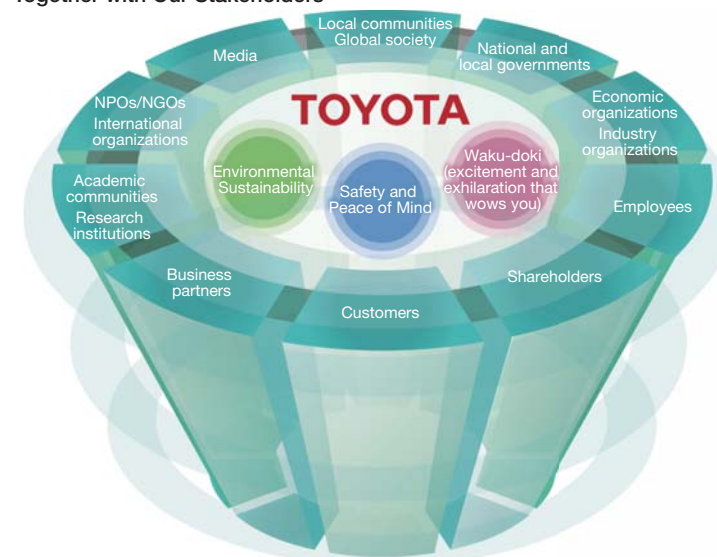
ensure compliance, carry out social contribution activities and address environmental problems.

In April 2015, this framework was revised to emphasize corporate value enhancement, an approach that makes CSR an integral part of management. This change was aimed at integrating the specialized CSR-focused discussions that had until then been confined to the CSR Committee into broader discussions of overall management and business activities. To this end, the functions of the CSR Committee were transferred to the Corporate Planning Meeting and Corporate Governance Meeting. The Corporate Planning Meeting, under the Shareholders' Meeting and Board of Directors, takes a wide range of social issues into account when considering growth and business strategy. The Corporate Governance Meeting serves to oversee business operations and makes decisions regarding the governance framework under which such strategies are implemented.

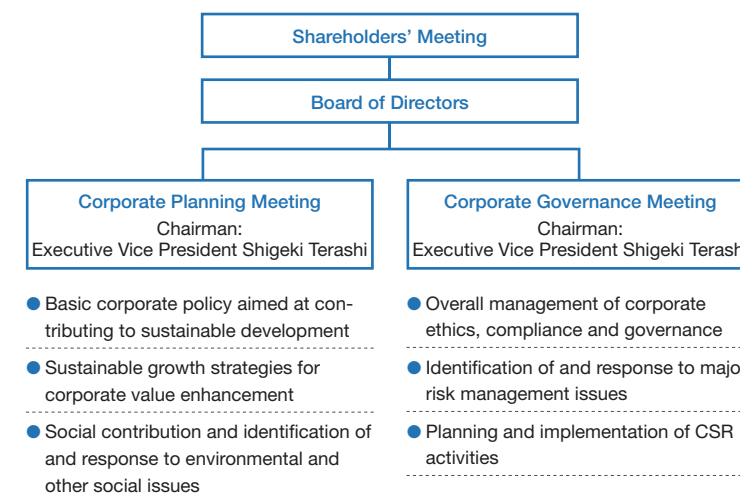
### Helping Solve Global Social Problems

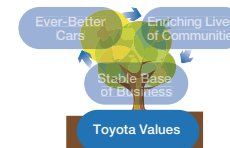


### Together with Our Stakeholders



### Implementation Framework





## Corporate Philosophy

In all of its business activities, Toyota aims to contribute to the creation of a more affluent society and earn the trust of stakeholders as a good corporate citizen.

### The Guiding Principles at Toyota and Their Implementation

The Five Main Principles of Toyoda have been passed down since Toyota's founding as the core of its management. These principles embody the thinking of the Toyota Group's founder, Sakichi Toyoda. In 1992, they were reorganized in light of changes in society and business structure to create the Guiding Principles at Toyota.

The Guiding Principles at Toyota lay out the kind of company we want to be. Building on this, the Toyota Way 2001 (hereinafter called the "Toyota Way") was

established in 2001, laying out values and business practices that everyone working at Toyota around the world should embrace. The Toyota Way thus clearly articulates and facilitates the global sharing of values and practices that had previously been passed down only as implicit knowledge.

The Toyota Way's main pillars are the concepts of continuous improvement and respect for people, with the keywords of taking on challenges, *Kaizen*, and *Genchi Genbutsu* (onsite, hands-on experience) under the former and respect and teamwork under the latter. Continuous improvement means never being satisfied with the status quo and always doing our utmost to create even greater added value.

Respect for people entails respect for all our stakeholders and working to achieve business success by promoting the growth of employees.

### Rewarded with a Smile by Exceeding Your Expectations. The Toyota Global Vision

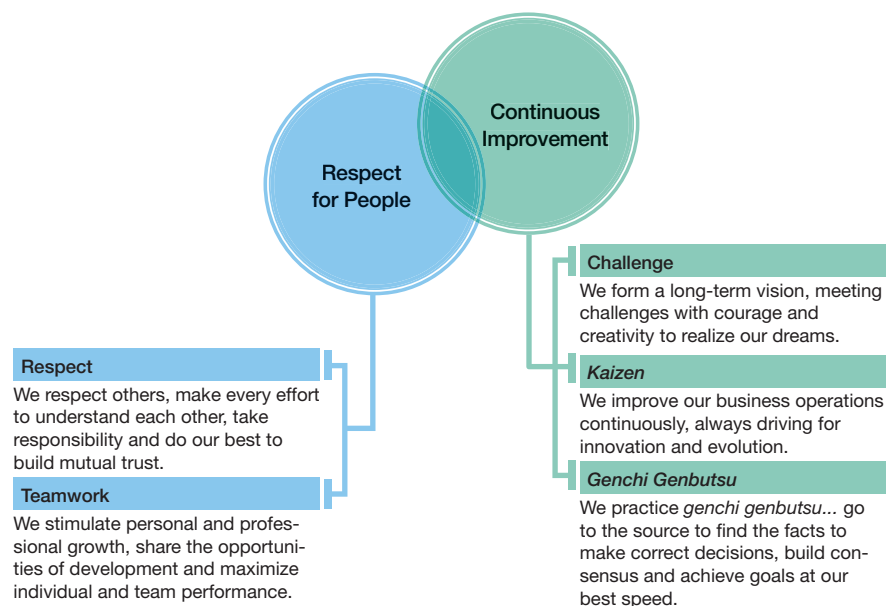
The Toyota Global Vision, published in March 2011, articulates the kind of company that Toyota aspires to be and the values that it esteems as a common rallying point for the entire Company and as a statement to Toyota's customers and society at large. The vision took on particular meaning in light of the

Company's losses following the global economic crisis of 2008 and the series of recalls in 2010. We are implementing a positive cycle of making ever-better cars that exceed customer expectations, enriching lives of communities, being rewarded with the smiles of customers and communities and thus reinforcing our stable base of business. By maintaining and enhancing this cycle, we aim to continuously provide value to society in the forms of safety and peace of mind, environmental sustainability and *Waku-doki* (excitement and exhilaration that wows you) while enhancing Toyota's corporate value.



Corporate Principles  
(Sustainability Data Book 2017, p. 5)

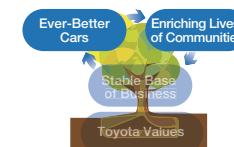
### The Two Pillars and Five Keywords of the Toyota Way



### Toyota Global Vision







## Making Ever-better Cars (TNGA)

In line with its Customer First policy, Toyota strives to make ever-better cars that surpass customer expectations.

The automobile business is in the midst of tremendous change. In the automobile manufacturing business, Toyota's most important business today, we seek to make cars even more appealing so that they will be loved by customers for years and years. To this end, we are implementing Company-wide structural innovation across our global car making business. In terms of corporate structure, we have adopted a product-based in-house company system with the aim of more quickly responding to customer demand.

Since its founding, Toyota has developed unique methods and values, such as the Toyota Production System (TPS) and *Kaizen* (improvement), handing them down as sources of competitiveness. Going forward, while we will leverage these strengths, we will not be bound by precedent as we endeavor to make ever-better cars.

### TNGA Accelerates Our Efforts to Make Ever-better Cars

With the aim of making ever-better cars, Toyota is implementing a program of structural innovation it calls the Toyota New Global Architecture (TNGA). TNGA is how we are changing the basic architecture of our cars, entailing the integrated development of new powertrain units (engines, transmissions, and HV units) and platforms (chassis) from the ground up. By doing so, TNGA is aimed at dramatically improving basic functionality—propulsion, turning, and stopping—and enhancing product appeal so that

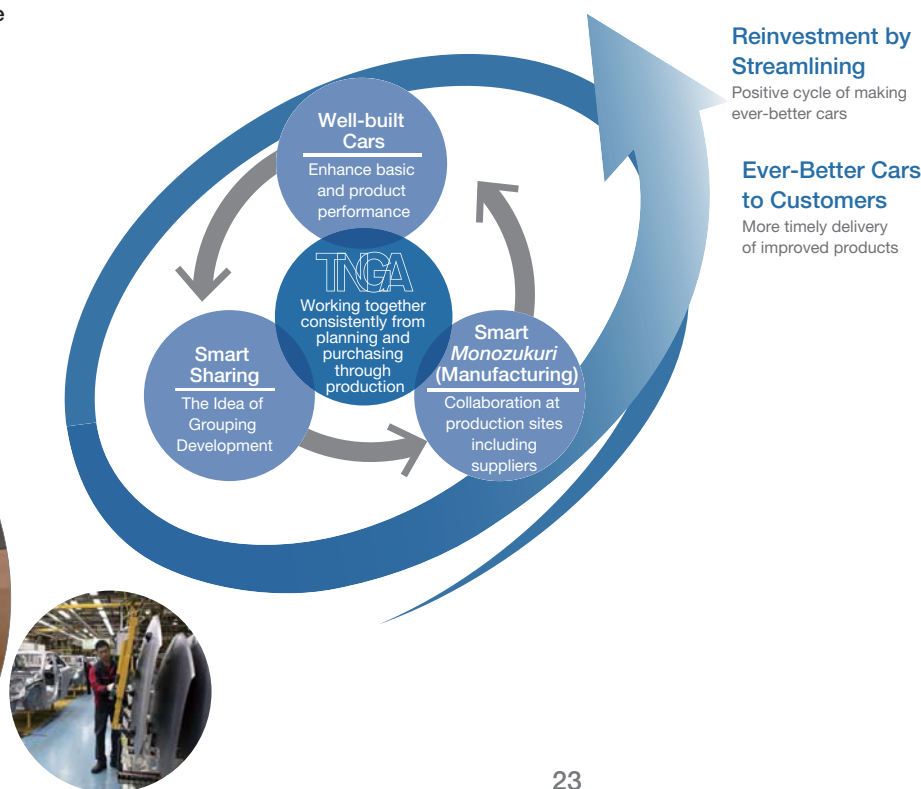
customers will love their cars for year and years. We expect these initiatives to cut development resource requirements by about 20%, permitting greater reinvestment in enhancing quality and product appeal and thus accelerating a virtuous cycle, enabling us to deliver ever-better cars faster than ever before.

