

Fundamental Approach Toward the Environment GRI 102-16, 103-2

In order to contribute to the sustainable development of society and the world through its business activities while cooperating with global society, Toyota has been conducting continuous environmental initiatives since the 1960s. We aim to build a corporate group that is admired and trusted by society through ensuring that all employees, including those at consolidated subsidiaries, recognize our sustainable policies.

In the area of environment, we established the Toyota Earth Charter in 1992 (revised in 2000). Based on this, we formulated our long-term initiatives for the global environment by 2050 as the Toyota Environmental Challenge 2050, in 2015, when the Paris Agreement was adopted at COP 21*. We are advancing various initiatives centered on this.

* The 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change

 [Vision & Philosophy](#)  [Toyota Environmental Challenge 2050 p. 11](#)

Toyota Earth Charter

I. Basic Policy

- 1. Contribution toward a prosperous 21st century society**
Contribute toward a prosperous 21st century society. Aim for growth that is in harmony with the environment and set as a challenge the achievement of zero emissions throughout all areas of business activities.
- 2. Pursuit of environmental technologies**
Pursue all possible environmental technologies, developing and establishing new technologies to enable the environment and economy to coexist harmoniously.
- 3. Voluntary actions**
Develop a voluntary improvement plan, based on thorough preventive measures and compliance with laws, which addresses environmental issues on the global, national and regional scales and undertake continuous implementation.
- 4. Working in cooperation with society**
Build close and cooperative relationships with a wide spectrum of individuals and organizations involved in environmental preservation, including governments, local municipalities, affiliated companies and industries.

II. Action Guidelines

- 1. Always be concerned about the environment**
Take on the challenge of achieving zero emissions at all stages, i.e., production, utilization and disposal.
 - (1) Develop and provide products with top-level environmental performance
 - (2) Pursue production activities that do not generate waste
 - (3) Implement thorough preventive measures
 - (4) Promote businesses that contribute toward environmental improvement
- 2. Business partners are partners in creating a better environment**
Cooperate with affiliated companies.
- 3. As a member of society**
Actively participate in social actions.
 - (1) Participate in the creation of a recycling-based society
 - (2) Support government environmental policies
 - (3) Contribute to non-profit activities
- 4. Toward better understanding**
Actively disclose information and promote environmental awareness.

III. Organization in Charge

Promotion by the Sustainability Meeting which consists of top management

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| Strategy and Management | Life Cycle Zero CO ₂ Emissions Challenge | New Vehicle Zero CO ₂ Emissions Challenge | Plant Zero CO ₂ Emissions Challenge | Challenge of Minimizing and Optimizing Water Usage | Challenge of Establishing a Recycling-based Society and Systems | Challenge of Establishing a Future Society in Harmony with Nature | Environmental Data | Results of the Sixth Toyota Environmental Action Plan (Detail) |
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<Toyota's Commitment>

Toyota Environmental Challenge 2050

TOYOTA ENVIRONMENTAL CHALLENGE 2050

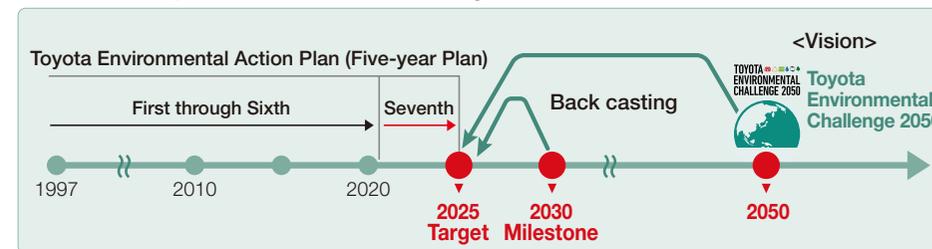
TCFD Strategies a GRI 102-11

Six Challenges

Toyota has been continuously following trends and customers' opinions and considering what issues should be focused, and working on environmental issues with new ideas and technologies in anticipation of future issues. However, global environmental issues such as climate change, water shortages, resource depletion and loss of biodiversity are continuing to grow and increase in seriousness every day.

We formulated the Toyota Environmental Challenge 2050 in October 2015 and the 2030 Milestone in 2018 so that each one of us can face these issues and continue to tackle challenges from a long-term perspective of the world 20 and 30 years ahead. Also, in 2020 we set the 2025 Target as the most recent target of the Toyota Environmental Action Plan, a five-year plan for achieving this. By establishing a medium- to long-term vision and implementing specific measures back cast from the vision in collaboration with global consolidated subsidiaries and business partners around the world, we are pursuing the development of a sustainable society.

Structure of Toyota's Environmental Strategies



Achieve Zero CO₂ Emissions

Life Cycle Zero CO₂ Emissions Challenge

Challenge **Completely eliminate all CO₂ emissions throughout the entire vehicle life cycle**

Contribution to SDGs

New Vehicle Zero CO₂ Emissions Challenge

Challenge **Reduce global¹ average CO₂ emissions (TtW²) from new vehicles by 90 percent compared to Toyota's 2010 levels by 2050**

Contribution to SDGs

Plant Zero CO₂ Emissions Challenge

Challenge **Achieve zero CO₂ emissions at global plants by 2050**

Contribution to SDGs

¹ Countries & Regions: Japan, U.S., Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand and Indonesia
² Tank to Wheel: CO₂ emissions during driving (CO₂ emissions during the production stage of the fuel and electricity are not included; TtW emissions are zero in the case of battery electric vehicles and fuel cell electric vehicles)

Achieve a Net Positive Environmental Impact

Challenge of Minimizing and Optimizing Water Usage

Challenge **Minimize water usage and implement water discharge management according to individual local conditions**

Contribution to SDGs

Challenge of Establishing a Recycling-based Society and Systems

Challenge **Promote global deployment of End-of-life vehicle treatment and recycling technologies and systems developed in Japan**

Contribution to SDGs

Challenge of Establishing a Future Society in Harmony with Nature

Challenge **Connect the reach of nature conservation activities among communities, with the world, to the future**

Contribution to SDGs

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2030 Milestone

TCFD Metrics and Targets a & c **GRI** 103-2, 103-3



The 2030 Milestone formulated in 2018 indicates how the six challenges will be as of 2030.

Steady action is being taken while confirming progress each year along with the Toyota Environmental Action Plan that sets the specific targets for every five-year period.

| Toyota Environmental Challenge 2050 | 2030 Milestone |
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| <p>Challenge</p> <p>Life Cycle Zero CO₂ Emissions Challenge</p> | <ul style="list-style-type: none"> • Reduce CO₂ emissions by 25 percent or more throughout the entire vehicle life cycle compared to 2013 levels by promoting activities for the milestones of New Vehicle Zero CO₂ Emissions Challenge and Plant Zero CO₂ Emissions Challenge, and with support from stakeholders such as suppliers, energy providers, infrastructure developers, governments and customers |
| <p>Challenge</p> <p>New Vehicle Zero CO₂ Emissions Challenge</p> | <ul style="list-style-type: none"> • The estimate of global¹ average CO₂ emissions reduction (TtW² g/km) from new vehicles will be 35 percent or more, which may vary depending on market conditions, compared to 2010 levels. <p><small>1 Countries & Regions: Japan, U.S., Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand and Indonesia 2 Tank to Wheel: CO₂ emissions during driving (CO₂ emissions during the production stage of the fuel and electricity are not included; TtW emissions are zero in the case of battery electric vehicles and fuel cell electric vehicles)</small></p> |
| <p>Challenge</p> <p>Plant Zero CO₂ Emissions Challenge</p> | <ul style="list-style-type: none"> • Reduce CO₂ emissions from global plants by 35 percent compared to 2013 levels |
| <p>Challenge</p> <p>Challenge of Minimizing and Optimizing Water Usage</p> | <ul style="list-style-type: none"> • Implement measures, on a priority basis, in the regions where the water environment is considered to have a large impact <Water quantity> Complete measures at the 4 Challenge-focused plants in North America, Asia and South Africa <Water quality> Complete impact assessments and measures at all of the 22 plants where used water is discharged directly to river in North America, Asia and Europe • Disclose information appropriately and communicate actively with local communities and suppliers |
| <p>Challenge</p> <p>Challenge of Establishing a Recycling-based Society and Systems</p> | <ul style="list-style-type: none"> • Complete establishment of battery collection and recycling systems globally • Complete setup of 30 model facilities for appropriate treatment and recycling of End-of-life vehicles |
| <p>Challenge</p> <p>Challenge of Establishing a Future Society in Harmony with Nature</p> | <ul style="list-style-type: none"> • Realize “Plant in Harmony with Nature”—12 in Japan and 7 in other regions—as well as implement activities promoting harmony with nature in all regions where Toyota is based in collaboration with local communities and companies • Contribute to biodiversity conservation activities in collaboration with NGOs and others • Expand initiatives both in-house and outside to foster environmentally conscious persons responsible for the future |

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<Toyota's Commitment> Seventh Toyota Environmental Action Plan—2025 Target

TCFD Metrics and Targets a GRI 103-2  2025 Target-Seventh Toyota Environmental Action Plan

In 2020, Toyota formulated the Seventh Toyota Environmental Action Plan—2025 Target, a five-year action plan to achieve the Toyota Environmental Challenge 2050. Under this target, we are accelerating environmental initiatives and aiming to come together globally to realize a sustainable society.

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|  <p>Challenge CO₂ 0 Life Cycle Zero CO₂ Emissions Challenge</p> | Life cycle CO ₂ emissions | <ul style="list-style-type: none"> Reduce CO₂ emissions by 18 percent or more throughout the entire vehicle life cycle compared to 2013 levels |
| | Logistics | <ul style="list-style-type: none"> Japan: Reduce CO₂ emissions by 7 percent by improving transport efficiency compared to 2018 levels (average of 1 percent reduction per year) Japan⇄Other regions: Reduce CO₂ emissions by vessels for export (introduce 2 LNG-powered pure car carriers) |
| | Suppliers | <ul style="list-style-type: none"> Promote CO₂ emissions reduction activities among major suppliers |
| | Dealers and distributors | <ul style="list-style-type: none"> Achieve 100 percent introduction rate for CO₂ emissions reduction items at newly constructed and remodeled dealers |

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|  <p>Challenge CO₂ 0 New Vehicle Zero CO₂ Emissions Challenge</p> | Average CO ₂ emissions from new vehicles | <ul style="list-style-type: none"> Reduce global¹ average CO₂ emissions (TtW² g/km) from new vehicles by 30 percent or more compared to 2010 levels <p>1 Countries & Regions: Japan, U.S., Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand and Indonesia</p> <p>2 Tank to Wheel: CO₂ emissions during driving (CO₂ emissions during the production stage of the fuel and electricity are not included; TtW emissions are zero in the case of battery electric vehicles and fuel cell electric vehicles)</p> |
| | Electrified vehicles | <ul style="list-style-type: none"> Make cumulative sales of 30 million electrified vehicles or more |

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|  <p>Challenge CO₂ 0 Plant Zero CO₂ Emissions Challenge</p> | Plant CO ₂ emissions | <ul style="list-style-type: none"> Reduce CO₂ emissions by implementing innovative technologies and daily <i>kaizen</i> and introducing renewable energy Reduce CO₂ emissions from global plants by 30 percent compared to 2013 levels Achieve a 25 percent introduction rate for renewable electricity Promote proactive technological development to utilize hydrogen |
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|  <p>Challenge Challenge of Minimizing and Optimizing Water Usage</p> | Water quantity | <ul style="list-style-type: none"> Reduce water usage taking the water environment in each country and region into consideration Promote wastewater recycling, rainwater use and various activities including daily <i>kaizen</i> Reduce global water usage by 3 percent per vehicle produced compared to 2013 levels (reduce by 34 percent compared to 2001 levels) Complete measures at 2 Challenge-focused plants where the water environment is considered to have a large impact |
| | Water quality | <ul style="list-style-type: none"> Thoroughly manage water discharge quality under internal standards that are stricter than regulatory standards Continuously assess the impact of wastewater at all plants where it is discharged directly into the river |

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|  <p>Challenge Challenge of Establishing a Recycling-based Society and Systems</p> | Toyota Global 100 Dismantlers Project | <ul style="list-style-type: none"> Complete setup of 15 model facilities for appropriate treatment and recycling of End-of-life vehicles Continuously accelerate easy-to-dismantle designs Integrate easy-to-dismantle designs to respond to appropriate treatment and recycling of End-of-life vehicles and resource issues, and provide appropriate information (large batteries, fuel cell (FC), hydrogen tank) |
| | Toyota Global Car-to-Car Recycle Project | <ul style="list-style-type: none"> Establish a safe and efficient system for battery 3R (Rebuild, Reuse and Recycle), eyeing the widespread use of electrified vehicles Aim to maximize collection and detoxification of End-of-life batteries globally Start operating battery 3R throughout 5 regions—Japan, U.S., Europe, China and Asia Develop technologies to utilize recycled materials (especially plastics) in accordance with the conditions in each region Promote utilization by technological development to optimally exploit recycled materials in Europe and to increase the supply of recycled materials in Japan |

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|  <p>Challenge Challenge of Establishing a Future Society in Harmony with Nature</p> | Toyota Green Wave Project | <ul style="list-style-type: none"> Realize “Plant in Harmony with Nature”—6 in Japan and 4 in other regions Promote activities to connect with local communities in collaboration with affiliated companies Start activities promoting harmony with nature in collaboration with local communities and companies toward biodiversity conservation |
| | Toyota Today for Tomorrow Project | <ul style="list-style-type: none"> Globally strengthen conservation of endangered species, which symbolize biodiversity in collaboration with NGOs and others |
| | Toyota ESD ³ Project | <ul style="list-style-type: none"> Implement globally unified initiatives to foster environmentally conscious persons responsible for the future Offer environmental education opportunities by utilizing biotopes and others in collaboration with the Plant in Harmony with Nature Foster environmentally conscious persons at both in-house and outside sites, including plants and the Forest of Toyota, by utilizing educational tools in harmony with nature for the next generation <p>³ Education for Sustainable Development</p> |

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|  <p>Environmental Management</p> | Chemical substances | <ul style="list-style-type: none"> Implement thorough management by carefully considering legal trends in each country and region |
| | Air quality | <ul style="list-style-type: none"> Product: Steadily introduce low-emission vehicles and boost further improvement by introducing and increasing ZEVs⁴ Production: Continue volatile organic compound (VOC) emissions reduction activities and maintain industry-leading level <p>⁴ Zero Emission Vehicles: Vehicles that have the potential not to emit any CO₂ during driving such as battery electric vehicles and fuel cell electric vehicles</p> |
| | Waste | <ul style="list-style-type: none"> Promote activities to thoroughly reduce waste globally and aim to minimize the volume of resource input and waste, with the environment and economy in balance |
| | Logistics packaging | <ul style="list-style-type: none"> Implement initiatives to reduce and recycle plastics used in packaging and recycle them |
| | Risk management | <ul style="list-style-type: none"> Thoroughly comply with environmental laws and regulations and strengthen proactive prevention activities for environmental risks in each country and region |

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Highlights of Results of the Sixth Toyota Environmental Action Plan (FY2017–2021)

TCFD Metrics and Targets a & c GRI 103-2, 103-3

[Results of the Sixth Toyota Environmental Action Plan \(Detail\) Data pp. 46-51](#)

After implementing initiatives based on the Sixth Toyota Environmental Action Plan—FY2021 Target, which was carried out from FY2017 to FY2021, we achieved the following results. From 2021, under the Seventh Toyota Environmental Action Plan—2025 Target, we are accelerating measures to achieve the Toyota Environmental Challenge 2050.

| Area | Challenge | Highlights of Results from FY2017 to FY2021 |
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| Low Carbon (Climate Change, CO ₂) |  Life Cycle Zero CO₂ Emissions Challenge | <ul style="list-style-type: none"> Conducted Life Cycle Assessment on 46 of the total 62 (74 percent coverage) new and redesigned models in Japan and achieved CO₂ emissions levels equivalent to or lower than those of reference vehicles (previous models or vehicles of the same class); e.g., reduced CO₂ emissions of the Yaris Cross hybrid electric vehicle model by 16 percent compared to vehicles of the same class Reduced total CO₂ emissions by 40 percent and emissions per transportation volume by 16 percent in Japan, by making further improvements to transport efficiency (loading efficiency improvements, shortening of logistics routes, modal shifts, use of tandem trailers, etc.) in the area of logistics Used 100 percent renewable electricity at all R&D centers in Japan as of April 2020 |
| |  New Vehicle Zero CO₂ Emissions Challenge | <ul style="list-style-type: none"> Reduced global average CO₂ emissions from new vehicles by 23 percent compared to 2010 levels by improving environmental performance and expanding vehicle lineups Set 56 models with an electrified option; achieved cumulative global sales of 16.98 million electrified vehicles, exceeding the target by 2020 of 15 million units |
| |  Plant Zero CO₂ Emissions Challenge | <ul style="list-style-type: none"> Reduced global CO₂ emissions per vehicle produced by 39 percent compared to FY2002 levels by introducing low-CO₂ production technologies and promoting comprehensive energy savings Accelerated global introduction of renewable energy, and achieved an 11 percent introduction rate. Maintained 100 percent renewable electricity introduction rate at all plants in Europe and also achieved it at all plants in South America. Started various verification tests to support the utilization of hydrogen at the Toyota Motor Corporation Honsha Plant and Motomachi Plant |
| Recycling (Resources, Water) |  Challenge of Minimizing and Optimizing Water Usage | <ul style="list-style-type: none"> Comprehensively introduced reduction technologies and undertook daily water-saving efforts such as water recycling and reducing the amount of steam used in painting processes, decreasing Toyota Motor Corporation's water usage per vehicle produced (at vehicle production plants) by 31 percent compared to FY2002 levels Assessed the impact of plant wastewater that is discharged directly into rivers and managed water quality under internal standards that are stricter than regulatory standards |
| |  Challenge of Establishing a Recycling-based Society and Systems | <ul style="list-style-type: none"> Under the Toyota Global 100 Dismantlers Project, completed setup of model facilities for appropriate treatment and recycling of End-of-life vehicles in Japan, Belgium, Thailand, Vietnam, Malaysia, Brazil and Argentina and achieved the target (setup of 7 facilities) Under the Toyota Global Car-to-Car Recycle Project, established organizations for promoting the 3R (Rebuild, Reuse and Recycle) for onboard batteries in 4 regions (North America, Europe, China and Asia) and took other measures to continuously promote utilization of renewable resources and recycled materials |
| Harmony with Nature |  Challenge of Establishing a Future Society in Harmony with Nature | <ul style="list-style-type: none"> Under the Toyota Green Wave Project, implemented the PDCA process such as wildlife habitats maintenance and improvement measures as well as surveys to confirm the effects, at 3 plants in Japan and 3 plants in other regions. Conducted 971 Harmony with Nature activities with the participation of 170,000 people or more in the past 5 years in collaboration with the Toyota Group companies and other affiliated companies. Under the Toyota Today for Tomorrow Project, continuously supported the assessment of endangered species (cumulative total of 29,830 species in the past 5 years) by the International Union for Conservation of Nature (IUCN). Supported 136 projects in the past 5 years by NPOs under the Toyota Environmental Activities Grant Program. Under the Toyota ESD¹ Project, conducted environmental education programs at company-owned lands including hands-on nature programs for local elementary schools (a total of 48,338 students participated in the past 5 years) at the Forest of Toyota, and hands-on nature programs for children and adults (a total of 49,786 people participated) at the Toyota Shirakawa-Go Eco-Institute <p><small>1 Education for Sustainable Development</small></p> |
| Environmental Management/ Value Chains Collaboration | | <ul style="list-style-type: none"> There were no significant violations of environmental laws and regulations and environmental non-compliance issues in the past 5 years Toyota revealed in the CDP² A List, the highest rank, in both the climate change and water security categories scored by CDP (2016–2017, 2019–2020). Continued the CDP Supply Chain Program from FY2016, and conducted measures based on programs for climate change and water security in cooperation with suppliers accounting for approximately 82 percent of the total purchasing value by Toyota Motor Corporation (127 companies). <p><small>2 CDP: An international NGO that encourages and assesses corporate disclosures on environmental actions based on calls from global institutional investors with high levels of interest in environmental issues</small></p> |

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Risks and Opportunities and Scenario Analysis Relating to Climate Change

TCFD Strategies a & b & c, Risk Management a

SASB TR-AU-410a.3

GRI 102-15, 103-1, 103-2, 201-2

Risks and Opportunities Relating to Climate Change

Toyota strives to identify the various risks and opportunities that will arise from environmental issues, takes action while continuously confirming the validity of strategies such as the Toyota Environmental Challenge 2050 and works to enhance its competitiveness.

Among them, climate change requires measures in various areas including the adoption of new technology and tighter regulations by governments. As climate change progresses, higher temperatures, rising sea levels and severity of natural disasters such as typhoons and flooding are expected. These changes may have various impacts on Toyota's business fields. These impacts may also pose risks to Toyota's business, but it is our understanding that if we can respond appropriately, this will lead to

enhanced competitiveness and the acquisition of new business opportunities. In accordance with this understanding, we have organized the risks relating to climate change and identified particularly significant risks in line with risk management processes based on the degree of impact and stakeholders' interest. To respond to risks, we are promoting electrification, the introduction of renewable energy in production processes, and adaptation measures for natural disasters. Toyota supports the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and appropriately discloses information concerning risks and opportunities related to climate change and their analyses. Disclosure is also being conducted through responses to CDP in accordance with the TCFD.

 [TCFD Content Index](#)

List of Toyota's Climate Change Related Risks (Risks (1), (3) and (7) are significant)

| | | |
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| Transition Risks | Regulation | (1) Tightening of regulations for fuel efficiency and ZEVs* (electrification responses); (2) Tightening of regulations for life cycle CO ₂ emissions; (3) Expansion of carbon pricing <small>* Zero Emission Vehicles: Vehicles that have the potential not to emit any CO₂ during driving such as battery electric vehicles and fuel cell electric vehicles</small> |
| | Market | (4) Increase in costs to reduce plant CO ₂ emissions (by expansion of renewable energy and hydrogen use, and energy-saving technologies) |
| | Reputation | (5) Tightening of ESG assessment criteria and expansion of disclosure requirement fields; (6) Differences between catalog fuel efficiency and actual fuel efficiency |
| Physical Risks | Acute | (7) Increase in frequency and severity of natural disasters |
| | Chronic | (8) Increase in threat to water security |

Significant Risks and Opportunities and Toyota's Measures

| Risks | Opportunities | Toyota's Measures | Relationship with Climate Scenario | | |
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| | | | Current Scenario | Enhanced Measures Scenario (below 2°C/1.5°C) | |
| (1) Tightening of regulations for fuel efficiency and ZEVs (electrification responses) | <ul style="list-style-type: none"> • Fines for failure in achieving fuel efficiency regulations • Decrease in total vehicle sales due to delays in complying with ZEV regulations • Stranded assets of internal combustion engine manufacturing facilities | <ul style="list-style-type: none"> • Increase in sales of electrified vehicles • Increase in profits from external sales of electrification systems | <ul style="list-style-type: none"> • Maintenance of the top-level fuel efficiency (currently the highest in Europe) • Increase in investment in batteries and shift of resources • Start of external sales of electrification systems • Expansion of electrified vehicle lineup • Reduction of CO₂ emissions from vehicles currently in use | Impacts will be an extension of current status  | Impacts will increase  |
| (3) Expansion of carbon pricing | <ul style="list-style-type: none"> • Increase in production and purchasing costs due to the introduction of carbon taxes, etc. | <ul style="list-style-type: none"> • Decrease in energy costs due to promoting the introduction of energy-saving technology | <ul style="list-style-type: none"> • Reduction of energy use through comprehensive energy conservation and promotion of renewable energy and hydrogen use • Promotion of emission reductions in collaboration with suppliers | Impacts will be an extension of current status  | Impacts will increase  |
| (7) Increase in frequency and severity of natural disasters | <ul style="list-style-type: none"> • Production suspension due to damage to production sites and supply chain disruptions caused by natural disasters | <ul style="list-style-type: none"> • Increase in demand for electrified vehicles due to increased need for supply of power from automobiles during emergency situations | <ul style="list-style-type: none"> • Continuous improvement of a BCP in light of disaster experiences in an effort for adaptation • Reinforcement of information gathering in collaboration with suppliers to avoid purchasing delays | Impacts will increase  | Impacts will be an extension of current status  |

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Scenario Analysis Assuming Risks and Opportunities

STEP 1

Set Future Images Assuming Climate Change Effects

Climate change and the policies of various countries may expose the automobile industry and the entire mobility society to substantial changes. These changes will present both risks and opportunities to Toyota. We used scenarios such as those of the IEA* to examine future images of society based on the current policy scenario, below 2°C scenario and 1.5°C scenario at around 2030 for Toyota's external environment, in light of risk and opportunity analysis.