TNGA comprises two main aspects: total optimization and individual optimization. Total optimization entails exhaustively enhancing cars' basic performance and implementing smart sharing of the results, while individual optimization is achieved through the exacting design of each model by a chief engineer, who acts as development leader, in line with each region's market needs and customer preferences.

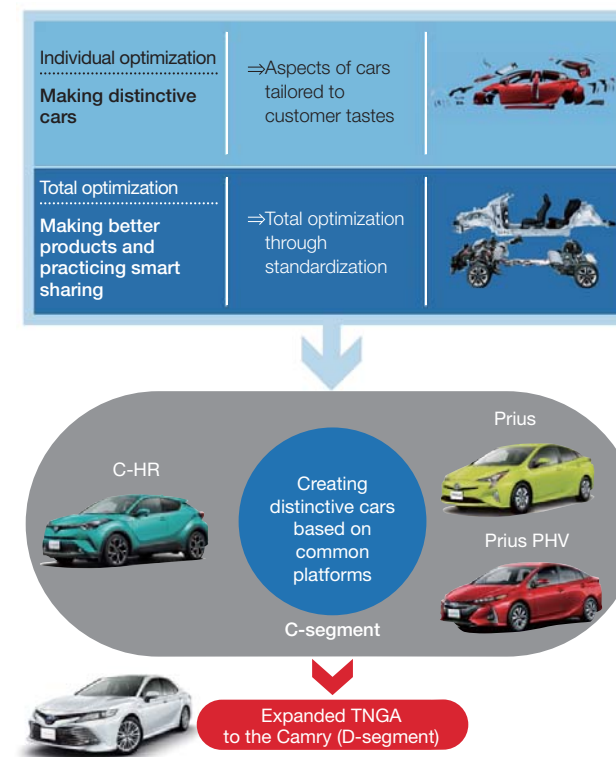
For example, the C-HR shares a platform (labeled "total optimization" in the diagram below) with the Prius, also in the C-segment. In contrast to the Prius's development concept, beautiful hybrid, the C-HR was designed in line with the development concept of responsive driving performance, with a focus on performance-enhancing features unique to the C-HR. The C-HR's exterior architecture features a distinctive diamond theme, and its styling is enjoying considerable popularity in the rapidly growing compact SUV market.

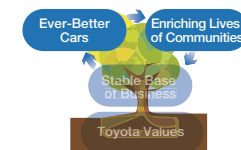
Toyota began the TNGA initiatives with the fourth-generation Prius (launched in Japan in December 2015), followed by horizontal expansion within the

### The Integrated TNGA Cycle



### Making Cars under TNGA





## Making Ever-better Cars (TNGA)

C-segment to include the C-HR (launched in Japan in December 2016) and Prius PHV (launched in Japan in February 2017). Leveraging the know-how gained from these earlier releases, we released the new Camry (launched in Japan and the United States in summer 2017) in the D-segment, expanding the range of car types produced under the TNGA.

### Powertrain Development

One specific initiative under TNGA is the development of new powertrains, which form the core of the automobile, that have a lower center of gravity, thus promoting both excellent driving performance and excellent environmental performance.

Our approach to powertrain development aims to simultaneously enhance product marketability and improve production and development efficiency. To enhance product appeal, we are, of course, working to ensure excellent environmental performance while also seeking boost driving performance by focusing development on customers' sensory experiences

under the theme "Direct & Smooth." Through this approach, we have developed powertrain units that, by themselves, improve power performance approximately 10% and fuel economy approximately 20%. In terms of production efficiency, we are globally unifying processing and assembly standards as well as process and equipment specifications in order to create a global architecture that will be able to quickly and flexibly respond to customer needs. Looking at development efficiency, to take the example of engines, we are unifying the design of combustion chambers and cylinders while achieving engine variation using different combinations of cylinder volume and number of cylinders, thus promoting integration and reducing the types of engines under development by approximately 40%.

Using TNGA-based modular development, in the five years leading up to 2021, Toyota plans to introduce a vehicle lineup that consists of 37 variations of 19 models to meet diverse driver needs. Beginning with the new Camry, Toyota will steadily increase the lineup of cars incorporating the new powertrains, aiming for such vehicles to account for 60% or more of all new vehicles sold in 2021 on a non-consolidated basis (in Japan, the United States, Europe and

China). We estimate that the increased fuel economy of the new powertrains alone will reduce the CO<sub>2</sub> emissions from the cars sold by Toyota on a non-consolidated basis in 2021 by at least 15%.

### Reinforcing the Powertrain Development Framework

As part of the Toyota Environmental Challenge 2050, to help conserve the global environment, Toyota is working toward the goal of reducing its global average new vehicle CO<sub>2</sub> emissions by 90% from its 2010 global level.

Conventional engine-powered vehicles account for the vast majority of vehicles currently on the market, and even hybrid vehicles (HVs) and plug-in hybrid vehicles (PHVs) have internal combustion engines. Toyota therefore believes that the further technological development of conventional engines and transmissions, which will remain dominant for some time to come, is a sure, steady, realistic, and effective means of reducing CO<sub>2</sub> emissions. At the same time, to advance the electrification of vehicles, Toyota must also accelerate

its development of hybrid technologies (electrification technologies), such as those used in electric motors, batteries, and power control units (PCUs).

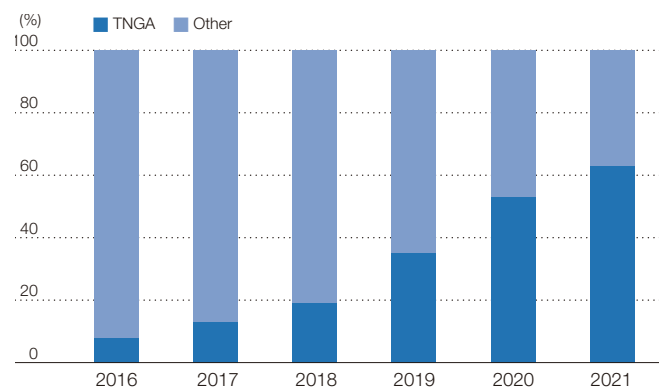
Going forward, to produce greater results than ever using limited resources, we believe that we must implement business innovation, and we plan to carefully review the technologies we have with the aim of further acquiring technologies through in-house creation while sharing technologies within the Toyota Group and expanding areas of joint development. By strengthening coordination within the Group and efficiently utilizing resources, we aim to quickly establish new technologies, enhance the collective ability of the Group, speed up development, and increase scale through the proliferation and expansion of environmental technologies.

Furthermore, to advance electrification and speed up the development of hybrid technologies, which are at the core of PHVs, FCVs, and EVs, we plan to increase the number of personnel involved in hybrid technology development by approximately 30% by 2021.

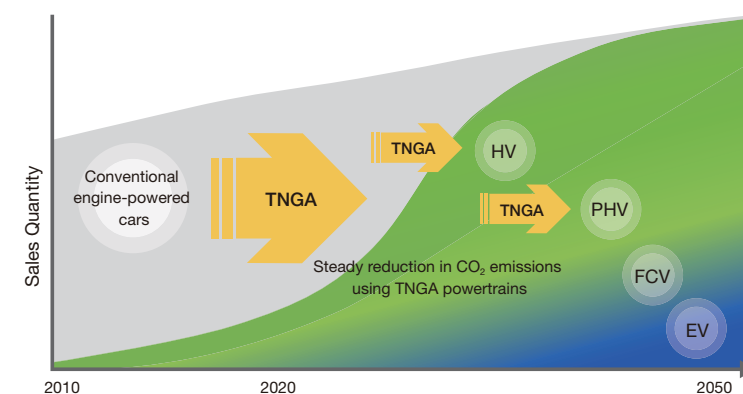
### Dynamic Force Engine (2.5-liter) in the New Camry

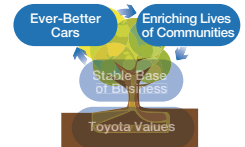


### TNGA Powertrain Adoption Plan (% of total sales in Japan, the United States, Europe and China)



### TNGA Powertrains' Environmental Contribution





## Making Ever-better Cars (TNGA)

### Achieving both Smart Sharing and Outstanding Car Manufacturing

The transition to a product-based in-house company system as part of the 2016 structural reforms was intended to better enable us to make ever-better cars while developing human resources to support that goal. Accordingly, R&D operations, which had been organized by function, have been divided into the categories of advanced and mass production, and those in the latter category have been allocated to the related in-house companies. The new system thus enables integrated operations, from planning to production, under the authority of each in-house company president.

Advanced R&D is handled by the Advanced R&D and Engineering Company, which removes barriers

between R&D and production engineering to speed up technological development. This company works with Toyota Central R&D Labs., Inc., Toyota Research Institute, Inc. (TRI), and the Frontier Research Center on cutting-edge research, exploring the possibilities of future automotive technology as it drives development. In addition, this company creates technological scenarios as global benchmarks to help Toyota understand how to achieve its vision for the future. Moreover, the Advanced R&D and Engineering Company supports development at the product-based in-house companies through its innovative technological development.

In April 2017, we established GAZOO Racing Company, creating a framework for building up motor sports technical capabilities to serve as know-how for adding flavor and spice to driving. Using this know-how, we aim to develop and release cars that offer customers true *Waku-doki* (excitement and

exhilaration that wows you). Taking a *Genchi Genbutsu* (onsite hands-on experience) approach rather than relying solely on data, we are positioning motor sports at the heart of our efforts to make ever-better cars.

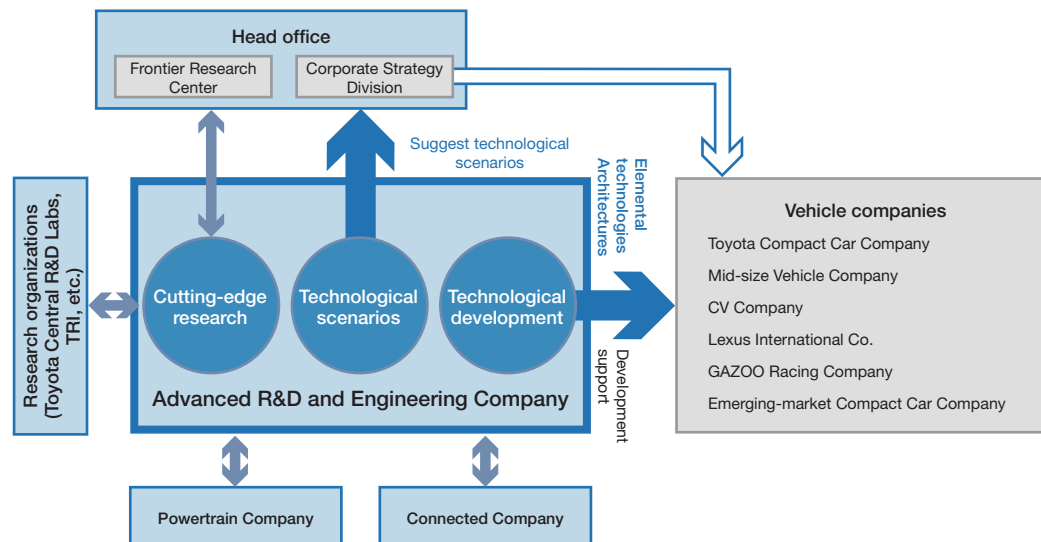
Each in-house company, due to its integrated operations, bears the final responsibility for product revenue. To strengthen this system, in September 2017, we reorganized the Cost KAIZEN Division (now the Cost KAIZEN Department), reallocating approximately 60% of its cost planning staff to the in-house companies. The Cost KAIZEN Department staff remaining at the head office will promote overall optimization.

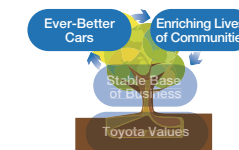
More than a year after the transition to the in-house company system, the new approach to making ever-better cars has begun to take root, but areas that require improvement have also come to light. In particular, we are still learning from our partners in business alliances and subsidiary Daihatsu Motor Co., Ltd. about efficient development and car manufacturing

with a rigorous focus of the customer's perspective. As part of such initiatives, we are encouraging healthy competition between in-house companies, such as that related to new compact vehicle projects between the Emerging-market Compact Car Company and Toyota Compact Car Company.

Going forward, we will continue working to make ever-better cars that exceed customer expectations, seeking to translate structural reforms into opportunities to improve ourselves based on the belief that the process of *Kaizen* (improvement) never ends and that innovation is created only through steadfast, ongoing *Kaizen*.

### Framework for Making Ever-better Cars

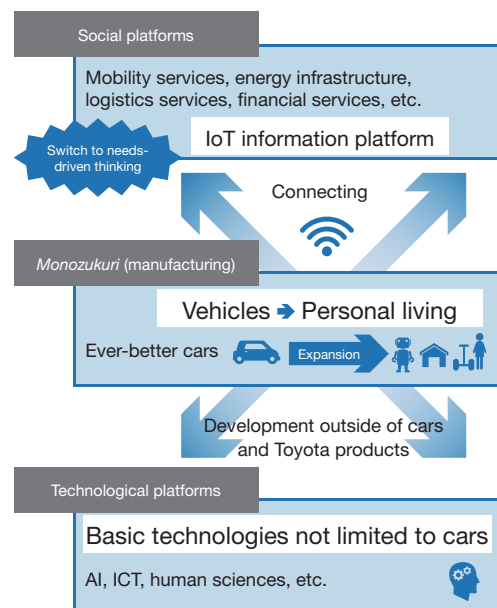




## Taking on the Future

Society and industry are undergoing structural changes of unprecedented pace and scale. Values and lifestyles are diversifying, while a wide range of social issues are growing more pronounced, and innovation is driving rapid technological development. We believe that the value of mobility is also beginning to change not just through the evolution of cars, but through an expansion into aspects of personal life, including social infrastructure.

Toyota is taking on the future by not only evolving its long-standing *monozukuri* (manufacturing), but expanding its focus to encompass social platforms that address society's needs as well as technological platforms, such as AI, that extend beyond cars. By doing so, we aim to provide broad-ranging value that exceeds customer expectations.



## Creating New Industries

The Frontier Research Center was established as part of the April 2016 structural reforms with the objective of creating new value from a long-term perspective to achieve sustainable growth by bringing together wisdom from across Toyota's Group companies and affiliates. The center is charged with, in short, fostering innovation in the value-creating industries that will come after automobiles from the perspective of serving the world and its people.

We are now at a once-in-a-century turning point. We believe that we must not only continue to make ever-better cars that will be irreplaceable assets for our customers; in order to ensure that Toyota remains a best-in-town company, we must think about how we can next contribute to society—this time outside of automobile manufacturing, sales, and services—and get started. The Frontier Research Center is working to leverage Toyota's traditional strengths in *monozukuri* (manufacturing), generate lasting employment, and create new industries for the next generation.

The Frontier Research Center takes an open stance, advancing initiatives in collaboration with partners that share its vision.

## Contributing to Agriculture

Toyota developed *Housaku Keikaku*, an agricultural IT management tool, to help improve agricultural productivity by applying production management methods and operational improvement know-how cultivated in the automotive business to agriculture. In 2014, we began providing the tool to rice growing agricultural cooperatives. Starting in April 2014, as part of the Advanced Model Agricultural Business Formation Trials by the Japanese Ministry of Agriculture, Forestry and Fisheries, we established the Rice Production Kaizen Network, a consortium formed with nine rice growing agricultural cooperatives in Aichi and Ishikawa prefectures and the Ishikawa prefectural government. Through this consortium, we are providing *Housaku Keikaku*, conducting pilot testing aimed at further efficiency and quality improvement, and building a foundation for human resource development through front-line *Kaizen* (improvement).

In April 2017, we announced new partnerships in Hokkaido and Nagano. As of May 2017, 33 cooperatives were using *Housaku Keikaku*. Going forward, we will continue to expand the number of users of the tool, seeking to contribute to enhancing the efficiency and quality of rice farming.

## Investing in Start-ups through a Fund to Create New Value

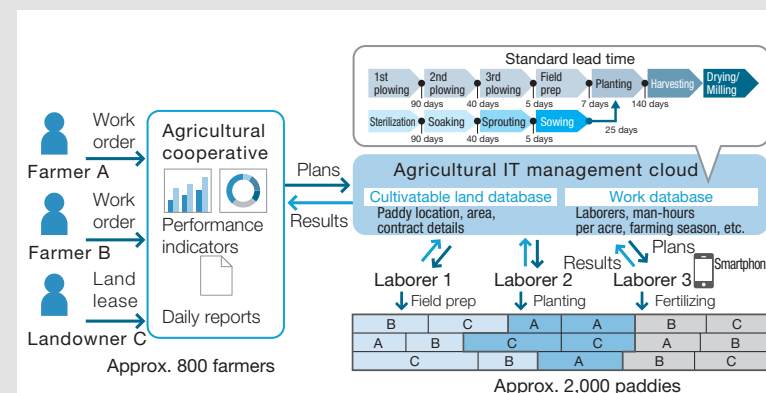
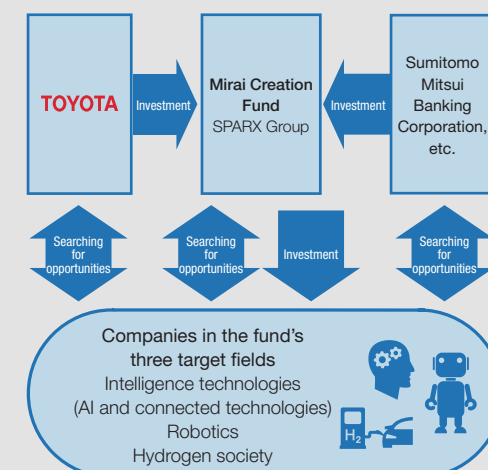
Mirai Creation Investment Limited Partnership ("the Mirai Creation Fund") is an investment fund established by SPARX Group Co., Ltd. to accelerate future-oriented innovation. Along with Sumitomo Mitsui Banking Corporation, Toyota has participated in this fund as an investor since its establishment.

The fund's basic purpose is to help accelerate innovation by investing in and nurturing enterprises that possess technologies with the potential to drive future-oriented growth and to promote said potential worldwide by building a portfolio of the promising businesses it finds. The fund also shares the corporate information it collects with Toyota, supporting new technological development by introducing potential partners and facilitating the execution of capital alliances. The fund focuses investment on core technologies in the areas of intelligence (AI and connected technologies), robotics, and making a hydrogen society a reality.

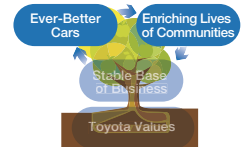
Since its establishment, the fund's investment in start-ups has progressed as initially planned. As of June 30, 2017, of its total ¥36.7 billion, it had

invested ¥14.3 billion in 29 companies in the United States, the United Kingdom, Israel, and Japan.

Examples of companies in which the fund has invested include PKSHA Technology Inc. in the AI field and Getaround, Inc. in the connected technology field. These companies are advancing research and development in cooperation with Toyota.







# Taking on the Future

## Solutions for the Problems Facing a Graying Society

Since the announcement of its development vision in 2007, Toyota has been applying its technology and know-how developed for industrial robots used in vehicle manufacturing to create partner robots that offer support for everyday living, working to bring these robots to market. So-called service robots for non-industrial use include robots designed to inspect infrastructure or provide emergency response. Toyota, however, is focusing on partner robots that work closely with people to provide support for living. Japan is rapidly graying, and its working-age population is decreasing. Because of these shifts, the burden on the working-age population of supporting the elderly is forecast to balloon to approximately three times the 2000 level by 2050. Toyota aims to use partner robots to instead keep this burden at around the 2000 level.

Under its vision for partner robot technology, “freedom of mobility for all, and the joy of self-reliance,” Toyota is working to bring products to market in the four main areas of Senior Life Support, Welfare Support, Independence Support, and Medical Support.

### Focusing First on Needs Created by the Low Birth Rate and Graying Population

#### Senior Life Support

Toyota is developing the Winglet, a personal mobility robot ridden while standing that facilitates seamless travel indoors and out, so that seniors can easily leave home with safety and peace of mind. The Winglet is now undergoing pilot testing on public roads.



Winglet

#### Welfare Support



Conversation robot, Pocobee

The patient transfer assist robot is being developed to reduce the burden on caregivers at elderly care facilities and elsewhere by helping transfer individuals who cannot move unassisted from, for example, a bed to a wheelchair.

Conversation robots are being developed to help prevent the onset and progression of dementia and reduce the burden on caregivers in light of the forecast increase in Japan's number of individuals with dementia and decrease in the working-age population.

#### Independence Support

The human support robot (HSR) offers such functions as picking up and fetching objects and is being tested for use in areas that include preventing the need for nursing care, health management and assistance with housework. This robot is being provided to universities and other research institutions as a platform in order to foster a development community and accelerate development and testing through open innovation.



HSR

The HSR was selected as the standard platform in the “@HOME” division for RoboCup2017 Nagoya Japan and as the platform robot for the World Robot Summit 2020 Partner Robot Challenge (a competition centered on uses for robots in the home).

#### Medical Support



Welwalk WW-1000

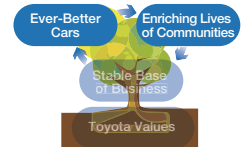
In autumn 2017, Toyota will commence the rental of the Welwalk WW-1000, a rehabilitation robot designed to aid in the gait training of patients with lower limb paralysis due to stroke or other factors.

The Welwalk WW-1000 comes with a range of rehabilitation support functions based on motor learning theory, including the ability to adjust the difficulty level of gait training to suit the patient and to provide feedback about the patient's gait characteristics.