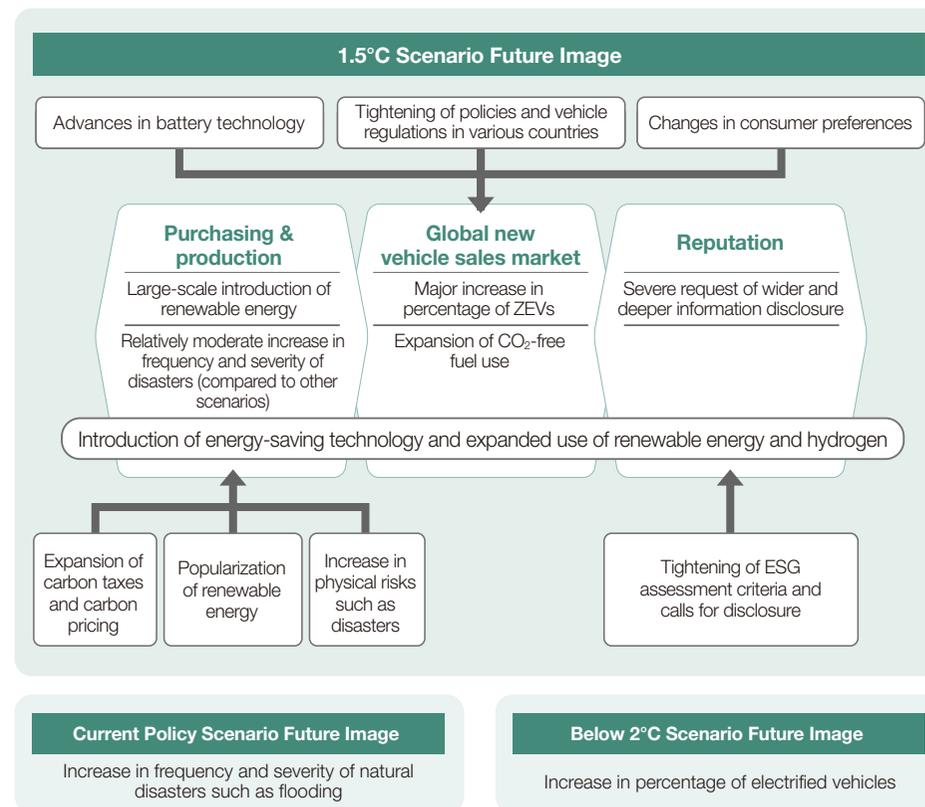
* Set using scenarios such as the IEA's Stated Policies Scenario (STEPS), Sustainable Development Scenario (SDS) and Net Zero Emissions by 2050 Scenario (NZE) as reference

STEP 2

Consider the Impacts on Toyota

In a society based on the below 2°C scenario or 1.5°C scenario in which climate change measures proceed, the percentage of electrified vehicles (ZEVs in particular) will increase. In case of a society based on the 1.5°C scenario in particular, it is said that the percentage of ZEVs among new vehicle sales will increase greatly and the use of CO₂-free fuels such as biofuels will also expand, mainly for large cargo and marine/air transport. With regard to effects on production and purchasing, the introduction of carbon taxes and increased tax rates may lead to higher costs, while expanding the use of energy-saving technology, renewable energy and hydrogen will mitigate risks. On the other hand, if adequate climate change measures are not implemented throughout society, production suspensions due to increased frequency and severity of natural disasters such as flooding as well as decreased production and production suspensions due to supply chain disruptions are likely to increase.

Three Different Images of Society as Toyota's External Environment



STEP 3**Toyota's Strategies**

In April 2021, Toyota proclaimed that it would address global-scale challenges to achieve carbon neutrality by 2050. It is vital that energy policies (renewable energy, charging infrastructure, etc.) and industrial policies (purchasing grants, supplier support, battery recycling systems, etc.) are operated in a unified manner to enable the automobile industry to achieve carbon neutrality. Initiatives must be implemented in coordination with various stakeholders such as national governments and industry organizations. When undertaking its business activities globally, Toyota will coordinate with national governments to establish environmental infrastructure for promoting electrification while implementing electrified vehicle strategies that contribute to reducing CO₂ throughout the entire life cycle. Based on this electrified vehicle strategy, Toyota has sold a cumulative total of over 18 million electrified vehicles worldwide. As one of the first companies to respond to climate change risks, it has achieved a CO₂ reduction of over 140 million tons. Going forward, with regards to battery electric vehicles (BEVs), we will successively introduce models with dedicated platforms starting in 2022 and seek to achieve practical vehicle supply through battery development and production strategies. In addition to BEVs, we are promoting electrification from all directions including hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs) and fuel cell electric vehicles (FCEVs). We will respond flexibly and strategically to each demand for varying powertrains depending on the scenario. Sales of electrified vehicles will be optimized for each region by introducing BEVs in regions where the emission factors from electricity are low and promoting emissions reductions through HEVs in regions where the emission factors are high.

In December 2021, we announced our aim of developing 30 types of BEVs and achieving a full lineup in the passenger and commercial segments globally by 2030 to reach 3.5 million annual global vehicle sales by 2030. In light of changes in the market, we will continue to flexibly increase total vehicle sales while leveraging the strengths that we have gained through our experience so far to increase the number of options for electrified vehicles. This will encourage customers in each region to choose us and accelerate the increased use of electrified vehicles. Even if battery demand increases in accordance with altered customer needs under the below 2°C scenario and 1.5°C scenario, we will work toward achieving carbon neutrality through flexible response such as enhancing collaboration with partners, considering a collaboration structure with new partners, and swiftly establishing production structures at suppliers that have capital ties with Toyota.

In addition to increasing the number of electrified vehicles, it is important to expand technology options to reduce CO₂ emissions of vehicles currently in use as well. This may include the adoption of CO₂-reducing off-cycle technology* (although not reflected in mode fuel efficiency) and the development of engines that can use CO₂-free fuel such as hydrogen engine vehicle. In order to achieve carbon neutrality, we will work together not only with the automobile industry, but with all industries while continuing to engage in challenges to respond to a society based on the 1.5°C scenario through initiatives that are practical as well as sustainable.

In the production field, we announced that we aim to achieve carbon neutrality at global plants by 2035. We are promoting the reduction of CO₂ emissions through comprehensive energy-saving technology and the introduction of renewable energy and hydrogen at plants, and have already achieved 100 percent renewable electricity introduction rate at all plants in Europe and South America. Furthermore, we will prepare to face risks such as carbon taxes through initiatives such as these. In addition, we will prepare adaptation measures to respond to natural disasters such as formulating a business continuity plan (BCP), strengthening the supply chain by enhancing information gathering and improving communication.

To confirm the suitability and progress of Toyota's strategies, we will conduct appropriate information disclosures regarding various ESG assessment indicators and enhance dialogue with stakeholders including institutional investors. We believe that this will enable stable fund procurement and lasting corporate value enhancement.

* Off-cycle technology: Technologies such as high efficiency lightings, waste heat recovery, active aerodynamic improvement and solar radiation/temperature management that improve actual fuel consumption. The U.S. has a system offering credits equivalent to the amount of improvement achieved.

 [Media briefing on batteries and carbon neutrality \(September 7, 2021\)](#)

| | | | | | | | | |
|-------------------------|---|--|--|--|---|---|--------------------|--|
| Strategy and Management | Life Cycle Zero CO ₂ Emissions Challenge | New Vehicle Zero CO ₂ Emissions Challenge | Plant Zero CO ₂ Emissions Challenge | Challenge of Minimizing and Optimizing Water Usage | Challenge of Establishing a Recycling-based Society and Systems | Challenge of Establishing a Future Society in Harmony with Nature | Environmental Data | Results of the Sixth Toyota Environmental Action Plan (Detail) |
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Environmental Management GRI 102-29, 103-2, 103-3

Contribution to SDGs



Fundamental Approach

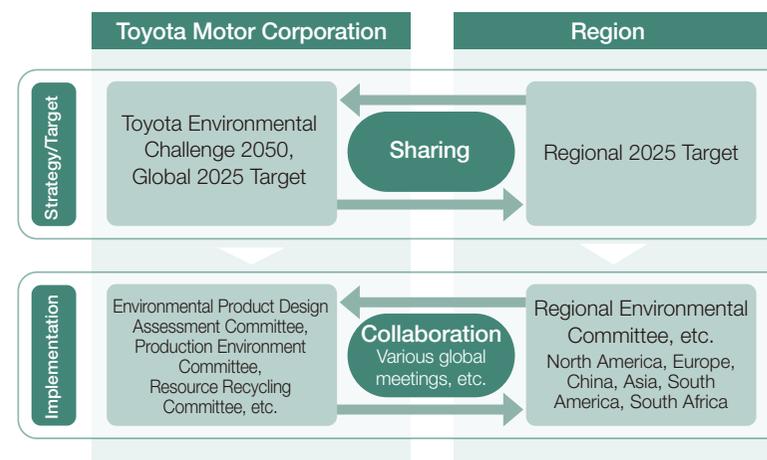
Together with consolidated subsidiaries, we are steadily promoting environmental management globally, including legal compliance measures and comprehensive risk management, to build a structure that enable sustainable development together with society. Also, we are constantly improving our management methods to be able to quickly respond to increasingly serious climate change and environmental issues, and to society's changing needs.

| 2025 Target | | 2020 Initiatives |
|---------------------|---|---|
| Chemical substances | Implement thorough management by carefully considering legal trends in each country and region | Complied with Toyota internal rules in the global deployment of chemical substance management structures, and evaluated and improved chemical substance management structures by auditing and investigating suppliers' processes |
| Air quality | Product: Steadily introduce low-emission vehicles and boost further improvement by introducing and increasing ZEVs* Production: Continue volatile organic compound (VOC) emissions reduction activities and maintain industry-leading level * Zero Emission Vehicles: Vehicles that have the potential not to emit any CO ₂ during driving such as battery electric vehicles and fuel cell electric vehicles | Product: In response to stricter emissions regulations in various countries and regions, steadily introduced vehicles that satisfy those regulations Production: Promoted a switch to water-based paint in the bumper painting process. Took measures to completely eliminate the use of ozone-depleting substances (ODS). No significant releases occurred. GRI 305-6 Environmental Data p. 38-A |
| Waste | Promote activities to thoroughly reduce waste globally and aim to minimize the volume of resource input and waste, with the environment and economy in balance | Promoted waste reduction and efficient use of resources through measures aimed at the sources of waste Environmental Data p. 38-B |
| Logistics packaging | Implement initiatives to reduce and recycle plastics used in packaging and recycle them | Promoted <i>kaizen</i> with a focus on increasing use of returnable containers and reducing the weight of packaging Environmental Data p. 38-C |
| Risk management | Thoroughly comply with environmental laws and regulations and strengthen proactive prevention activities for environmental risks in each country and region | There were 3 minor non-compliance issues (2 concerning abnormal water quality and 1 concerning exhaust gas) in the production area, for which measures were completed. There were no abnormalities or complaints in the non-production area. |