### Commercialization Schedule and Development Status

	2017	Approx. 2020	Target areas
Gait training robot	The rehabilitation robot Welwalk WW-1000 received medical device certification in November 2016. Rental of the robot will begin in autumn 2017.		Senior Life Support, Medical Support
Conversation robot	The robot is being tested at the National Center for Geriatrics and Gerontology with the aim of helping prevent the onset and progression of dementia, and we are working to quickly bring it to market.		Medical Support, Welfare Support
Standing personal mobility robot	We are testing the robots at test-ride events in retail facilities and on public roads as we work with the police and government to expand areas where they can be used.		Senior Life Support
Balance training assist robot	The robot is in use at 21 medical institutions across Japan for clinical research. We are incorporating feedback from doctors, physical therapists and other users as we work to bring the product to market.		Medical Support
Human support robot (HSR)	We are creating a development community based on open innovation to advance technological development and testing aimed at commercialization.		Independence Support
Patient transfer assist robot	We are implementing a development and testing cycle to create an easier to use device and bring the product to market		Welfare Support
	Development	Pilot testing	Commercialization





# Toyota Environmental Challenge 2050



Toyota has long carried out a wide range of initiatives aimed at addressing a host of mounting environmental problems, including extreme weather phenomena attributable to greenhouse gases, biodiversity loss due to development, and water shortages due to population growth.

Toyota announced the Toyota Environmental Challenge 2050 in October 2015. In addition to continuing efforts to reduce the environmental burden attributable to automobiles to zero, we have set ourselves six challenges aimed at helping to build a sustainable world through initiatives that will positively impact the earth and society.



## 0 Challenge of Achieving Zero



### New Vehicle Zero CO<sub>2</sub> Emissions Challenge

**Target** Reduce global average new vehicle CO<sub>2</sub> emissions by 90% from Toyota's 2010 global level

#### Actions

Further popularize next-generation vehicles to save energy and use diverse fuels

- Further popularize HVs and PHVs globally
- Further popularize zero emission vehicles such as FCVs and EVs<sup>\*1</sup>

<sup>\*1</sup> Zero emissions: The elimination of all harmful exhaust gases; in recent years, this term has been used to refer particularly to automobiles that emit no CO<sub>2</sub> whatsoever, such as EVs and FCVs. More broadly, the term encompasses efforts to completely eliminate waste that must be incinerated or put in landfills for final disposal.



### Life Cycle Zero CO<sub>2</sub> Emissions Challenge

**Target** Completely eliminate CO<sub>2</sub> emissions from the entire vehicle life cycle

#### Actions

Reduce CO<sub>2</sub> emissions from the entire life cycle, from materials, parts, and vehicle production to driving and disposal

- Reduce CO<sub>2</sub> emissions during material production by developing and adopting more low CO<sub>2</sub> emission materials
- Reduce environmental impact by adopting more recycled materials



### Plant Zero CO<sub>2</sub> Emissions Challenge

**Target** Achieve zero CO<sub>2</sub> emissions at all plants by 2050

#### Actions

Introduce and develop low CO<sub>2</sub> technologies, implement daily *Kaizen*, and promote the use of renewable energy and hydrogen

- Reduce energy use to one third by simplifying and streamlining production processes and implementing innovative energy saving
- Use renewable energy, including wind power produced on-site at our Tahara Plant by around 2020

## ✕ + Net Positive Impact Challenge



### Challenge of Minimizing and Optimizing Water Usage

**Target** Enact effective wastewater management and minimize water consumption based on individual local situations

#### Actions

Reduce water consumption in existing manufacturing processes, introduce technologies that reduce industrial water consumption through rainwater use, and improve water recycling rates

- Manage wastewater quality by complying with strict standards, improving the local environment by returning clean water



### Challenge of Establishing a Recycling-based Society and Systems

**Target** Promote global rollout of End-of-life vehicle treatment and recycling technologies developed in Japan

#### Actions

Establish a recycling-based society with four key areas:

- (1) utilizing eco-friendly materials;
- (2) using parts for longer;
- (3) developing recycling technologies;
- (4) manufacturing vehicles from End-of-life vehicles

Two global rollout projects started from 2016:

- 1) Toyota Global 100 Dismantlers Project
- 2) Toyota Global Car-to-Car Recycle Project



### Challenge of Establishing a Future Society in Harmony with Nature

**Target** Promote global rollout of nature conservation activities beyond the Toyota Group and its business partners

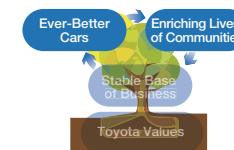
#### Actions

Expand Toyota's long-standing nature conservation activities in the areas of forestry, environmental grants, and environmental education

The following three future-oriented projects started from 2016 to share our know-how and experience gained from these environmental activities

- 1) Connecting communities: Toyota Green Wave Project
- 2) Connecting with the world: Toyota Today for Tomorrow Project
- 3) Connecting to the future: Toyota ESD<sup>\*2</sup> Project

<sup>\*2</sup> Education for Sustainable Development



# Toyota Environmental Challenge 2050

## Key Fiscal 2017 Initiatives under Toyota Environmental Challenge 2050

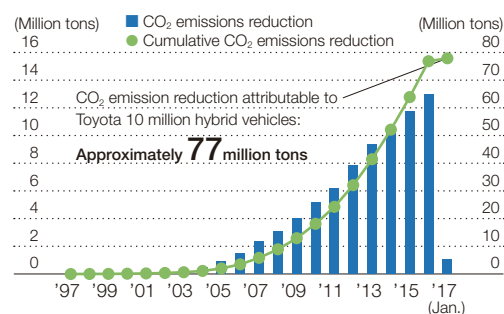
### CHALLENGE 1 New Vehicle Zero CO<sub>2</sub> Emissions Challenge

#### Cumulative Hybrid Vehicle Sales Surpass 10 Million

Toyota places top priority on environmental initiatives. Aware that eco-friendly vehicles can best help protect the environment if they are in widespread use, we have been working to promote the spread of hybrid vehicles (HVs). Toyota released the Coaster Hybrid EV in August 1997 and in December of the same year released the Prius, the world's first mass-produced HV. Since then, Toyota's HVs have enjoyed the support of customers around the world, and in January 2017 Toyota's cumulative HV sales surpassed 10 million vehicles.

The business environment surrounding eco-friendly cars has changed greatly in the 20 years since Toyota introduced HVs to the world. Environmental performance has come to be one of the standards by which customers choose their cars, and the increasing number of companies developing and releasing HVs has firmly established HVs as an important vehicle category. With customers around the world increasingly choosing HVs and other fuel-efficient vehicles, the automotive industry has been better able to contribute to solving environmental problems.

### CO<sub>2</sub> Emissions Reduction Effects of Toyota Hybrid Vehicles (Toyota Calculations)



### Hybrid Vehicles: Reducing CO<sub>2</sub> Emissions

Toyota calculates that the 10 million Toyota HVs sold as of January 31, 2017 have resulted in an approximately 77 million ton reduction in CO<sub>2</sub> emissions compared with what would have been emitted by gasoline-powered vehicles of the same class (in terms of size and horsepower). By the same comparison, these 10 million vehicles represent a savings of approximately 29 million kiloliters in gasoline.

### Toyota's Mainstay Next-Generation Eco-Friendly Vehicle: The Prius PHV

To further reduce CO<sub>2</sub> emissions, Toyota is promoting energy savings by focusing on the effective use of the finite supply of fossil fuels while also accelerating the adoption of other, diverse fuels, including the use of hydrogen and electric power. Specifically, HVs represent Toyota's key environmental technologies for saving energy, while fuel cell vehicles (FCVs) and electric vehicles (EVs) represent key environmental technologies related to using diverse fuels. Currently, plug-in hybrid vehicles (PHVs), combining the best aspects of HVs and EVs, are the Toyota vehicles best able to contribute to the environment.

Toyota positions the Prius PHV as the mainstay next-generation eco car to succeed HVs. In February 2017 a significant step forward was marked with the launch of the second-generation Prius PHV. With a higher capacity battery, the latest Prius PHV boasts an EV-mode cruising range of 68.2 km and, when



Prius PHV

running as an HV, achieves fuel efficiency of 37.2 km/l, equal to that of the fourth-generation Prius.\* Furthermore, the new Prius PHV features a solar charging system, the first ever on a mass-produced vehicle, that is capable of generating enough electricity per day to drive the car up to 6.1 km.

\* Excluding A grade models (JC08 test cycle fuel efficiency values)

### CHALLENGE 4 Challenge of Minimizing and Optimizing Water Usage

#### The Toyota Water Environment Policy

Making cars requires a great deal of water. Toyota is working to minimize its impact on the natural aquatic

environment in terms of both input, by rigorously reducing the amount of water it uses, and output, by rigorously cleaning water it has used.

While the specific issues and ways of addressing them vary by region, Toyota has created the Toyota Water Environment Policy to help it accomplish the challenge it has set itself with regard to the aquatic environment.

The Water Environment Policy is composed of a Basic Stance, the Challenge of Minimizing and Optimizing Water Usage, and Three Directions for Initiatives. By carrying out the policy, we aim to help maintain rich aquatic environments.

#### Toyota Water Environment Policy

Toyota prioritizes the sustainability of water resources and aims to create an affluent society to ensure that sound aquatic environments can be shared by future generations.

#### Challenge of Minimizing and Optimizing Water Usage

##### Rigorous reduction of water consumption

Minimize water intake at each factory and utilize rainwater to minimize impact on local water sources



##### Being the best factory in the region to contribute to the whole community's prosperity



##### Rigorous cleaning of all water before discharge

Make a positive impact on the environment by making wastewater cleaner than the body into which it is discharged



#### Three Directions for Initiatives

##### Pursuit of Technology

We will pursue technological possibilities and rigorously make water resource use more efficient.

##### Operations Rooted in Communities

We will implement ongoing measures to improve aquatic environments, conscious that water is an asset that belongs to its locality.

##### Coordination with Society

We will actively communicate and disclose information to promote coordination and cooperation with stakeholders.

### CHALLENGE 6 Challenge of Establishing a Future Society in Harmony with Nature

#### Five-Year Partnership with WWF

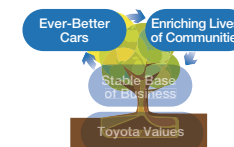
In July 2016, Toyota and the World Wide Fund for Nature (WWF) began a five-year partnership aimed at accelerating the globe's transition to sustainability. Toyota is the first car company and the first Japanese company to sign a Global Corporate Partnership agreement with WWF.

To help conserve biodiversity under the partnership, in 2016 Toyota donated US\$1 million and began offering other forms of support to the Living Asian Forest Project. The Living Asian Forest Project will reinforce existing WWF initiatives to conserve tropical rainforests and biodiversity in Southeast Asia and help develop new conservation initiatives.