Environmental Management Structure TCFD Governance a & b, Risk Management a & b & c GRI 102-30, 102-32, 102-33

At Toyota, operating officers and executives make timely decisions and carry out environmental initiatives from positions that are closer to customers and worksites under the supervision of the Board of Directors. Strategies and response policies in each area in light of risks and opportunities are set by three committees—the Environmental Product Design Assessment Committee, the Production Environment Committee and the Resource Recycling Committee—and all relevant organizations work together to carry out initiatives. Environmental secretariats have been established in six regions (North America, Europe, China, Asia, South America and South Africa). In addition, Toyota Motor Corporation and each region shared the Toyota Environmental Challenge 2050 and 2025 Target, and are cooperating with one another through various global meetings in order to undertake globally integrated environmental initiatives while taking local conditions into consideration. Moreover, the Sustainability Meeting, which is chaired by the Chief Sustainability Officer (CSO), timely deliberates on long-term enhancement of competitiveness and responses to risks in light of internal and external changes with a focus on environment, social and governance issues, and reports the results to the Board of Directors. The progress regarding measures to reduce CO₂ in the area of product and production are regularly reported as key management indicator at meetings attended by all of those on and above chief officer and company president levels at Toyota Motor Corporation.

Global Environmental Management Structure



Environmental Management System: Organizational Boundary and Promotions

We built an environmental management system that covers all consolidated subsidiaries (486 companies) on a financial accounting basis and are carrying out the following three steps.

We will maintain and improve this system in the future so that we can undertake even further environmental initiatives.

Environmental Management Promotions

1. Organize internal structures (governance system)
2. Ensure thorough risk management and compliance (including voluntary actions)
3. Maximize environmental performance

ISO 14001/ISO 50001

As of 2020, all plants of Toyota Motor Corporation and consolidated subsidiaries (124 companies) have obtained ISO 14001 certification, of which 8 companies also obtained ISO 50001 certification.

Awards Received

Revealed in the CDP* A List

In December 2020, Toyota has been selected for inclusion in the A List which is the highest evaluation for climate change and water security by CDP.

* CDP: An international NGO that encourages and assesses corporate disclosures on environmental actions based on calls from global institutional investors with high levels of interest in environmental issues



Risk Management TCFD Governance a & b, Risk Management a & b & c GRI 102-32, 102-33

Risk Management Through the Toyota Global Risk Management Standard (TGRS)

Under supervision of the Chief Risk Officer (CRO), we promote management focused on proactive preventive measures by gathering and analyzing all risks related to Toyota's corporate activities and behavior, including the area of environment, and developing a system (TGRS) that takes countermeasures.

Risk Management Relating to Climate Change

We strive to understand the various risks and opportunities arising due to climate change and always check the suitability of our strategies using scenario analysis to minimize risks and boost our competitiveness.

[Risks and Opportunities and Scenario Analysis Relating to Climate Change pp. 15-17](#)

Compliance GRI 306-2, 307-1

At all plants of Toyota Motor Corporation and consolidated subsidiaries, comprehensive risk management are undertaken based on prevention in accordance with criteria that meet or exceed laws and regulations. If a violation occurs or a complaint is made, we have systems in place to respond in a timely manner, and we work to prevent reoccurrence through identification of root causes. Furthermore, we also collaborate with unconsolidated subsidiaries to improve the environmental performance in the production area through discussion at the All-Toyota Production Environment Conference or All-Toyota Production Environment Liaison Committee.

In 2020, we were not involved in any major environmental incidents causing air or water pollution, nor were we subjected to any fines or penalties. However, there were three minor non-compliance issues (two concerning abnormal water quality and one concerning exhaust gas) in the production area, for which measures were completed. There were no abnormalities or complaints in the non-production area.

Air Pollution Measures (California, U.S.)

Toyota Motor Corporation is working with various partners, conducting research and taking action to improve the atmospheric environment. One such measure that we have been implementing since 2017 is a verification project that seeks to achieve zero emissions from the transport of cargo to verify the potential of deploying fuel cell electric vehicle (FCEV) technology on commercial trucks at the Port of Long Beach and the Port of Los Angeles, where air pollution from freight trucks is severe.

We are working to improve the atmospheric environment around the world by expanding the use of hydrogen including introduction of new heavy-duty commercial fuel cell (FC) electric trucks equipped with the second-generation FCEV system used on the new Mirai and conducting verification projects in freight transport operations.

Reduction of Waste and Efficient Use of Resources in Production Activities GRI 306-2

At all plants of Toyota Motor Corporation and consolidated subsidiaries, we are continuously taking measures aimed at the sources of waste (design and production method innovations), developing and deploying production technologies and implementing daily reduction activities, aiming to minimize the volume of resource input and waste.

And, in hazardous waste management, we ensure that End-of-life vehicle treatment is in compliance with the laws and regulations of each country at every plant. In addition, we do not import or export any hazardous waste listed in Annexes I, II, III or VII of the Basel Convention.

Target: Maintain the volume of waste per vehicle produced at each plant at or below FY2019 levels

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

[Environmental Data p. 38-B](#)

| | | | | | | | | |
|-------------------------|---|--|--|--|---|---|--------------------|--|
| Strategy and Management | Life Cycle Zero CO ₂ Emissions Challenge | New Vehicle Zero CO ₂ Emissions Challenge | Plant Zero CO ₂ Emissions Challenge | Challenge of Minimizing and Optimizing Water Usage | Challenge of Establishing a Recycling-based Society and Systems | Challenge of Establishing a Future Society in Harmony with Nature | Environmental Data | Results of the Sixth Toyota Environmental Action Plan (Detail) |
|-------------------------|---|--|--|--|---|---|--------------------|--|

Value Chains Collaboration

GRI 102-9, 103-2, 308-1, 308-2

Contribution to SDGs



Fundamental Approach

To reduce environmental footprint throughout the entire vehicle life cycle, Toyota is taking measures not limited to scope of consolidation, but also in broad collaboration with partners, including suppliers and dealers, in the upstream and downstream value chains.

Initiatives with Suppliers

Green Purchasing¹ Guidelines

Toyota purchases various materials, parts and equipment from many different suppliers. We ask all tier 1 suppliers, including new suppliers, to implement initiatives based on the TOYOTA Green Purchasing Guidelines (the “guidelines”), and also deploy and enlighten the guidelines to all tier 2 and subsequent suppliers.

Under the guidelines, we request that suppliers reduce environmental footprint throughout the product life cycle, and we are promoting risk management and activities by using a self-assessment sheet to confirm the status of initiatives by each company. In FY2021, we received responses from approximately 140 main companies in Japan and provided feedback on the scoring results. Each year, Toyota presents its CO₂ reduction program to each company, and in addition to monitoring their results, deepens communication by discussing reduction measures.

There is an assumption that if we do not observe improvement after a violation of the guidelines, such as non-compliance with laws and regulations, occurs, the transactional relationship may be subject to review.

Purchasing sites in each region have released the guidelines tailored to local conditions. We will continue to request that suppliers undertake initiatives in accordance with the guidelines. In April 2021, Toyota Motor North America (TMNA), our regional headquarters in North America, updated the existing guidelines and issued the Green Supplier Requirements. TMNA is reinforcing environmental management by including in the terms and conditions on compliance with requirements such as CO₂ reductions.

¹ Green Purchasing: Prioritizing the purchase of parts, materials, equipment and services with a low environmental footprint when manufacturing products



Training for Purchasing Group Personnel (Japan)

Toyota Motor Corporation conducts group training when new employees are assigned to the Purchasing Group to deepen their understanding of sustainability including the environment. We also hold periodic study groups for buyers that communicate directly with suppliers.

Initiatives Utilizing the CDP² Supply Chain Program GRI 103-3

We introduced the CDP Supply Chain Program in FY2016 to support continuous environmental initiatives conducted with suppliers. The program enables us to determine supplier’s risks, opportunities and their initiatives on climate change and water security.

Each year we create opportunities for environmental communication by holding briefing sessions and response guidance where we share information on social trends and Toyota’s environmental policies and provide feedback on response results. The scope of subject suppliers has been increasing every year, and in FY2021, suppliers accounting for approximately 82 percent of the total purchasing value by Toyota Motor Corporation were covered by the program. Based on the self-assessment results, we confirmed that approximately two-thirds of suppliers had reduced CO₂ intensity (per net revenue) compared to the previous year.

² CDP: An international NGO that encourages and assesses corporate disclosures on environmental actions based on calls from global institutional investors with high levels of interest in environmental issues

Main Results of the CDP Supply Chain Program (2020)

| | | Climate Change | Water Security |
|--------------------------------|--|------------------------------------|------------------------------------|
| Number of responding companies | | 127 (up 20 from the previous year) | 115 (up 13 from the previous year) |
| Response rate | | 96% | 88% |
| Percentage responding “Yes” | Governance (board-level oversight, corporate policy) | 93% | 73% |
| | Identifying risks | 87% | 65% |
| | Integrating issues into business strategy | 92% | 66% |
| | Setting quantitative targets | 96% | 65% |

Recognition of Supplier’s Environmental Initiatives (Japan)

We established the Environmental Activity Awards in 2017 to commend suppliers that conduct exceptional environmental initiatives and has presented the awards every year.

Training Sessions with Suppliers (Japan)

Toyota and its suppliers have established a variety of opportunities for joint training on environmental issues. Since 2019, Kyohokai, which consists of 200 parts suppliers or more, established research groups that consider environmental topics. Working groups exist for four themes, actively exchanging information and holding discussions for mutual learning, such as by inviting speakers from leading companies and holding on-site review meetings. In addition, Toyota holds periodic supplier briefings where we proactively share information on environmental trends and Toyota’s environmental policies.



Members of the Kyohokai research groups toured the solar power generation verification site at the Motomachi Plant

Supplier Hotline

In accordance with the Toyota Code of Conduct and Basic Policies at Toyota Purchasing, Toyota strives to act in a fair and just manner in compliance with laws and regulations. We have established hotlines that guarantee anonymity so that information can be gathered from suppliers if there is an instance of conduct relating to the environment in violation of laws, regulations or good practice within the supply chain.

Participation in Initiatives (U.S., Europe)

In the United States, we participate in the Suppliers Partnership for the Environment¹ and promote environmental initiatives where suppliers, governments, NGOs and other stakeholders collaborate. In Europe, as a member company of Drive Sustainability², in automobile industry partnership program established by CSR Europe³, we collaborate to address key sustainability issues in the supply chain. We also participate in the WBCSD⁴ and apply what we learn through participation in a traffic flow improvement verification program in Thailand, and other projects, to our efforts to contribute to the realization of a sustainable society.

1 Suppliers Partnership for the Environment: A U.S.-based public-private partnership program for automobile manufacturers and suppliers to promote sustainability  [Suppliers Partnership for the Environment](#)

2 Drive Sustainability: A European partnership NPO that promotes sustainability in the automobile industry  [Drive Sustainability](#)

3 CSR Europe: A European NPO that operates a European business network to promote corporate sustainability

4 World Business Council for Sustainable Development: An NGO that conducts advocacy and verification projects to realize a sustainable society with participation of major corporations worldwide  [World Business Council for Sustainable Development](#)

Ensuring Compliance with Regulation Concerning the REACH⁵ and Other Global Regulations on Chemical Substances

Against a backdrop of rising interests in the Sustainable Development Goals (SDGs) and Environment, Social and Governance (ESG), countries and regions around the world are strengthening regulations related to chemical substances. Such regulations include the Chemical Substances Control Law⁶ in Japan, and the Directive on ELV⁷ and Regulation concerning the REACH of a European Union.

Moreover, companies are expected to raise levels of corporate attitudes, such as chemical substance management structures and information disclosure, even further.

In addition to complying with laws and regulations, Toyota is improving structures and undertaking operational management in cooperation with all parties involved in conveying chemical substance information in order to disseminate and share the ideals of the SDGs and ESG.

In FY2021, we continued to enhance business management regulations, revise regulations based on the Global Automotive Declarable Substance List (GADSL) to reflect the latest laws and regulations in each country (setting content rate targets for each substance in consideration of regulatory requirements, etc.), conduct supplier awareness activities (366 companies) using self-assessment check lists to ensure thorough management of chemical substances, and expand activities to other regions. In the future, we will continue industry collaboration and global deployment and comprehensive implementation of action standards tailored to the cultures and industrial structures of each region.

5 Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals regulation: A regulation for managing chemical substances to protect human health and the environment

6 Chemical Substances Control Law (The Act on the Regulation of Manufacture and Evaluation of Chemical Substances): An act to prevent environmental pollution caused by chemical substances that pose a risk of impairing human health and interfere with the inhabitation and growth of flora and fauna

7 Directive on End-of Life Vehicles: A directive designed to reduce the load of End-of-life vehicles on the environment

Initiatives with Dealers and Distributors

Toyota has strong bonds of trust with its dealers and distributors built on shared values for products and services. In the area of environment, we set a new target of a 100 percent introduction rate for CO₂ reduction items at newly constructed and remodeled dealers, and completed formulation of action plans in all eight regions advancing the Seventh Toyota Environmental Action Plan. Additionally, based on the Environmental Global Policy in the Sales and Service Area established in 2016, we are implementing four initiatives (establishment of an environmental system structure, minimization of environmental risks, improvement of environmental performance and activities to make environment better with customers and society), as a strategy to reduce environmental footprint in store operations. We take measures according to the conditions in each region. For example, we launched the Eco-Dealership program in Asia in 2018 and use an original certification system to conduct evaluations and implement an awards program.

We set quantitative targets for CO₂ reduction in this carbon reduction program and provide support for energy-saving activities at model dealers in each country and have achieved significant results. These results are shared in the Energy Reduction Innovation Guidelines with all dealers that participated the program, and we promote measures for achieving the targets.

Incubating Start-up Companies Striving to Accelerate Carbon Neutrality

Established the Toyota Ventures Climate Fund, a Global Investment Fund to Accelerate Carbon Neutrality

To achieve carbon neutrality, in addition to making our own efforts, we believe that we need to collaborate with like-minded partners. The Toyota Ventures Climate Fund, which was established in June 2021, will invest in promising early-stage companies around the world, that are eagerly working on solutions to drive innovation in carbon neutrality. It will be managed by the team at Toyota AI Ventures, a Silicon Valley-based venture capital fund, which company name was recently changed to Toyota Ventures. Toyota Ventures will serve as the fund manager (GP) on behalf of Toyota, with a total investment of 150 million U.S. dollars.

Invested in the Mirai Creation Fund III to Accelerate Carbon Neutrality

The Mirai Creation Fund III, established in October 2021 by SPARX Group Co., Ltd., aims for a total scale of 100 billion yen to invest in six core technology areas including carbon neutrality. The fund aims to help accelerate innovation by investing in companies and projects that possess technologies capable of leading growth for future generations. Through this fund, Toyota invested 10 billion yen to support growth and commercialization of companies with innovative technologies, and to obtain a wide range of information on new technologies and market trends in a timely manner to incorporate in business strategies.

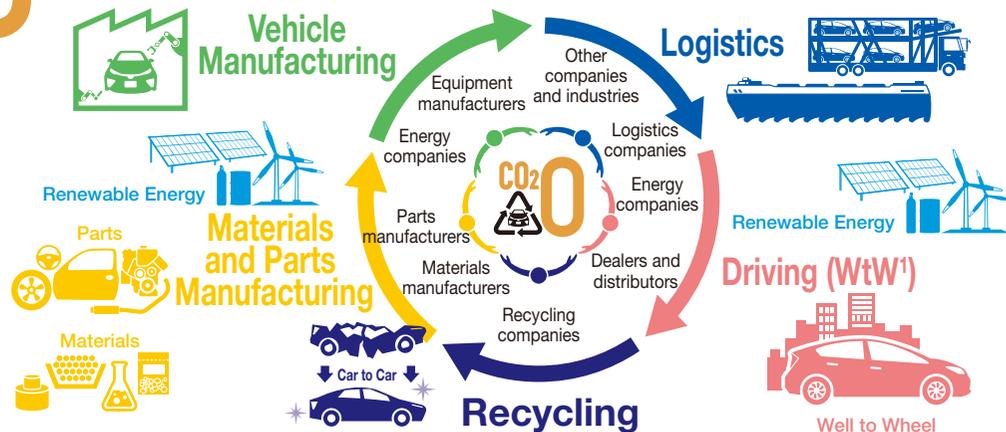


Life Cycle Zero CO₂ Emissions Challenge

Completely Eliminate All CO₂ Emissions Throughout the Entire Vehicle Life Cycle

TCFD Strategy b | GRI 102-15, 103-1, 201-2, 305-3

Six Challenges



Contribution to SDGs



Fundamental Approach

Since momentum for reducing CO₂ emissions is rising recently, the international movement for achieving carbon neutrality by 2050, such as the ambitious increase of CO₂ reduction targets in each country, is spreading with remarkable speed.

Toyota has been promoting Life Cycle Zero CO₂ Emissions Challenge activities for years to completely eliminate CO₂ emissions not only during driving (TtW²), but throughout the entire vehicle life cycle including materials, parts and vehicle manufacturing, logistics, energy production, disposal and recycling.

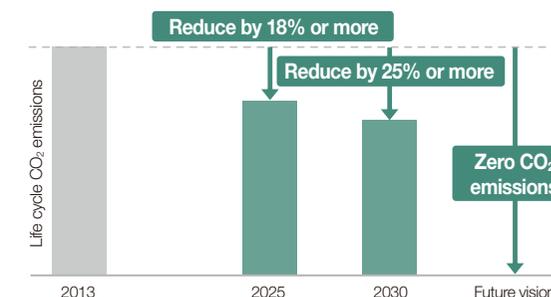
Our specific measures to reduce CO₂ emissions include adopting low-CO₂ emitting materials during manufacturing, reducing size and weight of parts and introducing renewable energy. We are also reducing CO₂ emissions in the disposal and recycling stages by expanding use of recycled materials and creating designs that make it easier to dismantle vehicles. In the future, we will accelerate our measures for the development of technologies that contribute to CO₂ emissions reduction and create eco-friendly designs as we pursue "ever-better cars."

We will also step up our efforts to reduce CO₂ emissions throughout the entire vehicle life cycle while engaging in even closer communication with parties in each stage of the value chain including suppliers and dealers as well as other stakeholders including partners, governments and industry organizations.

² Tank to Wheel: CO₂ emissions during driving (CO₂ emissions during the production stage of the fuel and electricity are not included; TtW emissions are zero in the case of battery electric vehicles and fuel cell electric vehicles)

Value Chains Collaboration pp. 20-21

Zero CO₂ Emissions Throughout the Entire Vehicle Life Cycle in the Future



| | 2025 Target | 2020 Initiatives |
|--|---|---|
| Life cycle CO₂ emissions TCFD Metrics and Targets c | <ul style="list-style-type: none"> Reduce CO₂ emissions by 18 percent or more throughout the entire vehicle life cycle compared to 2013 levels | <ul style="list-style-type: none"> Steadily promoted life cycle CO₂ emissions reduction by environmental management for product development (since 2005) Conducted assessments using the Eco Vehicle Assessment System (Eco-VAS) on 46 of the total 62 (74 percent coverage) new and redesigned models (models currently available for sale) in Japan. Achieved life cycle CO₂ emission levels in all subject models equivalent to or lower than those of reference vehicles (previous models or vehicles of the same class); e.g., reduced CO₂ emissions of the Yaris Cross hybrid electric vehicle model by 16 percent compared to vehicles of the same class. |
| Logistics | <ul style="list-style-type: none"> Japan: Reduce CO₂ emissions by 7 percent by improving transport efficiency compared to 2018 levels (average of 1 percent reduction per year) Japan⇔Other regions: Reduce CO₂ emissions by vessels for export (introduce 2 LNG-powered pure car carriers) | <ul style="list-style-type: none"> Promoted continual <i>kaizen</i> activities including loading efficiency improvement, shortening of logistic routes and modal shifts CO₂ emissions in Japan: 266,000 tons (down 8.9 percent compared to 2019 levels) |
| Suppliers | <ul style="list-style-type: none"> Promote CO₂ emissions reduction activities among major suppliers | <ul style="list-style-type: none"> Completed formulation of action plans for CO₂ data collection in each country and region globally. Commenced trials of data collection in some regions. |
| Dealers and distributors | <ul style="list-style-type: none"> Achieve 100 percent introduction rate for CO₂ emissions reduction items at newly constructed and remodeled dealers | <ul style="list-style-type: none"> Completed selection of CO₂ reduction items and formulation of introduction plans in each country and region globally |

Environmental Data p. 39-E

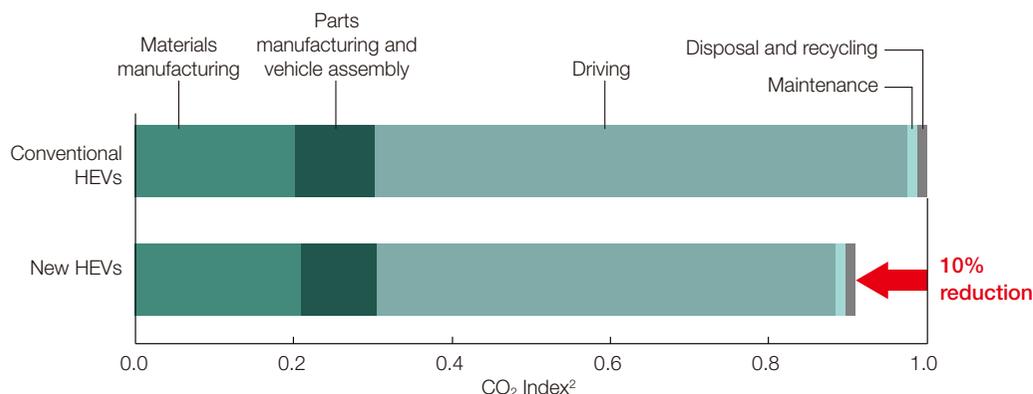
¹ Well to Wheel: Includes CO₂ emissions during driving as well as CO₂ emissions during the production stage of fuel and electricity (CO₂ emissions vary depending on the power supply configuration and hydrogen production method, in the case of battery electric vehicles and fuel cell electric vehicles)

Promoting Environmental Management in the Vehicle Life Cycle

Toyota has been working to reduce CO₂ emissions throughout the vehicle life cycle with the aim of a totally clean car manufacturing that adopts LCA¹ methods. One such effort is the Eco Vehicle Assessment System (Eco-VAS), which was introduced in 2005. Eco-VAS is a management system that sets environmental targets during the vehicle development stage under the guidance of the chief engineer and takes steady measures to achieve those targets in order to reduce environmental impact through the life span of a vehicle. By performing comprehensive environmental assessments, we are contributing to enhancing the environmental performance of each vehicle and promoting environmental management throughout the entire vehicle life cycle.