Environmental Report 2017





## Aiming to Be the Best in Town

Based on a philosophy of contributing to society through the manufacture of automobiles, Toyota endeavors to proactively contribute to sustainable development in harmony with society and the earth through all its business activities in countries and regions around the world.

Toyota currently faces a business environment on the verge of tremendous change. Given this, we believe that in the coming years, aiming to be the best company in town, even more than being global or the best company in the world, will be more important than ever before.

We aim to make ever-better cars in order to enrich customers' lives in the regions and countries where we operate based on relationships of sincerity and respect. This means maintaining and further developing sound relationships with increasingly diverse business partners and local communities through fair and open communication. We believe that by doing so, we can become the most trusted, most loved company in every town where we have the privilege of doing business.

In line with this approach, we are advancing a variety of initiatives to help address social issues confronting the regions and countries in which we operate.

Toyota will continue to use the technologies and know-how it has built up in car manufacturing to contribute to local prosperity and contribute to "enriching lives of communities" as it aims to always be the best company in town.

### The Toyota Mobility Foundation: Supporting Ideas and Initiatives to Enrich Mobility

Established by Toyota in August 2014, the Toyota Mobility Foundation (TMF) aims to help realize a prosperous mobility society and eliminate disparities in mobility.

TMF focuses on bringing together Toyota's know-how and resources and the outstanding vision and experience of like-minded partners to create innovative technologies and systems with the potential to change the world, looking to share the fruits of these efforts with society at large.

As part of these efforts, TMF supports initiatives to provide more people with enhanced freedom of movement by, for example, diversifying modes of transportation to ease and prevent traffic congestion and developing vehicles and systems to help solve mobility

challenges facing seniors living in remote mountainous areas. In addition, in July 2017, TMF turned its attention to addressing energy problems, establishing a research program to support innovative research aimed at creating a hydrogen society, and began soliciting research proposals. TMF plans to first narrow down candidate research themes and then collect information on universities, research institutions, and NPOs working in areas related to said themes before developing proposals with potential partner organizations. The proposals that TMF will support will ultimately be selected by TMF's Board of Directors, with input from external experts on their practicability as well as legal and financial considerations.

Now, three years after its founding, TMF is shifting its focus to creating a better future, working to find innovative technologies and ideas while leveraging the lessons learned from problem-solving initiatives undertaken to date.



Toyota Mobility Foundation

#### TMF's Projects

Ueyama, Mimasaka City, Okayama, Japan	
Sustainable personal mobility model for remote mountainous areas	
Period	Jan. 2016–Sep. 2019
Grant recipients	Research institute for sustainable rural villages (NPO) Aida Ueyama Tanadadan (NPO)
Grant amount	Approx. ¥220 million

Asuke, Toyota City, Aichi, Japan	
Sustainable personal mobility model for remote mountainous areas	
Period	Apr. 2016–Mar. 2019
Grant recipients	Nagoya University, University of Tokyo
Grant amount	Approx. ¥360 million

Bengaluru, India	
Improving subway access (first- and last-mile connectivity)	
Period	Dec. 2016–Mar. 2018
Grant recipients	World Resources Institute
Grant amount	Approx. ¥33 million

Bangkok, Thailand	
Traffic congestion mitigation	
Period	Apr. 2015–Mar. 2017
Grant recipients	Chulalongkorn University
Grant amount	Approx. ¥400 million

Da Nang, Vietnam	
Traffic congestion prevention and mitigation	
Period	Apr. 2015–Apr. 2019
Grant recipients	Danang People's Committee
Grant amount	Approx. ¥360 million



### Projects Bangkok, Thailand Traffic Congestion Mitigation Project in Bangkok Completed

TMF's inaugural project, launched in April 2015 and aimed at mitigating traffic congestion in Bangkok, Thailand, was completed in March 2017.

The project was aimed at controlling traffic volume and improving traffic flow in Bangkok's Sathorn District, where congestion is especially severe, through a range of measures implemented in cooperation with private companies, the government and academia, including Chulalongkorn University, the grant recipient. One of the main measures taken to control traffic volume was the creation of a park and ride system. Parking lots were set up near railway stations to encourage people travelling to the city center to transfer from private cars to public transportation. The program also provided shuttle bus service to two local schools to alleviate congestion caused by private cars dropping off and picking up students.

To improve traffic flow, the project identified traffic bottlenecks and worked to improve them. Implemented in close coordination with local police and transport operators, initiatives included measures to discourage drivers from unnecessarily stopping or changing lanes and the establishment of bus lanes.

The results of the project were used to formulate a roadmap for future cooperative initiatives encompassing companies, government, and academia aimed at alleviating traffic congestion. This roadmap was then proposed to the National Traffic Management Board, which serves as an advisory body to one of Thailand's deputy prime ministers. At a project closing event in April 2017, private, public, and academic participants agreed to continue working under government direction in accordance with the roadmap.

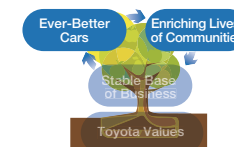


Project room at Chulalongkorn University



Park and ride





## Aiming to Be the Best in Town

### KURUMA-IKU (Nurture with Cars) Cultivates Children's Spirit of Inquiry and Creativity

As forms of value grow more complex, opportunities for learning that foster the creativity to develop new value and culture are more important than ever. At the same time, interest in cars has been falling markedly among young people, to the point that car ownership culture itself may disappear in the near future.

In light of this educational environment in Japan and the changes facing the automotive industry, in 2013, Toyota began a workshop program focused on future communities and mobility based on the concept of using cars as a learning material to foster a spirit of inquiry and creativity. Programs for children in elementary school and below include activities that prompt participants to think about the roles of cars in society using anthropomorphized cars and activities

in which they rediscover the value of mobility by attaching steering wheels to everyday objects. For junior high and high school students, we have developed and implemented programs including "3H Drive," in which participants plan a three-hour trip that exploits the features of their community and forms of mobility; "History Drive," in which they learn about the past and present to create the community and the mobility of the future; and "Ideas Drive," in which they walk through the community to identify challenges and imagine future forms of mobility. In the programs for junior high and high school students, in particular, we strive to provide opportunities for participants to think about their communities and their connections to society through the lens of mobility.

Going forward, we plan to expand these programs across Japan in collaboration with a wide range of partners under the name *KURUMA-IKU Lab* (Nurture with Cars Lab). We will involve communities, providing opportunities for children and adults to interact on a level

playing field and learn from one another, and for Toyota employees to gain new insights into the future of mobility along the way. We hope to expand the range of these initiatives, with an eye to implementing them globally.

 *KURUMA-IKU Lab* (Japanese language only)

### Taking Our Founding Principle of Social Contribution Global

Toyota has a long history of social contribution that traces back to the desire of Sakichi Toyoda—the father of Toyota Motor Corporation's founder, Kiichiro Toyoda—to support inventions that would enrich people's lives. Kiichiro and his team, who together built Toyota's automotive business, kept this spirit of social contribution alive after Sakichi's death, espousing the concepts of contributing to the development and welfare of the country and remembering to always be grateful. These concepts were eventually woven into the Five Main Principles of Toyoda, the Guiding Principles at Toyota and the Toyota Global Vision. In these various forms, this spirit of social contribution has been handed down to today.

In addition to contributions made through its businesses, Toyota is pursuing social contribution in three designated global priority fields: the environment, traffic safety, and education. We are also promoting activities in social, cultural and other fields to meet the social needs of specific countries and regions, utilizing our technologies, expertise, and other

resources to proactively advance initiatives.

Furthermore, Toyota strives to support volunteering and to sustain automotive and manufacturing cultures.

Specifically, in the area of the environment, Toyota actively provides environmental education, supports environmental programs, and undertakes greenification. As forests are an important basis of a sustainable society, Toyota carries out ongoing stewardship and preservation, based on appropriate management, of the woodlands that it owns. Toyota also implements environmental activities in and outside Japan with an emphasis on collaboration with local and regional communities, and its employees volunteer on their own to undertake regional environmental preservation.

In the area of traffic safety, Toyota carries out multifaceted activities focused on the three distinct pillars of people, cars, and the traffic environment with the aim of completely eliminating traffic casualties. As a part of these efforts, since the 1960s Toyota has been conducting activities targeting people—such as drivers and pedestrians—to raise awareness of traffic safety, and it implements a variety of programs for a wide range of people on an ongoing basis. In recent years, such programs have also been launched at overseas affiliates.

In the area of education, based on the principle that monozukuri is about developing people, Toyota implements occupational and educational support initiatives as well as activities designed to cultivate participants' sensibilities and convey the importance of *monozukuri* (manufacturing) in order to promote the development of the leaders of tomorrow worldwide.

 Social Contribution Activities



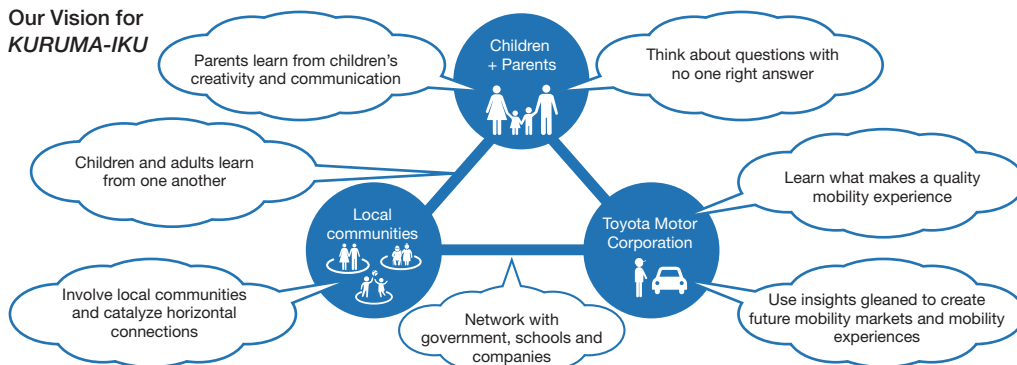
Program for children in elementary school and below  
Held so far in locations in Tokyo, Nagoya, Toyota, Hakodate, and Austria



Program for junior high and high school students  
Held so far in locations in Kanazawa, Onomichi, Kawasaki, Okayama, and Minami-Ise



### Our Vision for KURUMA-IKU



Hands-on nature program for local elementary school students (Japan)



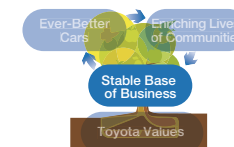
Support for free cleft palate surgery project (Venezuela)



White Road traffic safety program for children (Thailand)



Support for toilet construction and improving hygienic habits (India)



## Employees

Toyota prioritizes respect for people, aiming to provide employees with opportunities to make social contributions and realize self actualization through their work and to allow them to exercise their ability to think, create, and take action.

To achieve this goal, a relationship of mutual trust and mutual responsibility between labor and management is essential. In such a relationship, the company places the highest priority on ensuring stable employment for its employees and proactively strives to improve labor conditions, while employees do their utmost to enhance the prosperity of the company. This philosophy is shared by all Toyota affiliates around the world and is reflected and implemented in Toyota's management and policies.