¹ Life Cycle Assessment: A comprehensive assessment technique to quantify a vehicle's impact on the environment (including global warming, acidification and resource depletion) in each stage from resource extraction to disposal and recycling

Eco-VAS Activity Examples: LCA Results of CO₂ Reduction in the Vehicle Life Cycle for New HEVs Launched in 2020



² Calculated based on vehicle lifetime mileage of 100,000 km (10 years)

Promoting Environmental Management in Cooperation with Suppliers

CO₂ emissions from products and services purchased from suppliers account for a significant proportion of CO₂ emissions throughout the vehicle life cycle. Because of this, Toyota is strengthening its cooperation with suppliers and conducting environmental management that takes the entire life cycle into consideration. We are jointly undertaking CO₂ emissions reduction activities in all areas of the supply chain including introduction of energy-saving production equipment and production technologies, selecting development, design and raw materials that contribute to lower CO₂ emissions and reducing CO₂ emissions in logistics and at sales sites.

We are visualizing CO₂ emissions volumes of parts that are subject to Eco-VAS by investigating emissions volumes in each process and have started considerations of specific measures to reduce emissions. In the future, we will conduct investigations that extend to the upstream segments of the supply chain and expand the scope of subject parts in stages.

Green Purchasing Guidelines³

³ Green Purchasing Guidelines: Guidelines that Toyota requires all of its tier 1 suppliers to follow to promote environmental management in the supply chain

Supplying Vehicles According to Energy Situation

In order to reduce CO₂ emissions from vehicles during driving, it is important to select optimal vehicles according to local energy situations and the status of infrastructure development. Battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs) do not emit CO₂ during driving (TtW), but CO₂ emissions during the production stage of electricity used for charging and hydrogen used as fuel, varies depending on the production methods. The potential for reducing CO₂ emissions can be expanded even for vehicles equipped with internal combustion engines by developing clean fuels, such as biofuel and e-fuel, and hydrogen engines that generates power through the combustion of hydrogen. Toyota will supply vehicles that customers need by expanding and enhancing low-CO₂ technologies and establishing a full lineup of electrified vehicles.

Use of the World's Largest Class LNG-powered Pure Car Carriers for Completed Vehicles Starts

The proportion of emissions from marine transport in the logistics segment is particularly large, we therefore began using two pure car carriers that run on LNG as the primary fuel introduced by two Japanese shipping companies (NYK Line and "K" Line) to transport completed vehicles from Japan to North America. These pure car carriers are the world's largest class ships of their type and can transport 7,000 vehicles each (standard vehicle conversion). By adopting LNG fuel and improving ship configuration, CO₂ emissions per transport unit are reduced by 25 percent to 40 percent, sulfur oxides (SO_x) are almost entirely eliminated, and nitrogen oxides (NO_x) are reduced by 80 percent to 90 percent compared to earlier diesel ships. The ships have extremely long life spans, so Toyota will continue working with shipping companies to consider means of reducing the environmental impact of marine transport, using the opportunity of ship renewal.

Pursuing Transport Efficiency and Reducing CO₂ Emissions in Logistics Activities

To reduce CO₂ emissions in logistics, Toyota is taking measures to improve transport efficiency by expanding the use of joint transport across suppliers through in-house logistics arrangements for production parts and using mixed transport with other companies for completed vehicles. In 2020, CO₂ emissions in Japan were 266,000 tons (down 8.9 percent year on year) and substantially below the target value because of effects from COVID-19. In the future, we will continue and expand improvements in transport efficiency by cooperating with other companies such as joint transport while working to reduce CO₂ emissions even further by taking on new initiatives for the practical use of new technologies including 25-meter tandem trailers and hydrogen fuel cell electric trucks.

[Environmental Data p. 39-E](#)

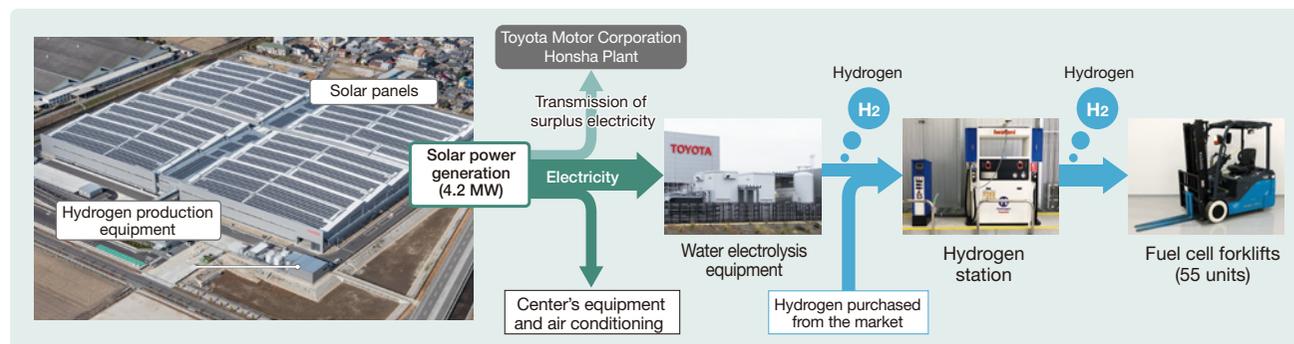


A 25-meter tandem trailer being considered for introduction

Achieving Carbon Neutrality at the Oguchi Parts Center No. 2

The Oguchi Parts Center No. 2, which began operation in March 2021, is a cutting-edge logistics center that gives maximum consideration to energy savings including streamlining of equipment. Furthermore, a 4.2 MW solar power generating facility, Toyota Motor Corporation's largest such facility, was installed at the center, meeting electricity produced from renewable energy without any waste by delivering the surplus electricity to the Honsha Plant. In addition, this electricity is used to produce hydrogen from the electrolysis of water, which is then supplied to fuel cell forklifts at the facility. Electricity during nighttime and on rainy days and some hydrogen are purchased, but as a result of offsetting this against the surplus electricity that is delivered offsite, the center has achieved carbon neutrality with virtually zero CO₂ emissions.

Use of Electricity and Hydrogen Produced from Renewable Energy (Oguchi Parts Center No. 2)



Challenge CO₂ 0

New Vehicle Zero CO₂ Emissions Challenge TCFD Strategy b SASB TR-AU-410a.3 GRI 102-15, 103-1, 201-2

Reduce Global¹ Average CO₂ Emissions (TtW²) from New Vehicles by 90 Percent Compared to Toyota's 2010 Levels by 2050 Six Challenges

Contribution to SDGs



Fundamental Approach

As the world moves to curtail temperature increase, Toyota sees this situation as both a risk and an opportunity and strives to reduce average CO₂ emissions per vehicle during driving by 90 percent compared to 2010 levels by 2050 under the New Vehicle Zero CO₂ Emissions Challenge.

Since the launch of the world's first mass-produced Prius HEV in 1997, based on the idea that "eco-friendly vehicles are only meaningful if they achieve widespread use and contribute to CO₂ reductions," we have worked to establish a full lineup of electrified vehicles including hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs), thereby offering a variety of options to customers suited to the circumstances of the region. Following up on this, in addition to enhancing the fuel efficiency improving technologies, engine technologies and technologies that integrate these that we have accumulated, we are also working to develop and promote further electrification technologies.

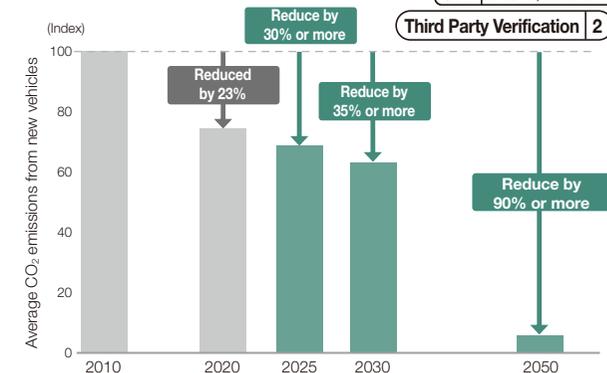
In response to different operating environments and cruising ranges desired by customers as well as differences in the status of development of recharging infrastructure among countries and regions, we seek to provide powertrains that inspire customers to think, "this is easy to use" and "I want to drive this" based on a sustainable and practical approach, and we hope that this will lead to reductions in CO₂ emissions.



The Toyota bZ4X Concept, unveiled at Auto Shanghai in April 2021

| 2025 Target | | 2020 Initiatives | |
|--|---|--|---|
| Average CO₂ emissions from new vehicles TCFD Metrics and Targets c | <ul style="list-style-type: none"> Reduce global¹ average CO₂ emissions (TtW² g/km) from new vehicles by 30 percent or more compared to 2010 levels | <ul style="list-style-type: none"> Reduced global¹ average CO₂ emissions from new vehicles by 23 percent compared to 2010 levels by improving environmental performance and expanding vehicle lineups Third Party Verification 2 | |
| Sales of electrified vehicles SASB TR-AU-410a.2 | <ul style="list-style-type: none"> Make cumulative sales of 30 million electrified vehicles or more | <ul style="list-style-type: none"> Achieved cumulative global sales of 16.98 million electrified vehicles, exceeding the target by 2020 of 15 million units Third Party Verification 3 | Environmental Data p. 40-I |

Average CO₂ Emissions from New Vehicles: Global¹ TCFD Metrics and Targets c GRI 302-5, 305-5



¹ Countries & Regions: Japan, U.S., Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand and Indonesia

² Tank to Wheel: CO₂ emissions during driving (CO₂ emissions during the production stage of the fuel and electricity are not included; TtW emissions are zero in the case of battery electric vehicles and fuel cell electric vehicles)

Eco-friendly Vehicles Contribute to the Environment Only When They Come into Widespread Use—Sales Results of Electrified Vehicles

Development of stricter environmental regulations relating to the sale of new vehicles has been accelerating in each country in recent years, but in Europe, a key market for Toyota, average CO₂ emissions from Toyota's new vehicles were better than the regulatory standards and the best level in the industry. We believe that this was the result of electrified vehicles—mainly hybrid electric vehicles (HEVs) and plug-in hybrid electric vehicles (PHEVs)—reaching 60 percent of all sales thanks to the improved fuel efficiency and enhanced marketability.

Also, global annual electrified vehicles sales reached a record high of 1.95 million units in 2020, and we achieved the Sixth Toyota Environmental Action Plan of global annual electrified vehicle sales of 1.5 million units and cumulative sales of 15 million units by 2020. Cumulative sales have reached 17.62 million units (as of March 31, 2021), and the cumulative CO₂ emissions reduction effect from the widespread use of electrified vehicles is approximately 143 million tons.

This result is due to Toyota providing a lineup of 58 diverse electrified models (as of March 31, 2021) of passenger cars and commercial vehicles comprising 46 HEVs, 4 PHEVs, 6 battery electric vehicles (BEVs) and 2 fuel cell electric vehicles (FCEVs).

Going forward, we will continuously make technological innovations and will expand the lineup of electrified models to around 70 models by 2025 while enhancing mass production technologies.