Toyota believes that this approach leads not only to management that operates with respect for people, but to customer satisfaction and social contribution.

### Fundamental Approach regarding Human Resource Development

Toyota is committed to developing human resources in accordance with its philosophy that *monozukuri* (manufacturing) is about developing people. In order to sustain growth, it is important to strive toward achieving people-centric *monozukuri* and to utilize the wisdom of our people to make constant improvements.

Furthermore, in light of the globalization of Toyota's businesses amid the world's many cultures and customs, to make ever-better cars and carry out our Customer First policy, all employees must share certain values.

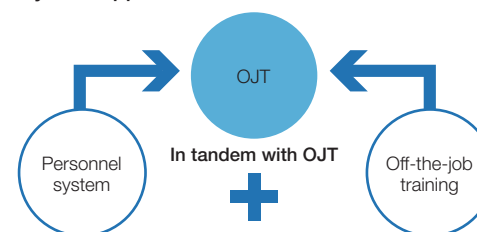
To this end, Toyota is implementing human resource development aimed at sustainable growth through a global educational program centered on the application of the Toyota Way. On-the-job training (OJT), a crucial part of developing and passing down Toyota's tradition of superior *monozukuri*, is the foundation of this program.



### On the Job Training Human Resource Development Rooted in Genchi Genbutsu

In line with Toyota's concept of *Genchi Genbutsu* (onsite, hands-on experience), we believe that the workplace is the basis for human resource development at Toyota. Being mentored by supervisors and senior colleagues and, in turn, mentoring subordinates and junior colleagues to build mutually beneficial learning relationships in the course of daily work

#### Toyota's Approach to OJT



(OJT) provide the basic experiences that drive professional growth. In addition, to supplement OJT, Toyota offers a variety of off-the-job training programs.

### Sharing the Values of the Toyota Way Globally

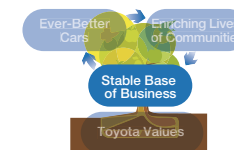
We have organized job skills and techniques into a framework that we call Global Content to help Toyota employees around the world understand and practice the Toyota Way as a shared set of values and ways of thinking.

Global Content is utilized by Toyota employees through both on- and off-the-job training in Japan and overseas. Providing a common language for talking about ways of working, the Global Content gives Toyota an advantage by providing a platform for employees around the world to come together to improve efficiency.

#### Global Content Overview

	Administrative and engineering employees	Shop floor employees
Managers	<b>Policy management</b> <ul style="list-style-type: none"> <li>Activities aimed at realizing <i>Kaizen</i> on a Company-wide scale</li> <li>Mechanisms to maximize overall output</li> </ul>	<b>Skills and roles of management and supervision</b> <ul style="list-style-type: none"> <li>Manager and supervisor skills for optimizing standard operations</li> <li>Knowledge about organizational and team operations gleaned from managing irregularities</li> </ul>
	<b>On-the-job development (OJD)</b> <ul style="list-style-type: none"> <li>A four-step method for human resource development through regular business activities and instruction</li> </ul>	
	<b>Toyota Management Training Program</b> <ul style="list-style-type: none"> <li>An overview of management roles at Toyota</li> <li>Measures to implement for effective workplace management</li> </ul>	
General employees	<b>Problem solving</b> <ul style="list-style-type: none"> <li>An eight-step method for identifying and solving problems (implementing the Toyota Way)</li> </ul>	<b>Problem solving</b> <ul style="list-style-type: none"> <li>Techniques for improving current conditions in order to realize ideal working conditions</li> </ul>
	<b>Ji Kotei-Kanketsu (built-in quality with ownership)</b> <ul style="list-style-type: none"> <li>A three-step method for building quality into processes</li> </ul>	
		<b>Production skills</b> <ul style="list-style-type: none"> <li>Knowledge regarding recognizing irregularities and key points in tasks</li> <li>Ability to correct irregularities</li> </ul>
	<b>Basic skills</b> Minimum skills necessary for production line work	
	<b>The Toyota Way</b> • Toyota's values • The foundation of all work	





# Employees

## Promoting Diversity and Inclusion

Toyota has positioned the promotion of diversity and inclusion in the workplace as an important management strategy. We are working to create workplaces where human resources with diverse abilities and values can thrive and each individual can achieve positive self actualization.

Diverse perspectives help to generate novel ideas and uncover problems. Toyota aims to use these contributions to help enhance its competitiveness and make ever-better cars.



## Work Style Reforms

Toyota is advancing work style reforms to improve productivity and support employees seeking to continue working while raising children or providing nursing care for a family member. In October 2016, we expanded our existing telecommuting system with the introduction of the Free Time & Location (FTL) system. By adopting more flexible work styles, Toyota aims to make the most of each individual's abilities and maximize results. While the previous telecommuting system was available only to employees with childcare or nursing care responsibilities, all employees that meet certain conditions can request the permission of their supervisors to use the FTL system. As of March 31, 2017, of the approximately 13,000 employees who qualify for the FTL system, approximately 2,300 are using it.

Over the next two years, Toyota plans to distribute dedicated computers for telecommuting to employees eligible to work from home. We have received a great deal of positive feedback from users of the program already, with employees commenting, for example, that the system has made them more aware of time and thus more efficient when working, and that they have more time to spend with family.

## Diversity Management

Toyota's employees in managerial positions are leading diversity management initiatives to create workplaces where diverse human resources can thrive. Toyota seeks to develop supervisors who successfully implement diversity management. We are working to develop supervisors who understand and support the values and career goals of subordinates, taking a flexible approach to management to produce results at the organizational level while also giving

ample consideration to the quality of the private lives of themselves and their subordinates.

To develop such supervisors, Toyota implemented a trial program in which 200 employees in managerial positions tried working from home. More than 90% of participants found that working from home was helpful and noticeably improved their productivity. These results are helping to foster a culture in which employees use the telecommuting programs available to them.

## Developing Executives Globally

The GLOBAL 21 program is aimed at developing executives globally. The program serves to enable outstanding human resources from around the world to obtain the skills and discernment expected of global-level Toyota executives and to fully realize their individual strengths in their respective roles. The program consists of the following three pillars.

### 1. Ensuring understanding of our management philosophy and the expectations of executives

We are applying the Toyota Way and Toyota Global Vision, incorporating them into global personnel evaluation systems and education.

### 2. Personnel management

We are unifying evaluation standards and processes globally to ensure fairness and consistency. Our main evaluation criteria are individuals' ability to set tasks, carry out tasks, manage their organization, and effectively utilize human resources as well as the level of trust and respect that others have for them. We assign and transfer human resources on a global basis, across countries, regions, and functions.

### 3. Development framework and education programs

We are allocating human resources and developing executives globally. Our development of human resources at overseas affiliates is based on education

conducted by affiliates in each region, with OJT at Toyota Motor Corporation (TMC) so that participants can learn Toyota-style ways of working. In addition, we are also implementing a program similar to GLOBAL 21 for employees of TMC.

## Localizing the Management of Overseas Affiliates

Taking a long-term perspective, Toyota seeks to localize the management of its overseas affiliates, with deciding what to do as the role of TMC in Japan and deciding how to do it the role of local affiliates.

In principle, chief officers and other executives responsible for operations in overseas regions are stationed in their respective regions as part of efforts to create a management system closely rooted in local communities.

We also actively hire and promote local human resources. As of July 2017, three of the Group's eight regional headquarters are led by non-Japanese chief officers, and TMC's top management includes seven non-Japanese nationals (of whom one is an Outside Member of the Board of Directors). Local employees hold 65.8% of Toyota's overseas executive positions.

### Overseas Executive Positions Held by Local Employees (%)

Fiscal year	2013	2014	2015	2016	2017
Local employees	60.1	64.7	62.9	62.6	65.8

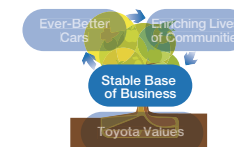
### Non-Japanese Executives in Charge of Operations in Overseas Regions

Region	Name	Title
North America Region	James E. Lentz	Senior Managing Officer
Europe Region	Johan van Zyl	Senior Managing Officer
Latin America & Caribbean Region	Steve St. Angelo	Senior Managing Officer



## Initiatives for Sustainable Growth

Corporate Philosophy Making Ever-better Cars (TNGA) Taking on the Future Toyota Environmental Challenge 2050 Aiming to Be the Best in Town  
Employees Corporate Governance Risk Management Compliance



## Employees

## Toyota's Work Style Innovation: Comments from the Field

Are We Falling Behind?  
The Realization  
That Propelled Us  
to Aim for the Top

Next-Generation Purchasing  
Team, Purchasing Group



In 2014, in line with President Toyoda's announcement of Toyota's "intentional pause," we began reforms. First, through comparisons with other companies, we identified Toyota's strengths and weaknesses. We found that, while Toyota's purchasing processes had been ahead of their time in 2000, they had not changed much since then. Specifically, we found weaknesses in horizontal global transactions and that Toyota was lagging behind its competitors in this area.

Our long history of diligently working to reduce costs in cooperation with suppliers as business partners is one of our unique strengths. While reducing prices from a *Genchi Genbutsu* (onsite, hands-on experience) perspective is the core of this work, when we closely examined buyers' workflows, we found that a great deal of time was tied up with paperwork before they even got to that stage.

To address this, we have been breaking down the entire division's work process flows, including those overseas, by degree of depth and detail, reorganizing them into new processes with the aim of globalizing purchasing operations. The realization that we were falling behind other companies propelled us forward, providing the urgency needed to tackle major reforms.

Rolling out TNGA  
Globally with Photos  
and Comments

MS General Assembly  
Engineering Division



Aiming to make ever-better cars and enhance competitiveness under the Toyota New Global Architecture (TNGA), we have been steadily switching over to new processes at our assembly plants around the world. The lead times required to get factories up and running have shrunk dramatically over the course of the TNGA roll out, and we are now working at a speed unprecedented in automobile manufacturing. We are striving to maximize efficiency as we set up the TNGA globally. This necessitates sharing information about problems and effective countermeasures found at the factories in Japan that switched over first in as close to real time as possible. If information about issues on the ground is shared only after things have settled down, it will be too late to prevent the same kinds of problems from cropping up elsewhere.

To deal with this, we set up a dedicated internal SNS for TNGA where we could post and share photos and video from security cameras with comments. This has enabled the sharing of information from the plants involved in the first wave of transition in Japan with those overseas in later waves as well as sharing between overseas plants. Furthermore, automatically sharing the information on the SNS with equipment specialists in Japan has helped us get expert comments and advice whenever needed. This system is the product of Toyota's corporate culture of helping those in trouble and offering mutual support, and we expect it to positively impact human resource development, as well.

Finding My Own  
Leadership Style by  
Balancing Work  
and Home

Natsumi Kakiuchi  
Engine Manufacturing  
Division 1, Kamigo Plant

I serve as a team leader for conveying operations on the engine production line. My husband, like me, works on the shop floor, and we have a 10-year-old at home. My husband and I strive to ensure our child isn't left alone, even when the two of us have back-to-back shifts on a two-shift schedule.

I think that my ability to communicate effectively with my colleagues to facilitate our work is a strength of mine. I wasn't always the leader type, though; those who knew me when I first came to Toyota might hardly recognize me now. When I became a parent, there were certain things that, for the sake of my child, I was determined not let slip, no matter what. I think that being a parent gave me that strength, which I am now able to apply at work. Still, juggling work and childcare really is hard. It has shown me, though, that with the right tweaks both at work and at home, anyone can become a leader. It's important to create an atmosphere in which everyone at work is supportive, even if, for example, someone suddenly has to take a day off. And in return, those juggling both work and home responsibilities will strive to do what they can, as best they can. I think that this kind of mutual understanding and support will help women and other employees juggling home responsibilities excel.

Finding New Ways to  
Work Thanks to  
Telecommuting

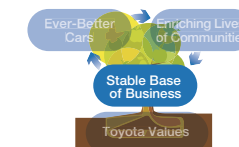
MS Product Planning Division  
Shinya Mori

I live with my wife, who has an office position, and our two year old. At work, I serve as the team leader of a cost planning team, and my wife and I both use the FTL\* system to balance childcare and work.

Everyone on my team, including those without children, uses the FTL system. I use the system to go home early, take care of childcare tasks, then work at home. To improve productivity by using time more effectively—one of the advantages of the FTL system—focusing on results at the team level is crucial. To that end, I think it's necessary to share common work practices so that anyone can tell where things stand, no matter where they are or when they check. The FTL system has been greatly beneficial, allowing me to maintain my output at work while increasing the time I spend with my family.

\* Free Time & Location: A new telecommuting program launched in October 2016





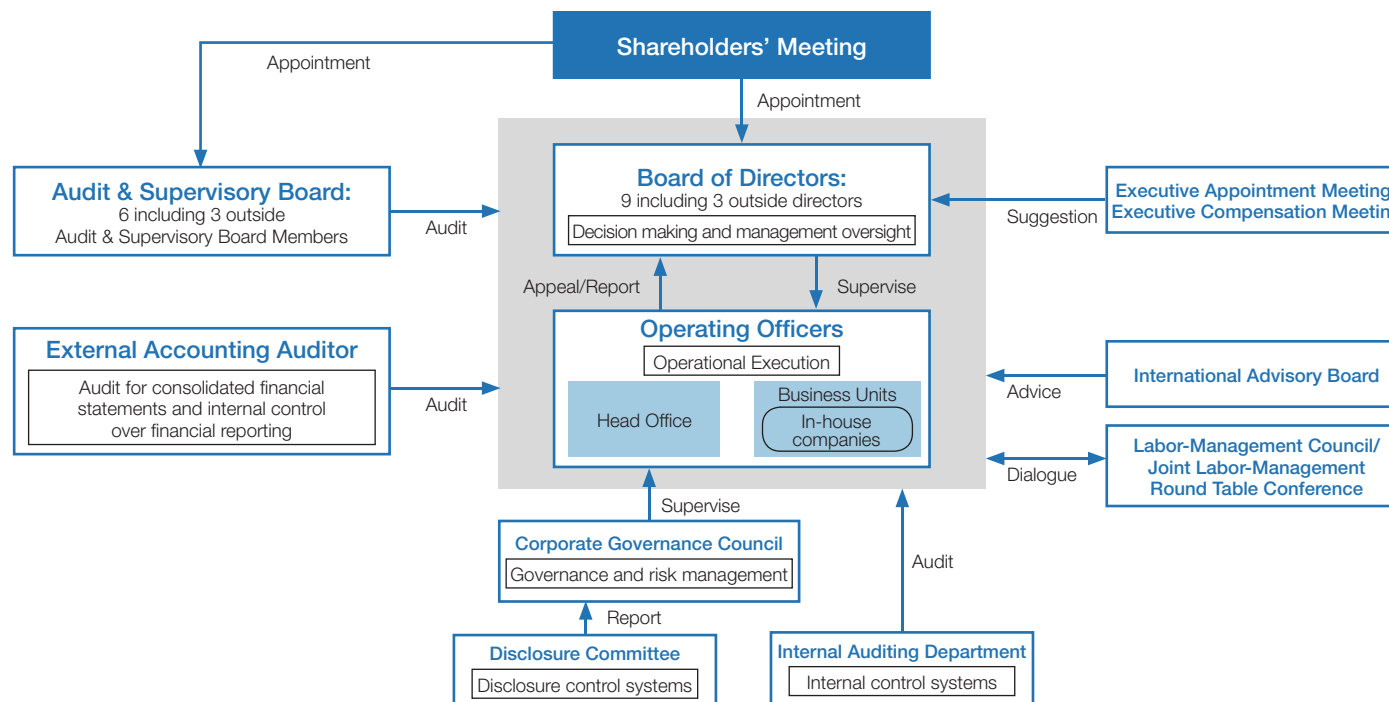
# Corporate Governance

## Fundamental Approach

Toyota regards sustainable growth and the stable, long-term enhancement of corporate value as essential management priorities. Building positive relationships with all stakeholders (including shareholders, customers, business partners, local communities, and employees) and consistently providing products that satisfy customers are key to addressing these priorities. To this end, Toyota constantly seeks to enhance corporate governance. Moreover, the Company complies with the general principles of the Corporate Governance Code promulgated in June 2015. The specifics of these efforts are discussed by the Corporate Governance Meeting and reported to the Board of Directors.

## Toyota's Corporate Governance (Emphasizing Frontline Operations + Multidirectional Monitoring)

Toyota is a company with an Audit & Supervisory Board. Three of the nine members of Toyota's Board of Directors are outside members, and three of the six members of its Audit & Supervisory Board are outside members. In addition to auditing carried out by the Audit & Supervisory Board and an external accounting auditor, Toyota incorporates the perspectives of diverse stakeholders, including outside experts, to deliberate on and monitor management and corporate conduct.



## Business Execution and Supervision

Toyota has established rules governing its Board of Directors that clearly lay out the matters to be discussed by and reported to the Board. In accordance with these rules, management execution is delegated to operating officers, helping to ensure rapid decision making and appropriate oversight.

With the aim of achieving the Toyota Global Vision, Toyota has been implementing ongoing revisions in its operational framework in order to quickly respond to the unprecedented rapid changes occurring in the

external environment. Toyota introduced region-based management in 2011, followed by the business unit system in 2013 and the in-house company system in 2016.

[More details](#) Business Execution Framework, p. 8

Under the in-house company system, product-based in-house companies handle integrated operations spanning from product development to production. These companies work with the Business Planning & Operation Unit to promote the development of ever-better cars from the customer's

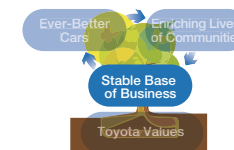
viewpoint (the existing region-based business units were reorganized into this unit in April 2017).

In April 2017, to accelerate decision-making and business execution, Toyota more clearly delineated the roles of the Members of the Board of Directors as decision making and oversight, and the role of executives as business execution.

The Corporate Planning Meeting operates under the Board of Directors. This meeting considers growth strategies, factoring in the positive impacts that Toyota's operations have on various social issues, and works with management to promote CSR and enhance corporate value on a Company-wide basis.

The Corporate Governance Meeting provides operational oversight by deliberating on issues related to the governance structure arising in the course of the implementation of these growth strategies.

Toyota has also established an International Advisory Board, comprising experts from around the world. The board provides advice on management issues from a global perspective as needed. Toyota also deliberates on and monitors management and corporate conduct from the diverse stakeholder perspectives provided by a wide variety of meetings, such as the Labor-Management Council/Joint Labor-Management Round Table Conference.



# Corporate Governance

## Board of Directors

Toyota's Board of Directors comprises nine members, three of whom are outside members. The Members of the Board of Directors are selected based on comprehensive consideration of suitability with the aim of ensuring prompt, appropriate decision making and appointing the right person to the right position. Toyota believes that it is crucial to appoint individuals who comprehend and are capable of putting into practice its core concepts of making ever-better cars and *Genchi Genbutsu* (onsite, hands-on experience). Moreover, these individuals must be able to contribute to decision making aimed at sustainable growth into the future. Toyota's Executive Appointment Meeting, half the members of which are Outside Members of the Board of Directors, makes recommendations to the Board of Directors regarding such appointments. In order to ensure that outside perspectives are adequately reflected in management decision making, the Company has three Outside Members of the Board of Directors, all of whom are registered as independent officers with the relevant financial instruments exchanges. When selecting Outside Directors who will serve as independent officers, Toyota considers candidates in line with the requirements set forth in the Companies Act and the standards of independence established by the relevant financial instruments exchanges. Toyota's Outside Members of the Board of Directors draw on their broad experience and insight, including their respective fields of expertise, to inform decision making from a perspective that is independent of business execution.

## Audit & Supervisory Board

Toyota has adopted an Audit & Supervisory Board system. The six Audit & Supervisory Board Members (including three outside members) play a key role in Toyota's corporate governance by undertaking audits in line with the audit policies and plans established by said board. Toyota's appointments to the Audit & Supervisory Board are based on the belief that candidates must offer broad-ranging experience and insight, particularly in their respective fields of expertise, and be able to audit business execution and advise management from a fair and neutral standpoint. Toyota's Executive Appointment Meeting, half the members of which are Outside Members of the Board of Directors, makes recommendations to the Audit & Supervisory Board regarding such appointments. Three individuals, all of whom are registered as independent officers with the relevant financial instruments exchanges, have been appointed as Outside Audit & Supervisory Board Members. When selecting Outside Audit & Supervisory Board Members, Toyota considers candidates in line with the requirements set forth in the Companies Act as well as the standards of independence established by the relevant financial instruments exchanges.

## Remuneration of Members of the Board of Directors and Audit & Supervisory Board Members

Basic remuneration and bonuses for Members of the Board of Directors are effectively linked to corporate performance while reflecting individual job responsibilities and performance. Remuneration standards in each member's home country are also taken into account when determining remuneration amounts and methods. Bonuses are paid based on the

relevant fiscal year's consolidated operating income, comprehensively taking into account dividends, the levels of bonuses for employees, trends at other companies, medium- to long-term business performance and past remuneration. Because the role of Outside Members of the Board of Directors includes monitoring and supervising management from an independent standpoint, they are not paid bonuses. Director remuneration and bonuses are decided by the Board of Directors with reference to proposals submitted by the Executive Remuneration Meeting, half the members of which are Outside Members of the Board of Directors.

Remuneration for Audit & Supervisory Board Members consists only of fixed basic payments and does not include bonuses. As a result, this remuneration is not readily impacted by business performance, helping to ensure independence from management. Remuneration for Audit & Supervisory Board Members is determined by the Audit & Supervisory Board within the scope determined by resolution of the Shareholders' Meeting.