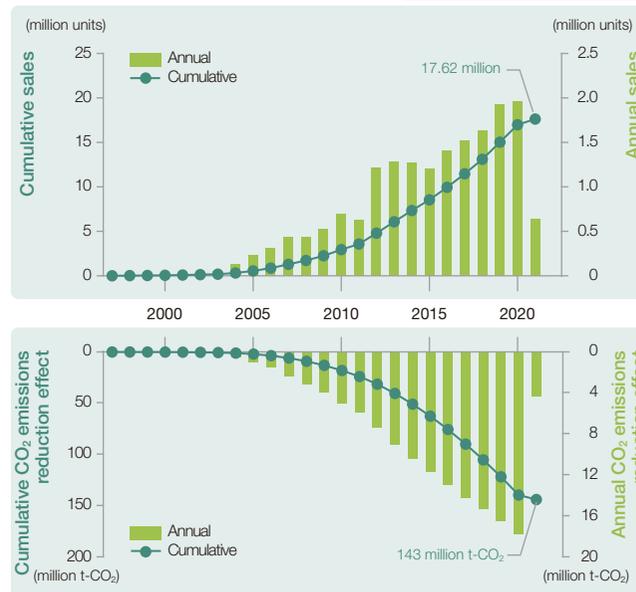
[Environmental Data p. 40-1](#)

SASB TR-AU-410a.2 **GRI** 302-5, 305-5

CO₂ Emissions Reduction Effects from Electrified Vehicles

(as of March 31, 2021)

Third Party Verification 3, 4



Toyota bZ Series of New BEVs Announced as Part of Full Electrified Vehicle Lineup

Toyota is advancing its plan to introduce 15 BEV models by 2025 and seeks to gain the acceptance of numerous customers in regions where demand for BEVs and supplies of electricity from renewable energy are high. Of the 15 models, we plan to introduce 7 models in the new Toyota bZ series. We announced the introduction plan and unveiled a concept version of the Toyota bZ4X, which will be the first model in the bZ series, at Auto Shanghai in China in April 2021. Toyota is developing this model in collaboration with Subaru Corporation and plans to begin phased global sales of the new SUV that takes advantage of the strengths of both companies by mid-2022. By coordinating with policies that encourage the use of renewable energies, Toyota hopes to expand the range of choice for customers, and contribute to the further reduction of CO₂ emissions.

Collaborative Efforts to Electrify Commercial Vehicles

In March 2021, Toyota, Isuzu Motors Limited (Isuzu) and Hino Motors, Ltd. (Hino) announced the formation of a new partnership in the commercial vehicle business. By integrating Isuzu's and Hino's commercial vehicle business foundations with Toyota's electrification technologies, the three companies will develop small battery electric and FC electric trucks. While working to reduce vehicle costs, we will accelerate initiatives to promote widespread use by advancing infrastructure-coordinated societal implementation, such as by introducing FC electric trucks to hydrogen-based society demonstrations in Fukushima Prefecture, Japan. By joining forces in the commercial vehicle segment as well, the automobile industry seeks to contribute to solutions to issues facing the transport industry and reduction of CO₂ emissions.



Joint press conference by Toyota, Isuzu and Hino

Measures to Reduce CO₂ for Vehicles Currently in Use —Development and Supply of Genuine Engine Oil That Improves Fuel Efficiency

GRI 302-5, 305-5

Toyota developed low-viscosity, high-performance genuine oil that improves fuel efficiency and has actively supplied it not only for new vehicles, but also for vehicles currently in use around the world, contributing to the achievement of carbon neutrality. We developed GLV-1 0W-8¹ genuine Toyota engine oil in 2020. The viscosity is approximately 25 percent lower compared to earlier products, improving fuel efficiency by approximately 0.7 percent. Supply started with the Yaris HEV and is being expanded to other models in stages. Our low-viscosity technologies are also used in oil standards² that are becoming increasingly popular, and we are supplying genuine oil that improves fuel efficiency to many vehicles.

1 The JASO GLV-1 standard was obtained for SAE 0W-8 viscosity grade oil (the lowest viscosity oil standard)

2 ILSAC GF-6A 0W-20 and ILSAC GF-6B 0W-16 standards were obtained

1, 2 2020 JSME Medal for New Technology was awarded by The Japan Society of Mechanical Engineers



The newly developed low-viscosity engine oil

Challenge CO₂ 0

Plant Zero CO₂ Emissions Challenge TCFD Strategy b GRI 102-15, 103-1, 201-2, 302-4

Achieve Zero CO₂ Emissions at Global Plants by 2050

Six Challenges

Contribution to SDGs



Blades for the wind power generators (22 MW) under construction at the Tahara Plant (left) and solar panels (23 MW) at the new Tianjin FAW Toyota Motor Plant in China (right)

| | 2025 Target | 2020 Initiatives |
|---------------------------------------|--|---|
| Plant CO₂ emissions | <ul style="list-style-type: none"> Reduce CO₂ emissions by implementing innovative technologies and daily <i>kaizen</i> and introducing renewable energy Reduce CO₂ emissions from global plants by 30 percent compared to 2013 levels | <ul style="list-style-type: none"> Introduced innovative technologies including a new type of paint atomizer (airless paint atomizer) that uses static electricity and promoted energy-saving through daily <i>kaizen</i> CO₂ emissions was 4.9 million tons (down 22 percent compared to 2013 levels) |
| Renewable electricity | <ul style="list-style-type: none"> Achieve a 25 percent introduction rate for renewable electricity | <ul style="list-style-type: none"> Achieved an 11 percent introduction rate for renewable electricity. Maintained 100 percent renewable electricity introduction rate at all plants in Europe and also achieved it at all plants in South America. Installed solar panels at the new plant in China (23 MW). |
| Hydrogen | <ul style="list-style-type: none"> Promote proactive technological development to utilize hydrogen | <ul style="list-style-type: none"> Continuously conduct various verification tests to support the utilization of hydrogen. Developed stationary FC generator diverting on-board FC, water electrolysis-based machine for hydrogen generation and filling, etc. Established the Hydrogen Power Generation Park, a verification site of an in-house power generation facility. |

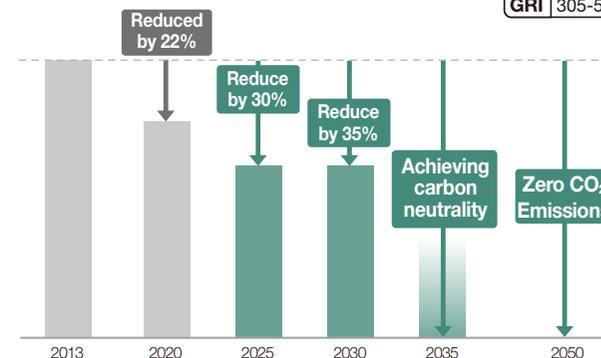
<Organizational Boundary and Coverage> All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

Fundamental Approach

Under the Plant Zero CO₂ Emissions Challenge, we are seeking zero CO₂ emissions in the vehicle manufacturing operations through the energy reduction initiatives such as daily *kaizen* and the introduction of innovative technologies, as well as the introduction of renewable energy and utilization of hydrogen, at all plants of Toyota and consolidated subsidiaries. Through daily *kaizen* and the introduction of innovative technologies, while the number of parts that emit CO₂ during manufacturing is increasing due to the popularization of electrified vehicles, we are optimizing production equipment and improving energy reduction programs to reduce the amount of energy used per vehicle by an annual rate of 1 percent or more. With regard to the introduction of renewable energy and utilization of hydrogen, we are working hand in hand widely with stakeholders not just internally, but also outside the company to build the necessary social infrastructure to support the widespread use of these energy sources. We are striving to achieve carbon neutrality at all global plants by 2035 and zero CO₂ emissions by 2050 by accelerating these initiatives.

CO₂ Emissions at Global Plants TCFD Metrics and Targets b

GRI 305-5



Environment Data p. 41-J

Reducing CO₂ Emissions in Production Activities

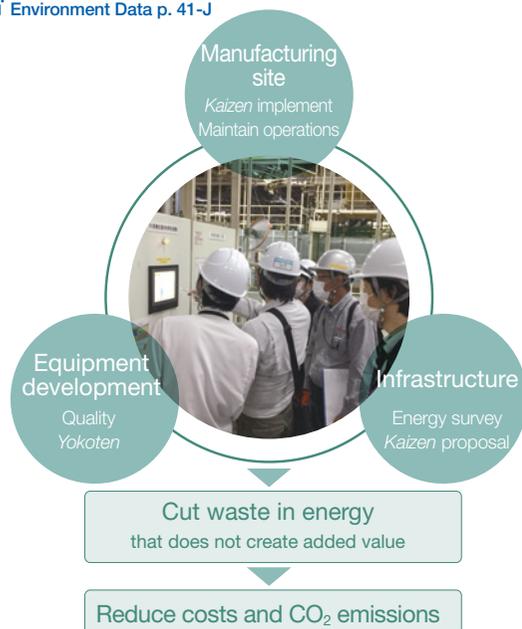
TCFD Metrics and Targets b
GRI 305-5

Toyota's plant manufacturing departments worked with production engineering and drive force departments to conduct energy diagnoses at production sites, propose improvements and implement measures. We continuously undertook energy-saving activities (internal ESCO¹ activities) and *yokoten*² of best practices. Also, the introduction of innovative technologies was expanded with a focus on painting processes and energy-saving was promoted by adopting steamless and airless processes and shifting to LED lighting. As a result, we reduced global CO₂ emissions (total) in 2020 to 4.9 million tons (down 22 percent compared to 2013 levels). We also conducted study sessions with Toyota Group companies and suppliers to share know-how on energy-saving measures, and that information has been reflected in *kaizen* implemented by those companies. We also observed other industries and are continuously seeking to discover new ideas for *kaizen*.

¹ Energy reduction Support & Cooperation

² *Yokoten*: Refers to sharing of best practices with other organizations

Environment Data p. 41-J

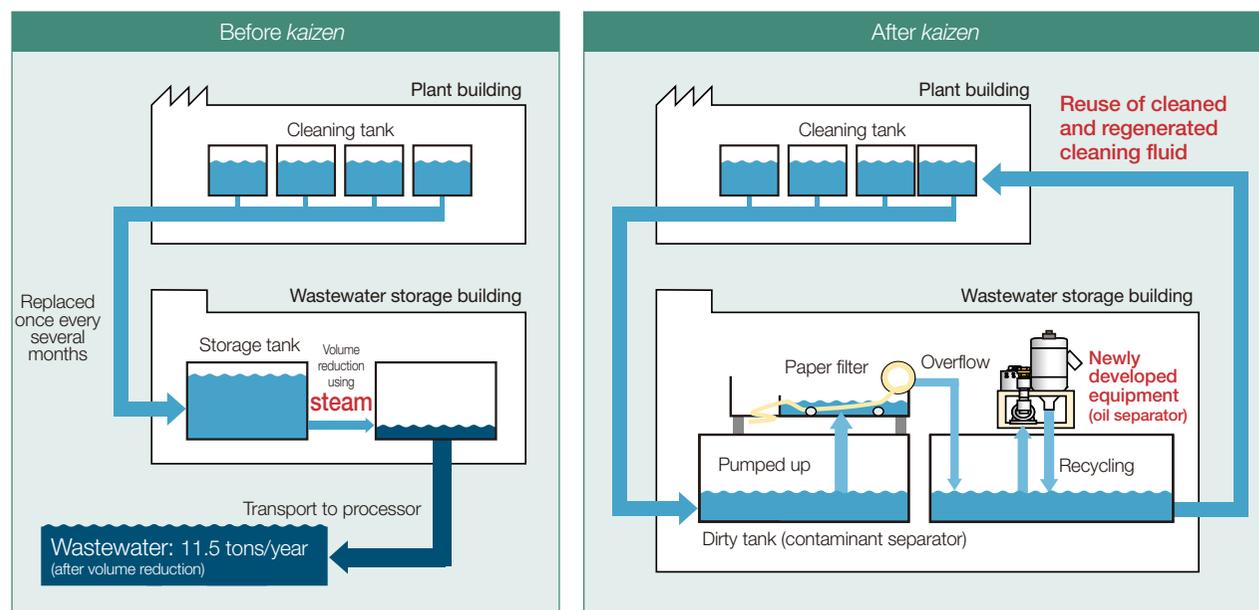


Concept of internal ESCO activities: Trinity of energy-saving improvements

Zero Steam and Zero Wastewater Achieved in Parts Cleaning Process

During the parts cleaning process at the Miyoshi Plant, wastewater from the cleaning process was reduced in volume by using steam at a rate of 12 kl per year of crude oil equivalent, and processing of 11.5 tons per year of wastewater was outsourced to processors. To address this, we developed a ultra-fast fine-bubble flotation separator that generates fine-bubbles to separate oil from contaminants and cleans and regenerates wastewater. This makes it possible to reuse all cleaning fluid³. This technology is highly applicable for other uses; the potential is expected to increase by about 60 times at other Toyota Motor Corporation plants. Deployment by suppliers and in other industries is also possible. This technology won the ECCJ Chairman's Prize of the 2020 Energy Conservation Grand Prize awarded by the Energy Conservation Center, Japan.