## Analysis and Evaluation of the Effectiveness of the Board of Directors

Based on instruction given by the Chairman of the Board of Directors, the Secretariat of the Board of Directors conducts quantitative analyses of the execution of the Board of Directors' duties, followed by a survey of the members of the Board of Directors and Audit & Supervisory Board on the execution of such duties and its oversight. Furthermore, based on the results of this survey, the secretariat conducts individual interviews with the Outside Members of the Board of Directors and the Outside Members of the Audit & Supervisory Board. The Secretariat of the Board of Directors compiles the results of these efforts and presents them to the Chairman of the Board of

Directors, after which they are reported to and discussed by the Board of Directors. In fiscal 2017, these evaluations found that the Board was effective. The insights gleaned from these evaluations regarding information sharing and administration are being used in fiscal 2018 to further improve effectiveness.

## Fundamental Approach to and Maintenance of Internal Control Systems

### Basic Stance on System for Ensuring Appropriate Business Operations

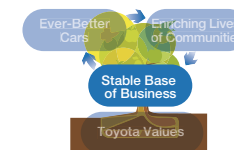
Toyota and its subsidiaries work to foster a sound corporate culture based on the Guiding Principles at Toyota and the Toyota Code of Conduct. Toyota integrates the principles of problem identification and *Kaizen* into its operational processes and continuously strives to develop employees who will put these principles into practice.

### System to Ensure Appropriate Operations

Toyota endeavors to maintain and properly operate a system for ensuring the appropriateness of business operations as a corporate group in accordance with its Basic Policies on Establishing Internal Controls. Each fiscal year, Toyota inspects the maintenance and implementation of internal controls to confirm that the organizational units responsible for implementing internal controls are functioning autonomously and enhancing said controls as necessary. The findings of these inspections are reviewed by the Corporate Governance Meeting and Board of Directors.

For further information on Toyota's fundamental approach to internal control systems and the maintenance of such systems, please refer to "IV. Basic Approach to Internal Control System and its Development" in the Corporate Governance Report.





# Corporate Governance

## Board of Directors and Audit & Supervisory Board Members (As of June 14, 2017)

### Chairman of the Board of Directors



Takeshi Uchiyamada

### Vice Chairman of the Board of Directors



Shigeru Hayakawa

### President, Member of the Board of Directors



Akio Toyoda

### Members of the Board of Directors



Didier Leroy



Shigeki Terashi



Osamu Nagata



Ikuo Uno  
Outside and Independent Director



Haruhiko Kato  
Outside and Independent Director



Mark T. Hogan  
Outside and Independent Director

### Full-Time Audit & Supervisory Board Members



Masaki Nakatsugawa



Masahiro Kato



Yoshiyuki Kagawa

### Outside Audit & Supervisory Board Members



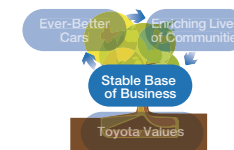
Yoko Wake  
Outside and Independent Member



Teisuke Kitayama  
Outside and Independent Member



Hiroshi Ozu  
Outside and Independent Member



## Risk Management

### Fundamental Approach

Toyota has been working to reinforce its risk management systems since the series of recall issues in 2010. In June 2010, Toyota established the Risk Management Committee (now the Corporate Governance Meeting) and appointed risk managers for the global group and each business division as part of global measures to prevent and mitigate the impact of risks that could arise in the course of business activities.

### Organization and Structure

#### Appointment of Risk Management Personnel

Toyota has appointed a global chief risk officer (CRO) to head global risk management and established a structure under the global CRO to monitor risk on a daily basis. This structure enables the Company to respond immediately in the event of an emergency.

Beneath the global CRO are regional CROs appointed to oversee specific regions, and each region has its own risk management structure.

Within the head office, risk management is assigned by function to chief officers and risk managers, while in each in-house company, risk management is assigned to the company president and company risk managers. These individuals coordinate and cooperate with the regional head offices.

#### Corporate Governance Meeting


Toyota established the Corporate Governance Meeting in April 2015 as a business supervisory body. The meeting discusses the governance structure with the goal of ensuring the success of growth and business strategies in light of a wide range of social challenges. Two of the yearly meetings of the Corporate Governance Meeting are attended by the regional CROs, all chief officers and all in-house company presidents. This practice is intended to aid in the initiation of action to prevent risks. Meeting participants comprehensively identify risks to business

activities, review and report on major current risk items, and review the status of improvements and reinforcements to each region's risk management system. Reports are also made on the status of initiatives to address imminent and serious risks with global implications. In these ways, the meeting endeavors to manage and prevent risk.

In addition, the meeting advances special measures related to information security and business continuity management (BCM), areas in which the level of risk facing corporations has been growing in recent years.

Risks related to Toyota's businesses and other factors that could significantly impact the decisions of investors are listed in Toyota's Form 20-F under the categories Industry and Business Risks; Financial Market and Economic Risks; and Regulatory, Legal, Political, and Other Risks.

 Risk Management  
(Sustainability Data Book 2017, p. 133)

 Form 20-F for the year ended March 31, 2017

### Business and Other Risks

#### Industry and Business Risks

- The worldwide automotive market is highly competitive
- The worldwide automotive industry is highly volatile
- Toyota's future success depends on its ability to offer new, innovative and competitively priced products that meet customer demand on a timely basis
- Toyota's ability to market and distribute effectively is an integral part of Toyota's successful sales
- Toyota's success is significantly impacted by its ability to maintain and develop its brand image
- Toyota relies on suppliers for the provision of certain supplies, including parts, components, and raw materials
- The worldwide financial services industry is highly competitive
- Toyota's operations and vehicles rely on various digital and information technologies

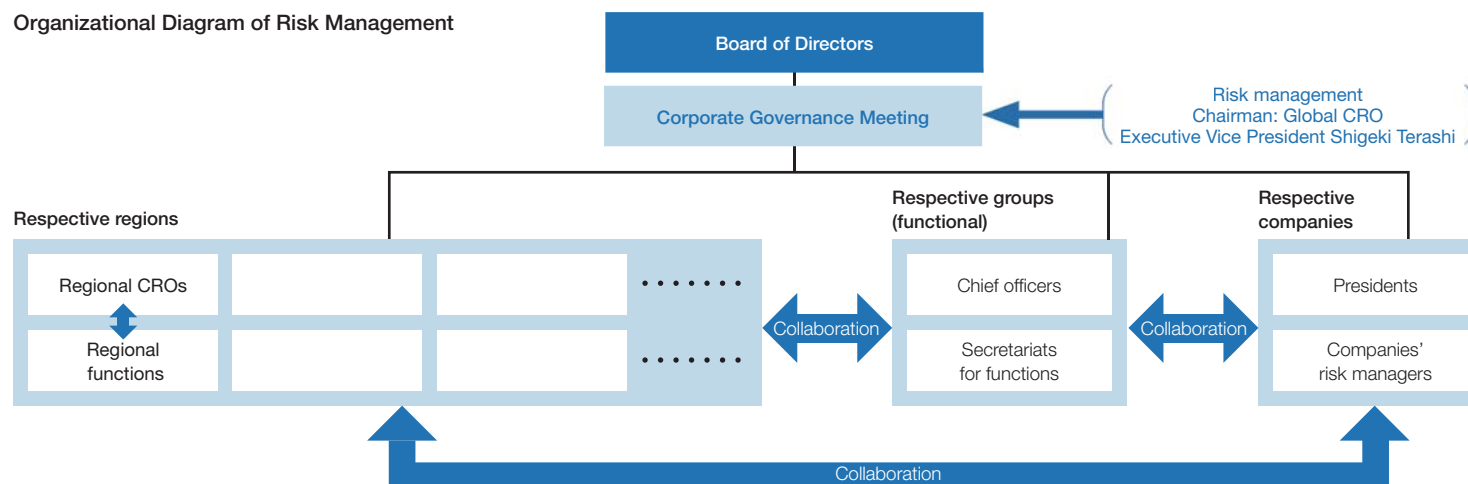
#### Financial Market and Economic Risks

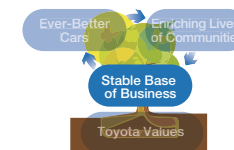
- Toyota's operations are subject to currency and interest rate fluctuations
- High prices of raw materials and strong pressure on Toyota's suppliers could negatively impact Toyota's profitability
- A downturn in the financial markets could adversely affect Toyota's ability to raise capital

#### Regulatory, Legal, Political, and Other Risks

- The automotive industry is subject to various governmental regulations
- Toyota may become subject to various legal proceedings
- Toyota may be adversely affected by natural calamities, political and economic instability, fuel shortages or interruptions in social infrastructure, wars, terrorism, and labor strikes

### Organizational Diagram of Risk Management





# Compliance

## Fundamental Approach

The Guiding Principles at Toyota state that Toyota shall “honor the language and spirit of the law of every nation and undertake open and fair business activities to be a good corporate citizen of the world.” Toyota believes that by adhering to this principle in its actions, it can fulfill its corporate social responsibility and ensure compliance.

In accordance with its basic internal control policies, Toyota promotes initiatives centered on the construction of frameworks, including the adoption and enforcement of the Code of Conduct as well as education and other means of human resource development. Toyota has also established consultation hotlines; any concerns that are reported to said hotlines are assiduously addressed to ensure that no potential problem is overlooked.

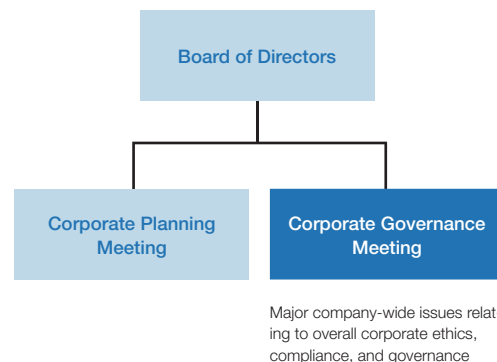
## Toyota Code of Conduct

The Toyota Code of Conduct (adopted in 1998 and revised in March 2006) outlines the basic frame of mind that all Toyota personnel should adopt and sets forth concrete guidelines to assist them in upholding the Guiding Principles at Toyota and doing their part to ensure that Toyota carries out its corporate social responsibility. A booklet containing the Toyota Code of Conduct is distributed to all employees to better enable them to put the code into practice in their own lives both at work and in the community.

## Organization and Structure

Toyota established the Corporate Governance Meeting in April 2015 as a business supervisory body. The meeting discusses governance structure with the goal of ensuring the success of growth and business strategies in light of a wide range of social challenges. Matters related to compliance are discussed by this meeting.

### Organizational Diagram



## Checks to Enhance Compliance

In fiscal 2009, Toyota began implementing internal checks to enhance its compliance structure. In fiscal 2010 these checks were extended to subsidiaries in and outside Japan. Since then, these checks have been carried out and improved upon every year. Results are reported to the Corporate Governance

Meeting and used as a basis for further improvement. By incorporating improvement initiatives into each year's action plans, we ensure that these checks lead to ongoing positive action.

Moreover, subsidiaries are visited in order to keep track of their compliance efforts and provide them support as needed.

### Activity Diagram