³ The result of joint development with Chubu Electric Power Miraiz Co., Inc. and Kansai Automation Equipment Co., Ltd.



Introduction of Renewable Energy and Utilization of Hydrogen

Toyota is promoting the introduction of renewable energy, taking into consideration the characteristics of each region. We are currently actively introducing renewable energy power generation facilities at Toyota plant sites. In Japan, we installed wind power generators (22 MW, operation to begin in 2022) at the Tahara Plant, and in other regions, we installed solar panels at the new plant in China (23 MW, currently in operation). In addition, we maintained 100 percent renewable electricity introduction rate at all plants in Europe and also achieved it at all plants in South America.

In conjunction with the increased use of renewable electricity in recent years, hydrogen holds great promise as a means of suppressing supply and demand variation in energy and for energy storage and transport. Toyota is leading the Hydrogen Utilization Study Group in the Chubu to create mechanisms for the use of hydrogen energy throughout society in collaboration with companies in other industries, contributing to the realization of a decarbonized society. With respect to the utilization of hydrogen at plants, we are developing hydrogen burners that can decarbonize the combustion process, expanding the use of fuel cell (FC) forklifts and promoting production and use of renewable energy-derived hydrogen at plants by introducing water electrolysis-based machine for hydrogen generation and filling (Motomachi Plant). Furthermore, we are installing hydrogen-fueled power generators and conducting verification testing. (Below: Shimoyama Plant; Right: Honsha Plant). Going forward, we will develop technologies for carbon capture and reuse and other technologies with the aim of achieving carbon neutrality at all global plants by 2035.

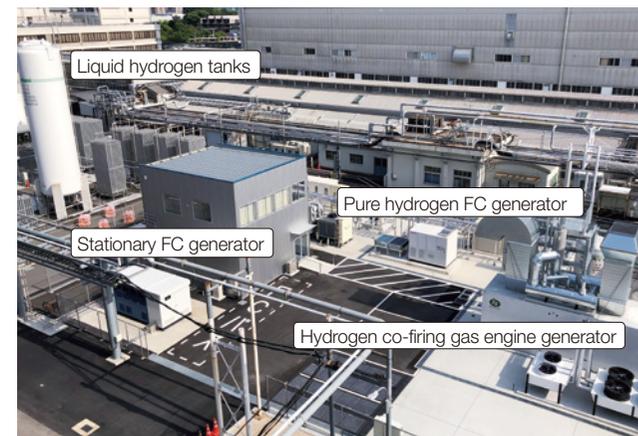


Self-supporting stationary FC generator diverting on-board FC (Shimoyama Plant)
Power generation using hydrogen is possible even in power outages

Operation of Hydrogen Power Generation Facility Starts at Honsha Plant to Expand Hydrogen Utilization

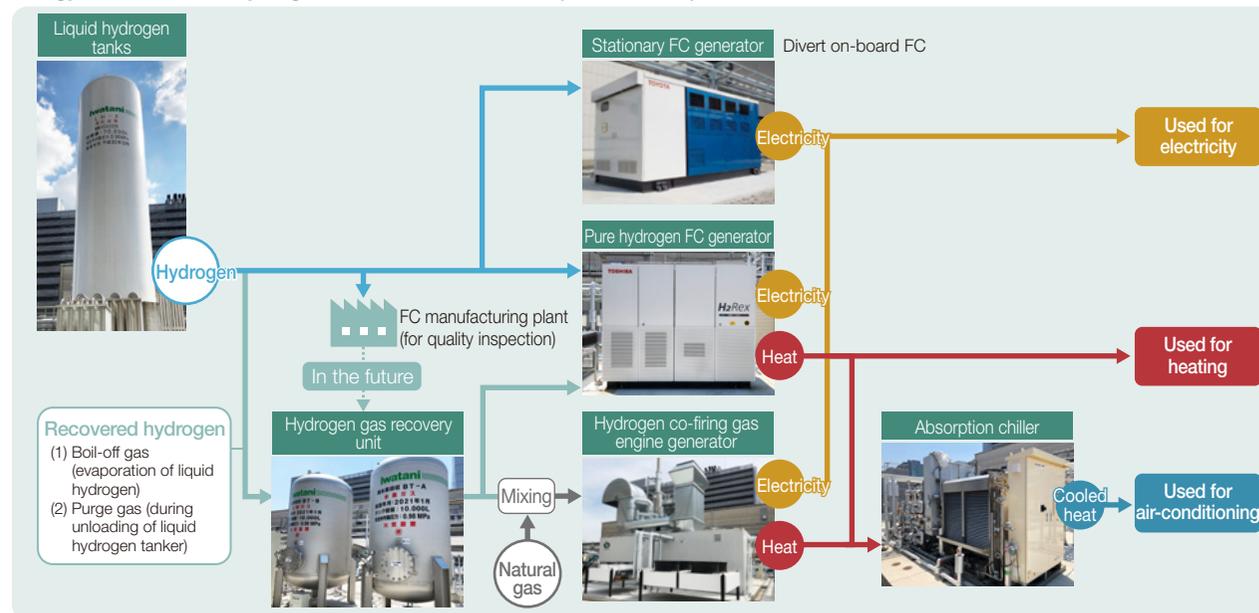
With the aim of achieving zero CO₂ emissions from in-house power generation facilities at our plants, we introduced three different types of power generating facilities at the Honsha Plant: a stationary FC generator diverting the Mirai's on-board FC, a pure hydrogen FC generator with high power generating efficiency that enables the use of waste heat, and a co-firing gas engine generator of natural gas and hydrogen. The combined generating capacity is 600 kW, and a portion of the hydrogen fuel used is recovered hydrogen that in the past was released. Verification tests are underway to achieve highly efficient power generation systems. The technologies gained from this hydrogen power generation facility will be rolled out to other plants with the aim for an early achievement of plant zero CO₂ emissions.

We also created a structure to use the hydrogen stored for power generation and automobile FCs for supply to the adjacent hydrogen station in the event of a disaster. By making it possible for company and other fuel cell electric vehicles (FCEVs) to refuel with hydrogen, their electric supply function can be used to support operations at evacuation centers in the region and for other purposes. Through this and other initiatives, we are tackling the challenges of creating a hydrogen-based society.



Hydrogen Power Generation Park, a verification site of an in-house power generation facility at the Honsha Plant

Energy Flow within the Hydrogen Power Generation Park (Honsha Plant)



Contribution to SDGs



Challenge



Challenge of Minimizing and Optimizing Water Usage GRI | 102-15, 103-1, 303-1, 303-2

Minimize Water Usage and Implement Water Discharge Management According to Individual Local Conditions Six Challenges



A rainwater reservoir (left) and rainwater treatment equipment (right) at Toyota Kirloskar Motor in India

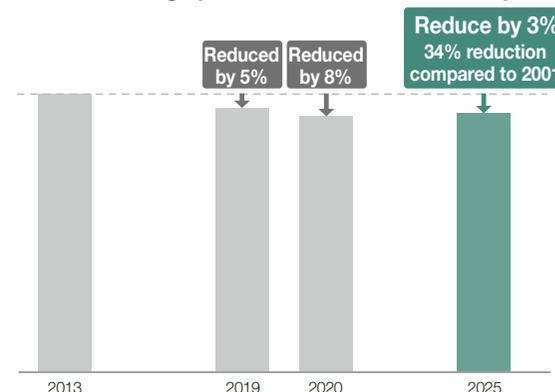
Fundamental Approach

It is said that the world's population will grow to 9.7 billion by 2050, water demand will increase 55 percent from current levels and 40 percent of the world's population is therefore expected to suffer water shortages*. Water problems such as increases in water stress in conjunction with rising populations and climate change as well as stricter regulations in response to deterioration of water quality in rivers and other water sources are important issues from the perspective of risk management in corporate activities. Water is essential in painting and other car manufacturing processes. This makes it imperative to reduce the impact on the water environment, to whatever degree possible. While there are significant differences in the characteristics of the water environment depending on the region, we have two main common strategies to be tackled regardless of the region: thoroughly reduce the amount of water usage and purify wastewater thoroughly and return. Toyota has been using rainwater, cutting water usage in production processes, recycling wastewater to reduce amounts withdrawn from water sources and returning high-quality water to local environments, prioritizing areas where we believe the impact on the water environment is significant.

In the future, we will continue to undertake measures that have a positive impact on local water environments, taking into consideration the local requests and water issues, through appropriate information disclosure and active dialogue with local communities and suppliers.

* According to Toyota data

Water Usage per Vehicle Produced Globally



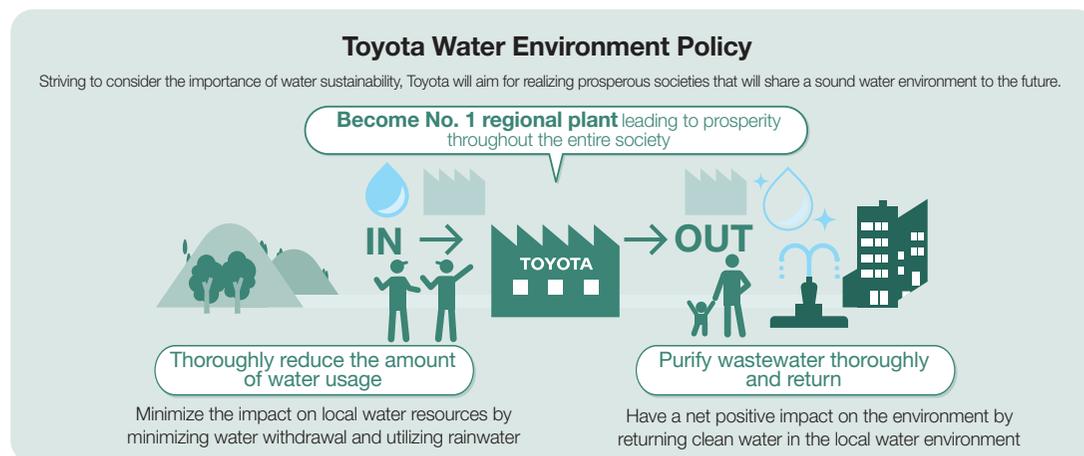
Environmental Data p. 42-O

| | 2025 Target | 2020 Initiatives |
|-----------------------|---|--|
| Water quantity | <ul style="list-style-type: none"> Reduce water usage taking the water environment in each country and region into consideration Promote wastewater recycling, rainwater use and various activities including daily <i>kaizen</i> Reduce global water usage by 3 percent per vehicle produced compared to 2013 levels (reduce by 34 percent compared to 2001 levels) Complete measures at 2 Challenge-focused plants where the water environment is considered to have a large impact | <ul style="list-style-type: none"> Comprehensively introduced reduction technologies and undertook daily water-saving efforts, such as water recycling and reducing the amount of steam used in painting processes In progress to reducing at a pace above target (down 8 percent compared to 2013 levels) <p>Environmental Data p. 42-O</p> |
| Water quality | <ul style="list-style-type: none"> Thoroughly manage water discharge quality under internal standards that are stricter than regulatory standards Continuously assess the impact of wastewater at all plants where it is discharged directly into the river | <ul style="list-style-type: none"> Continuously manage water quality under internal standards that are stricter than regulatory standards Assessed the impact of wastewater at all plants |

<Organizational Boundary and Coverage> All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

Measures Undertaken in Accordance with the Toyota Water Environment Policy

Although water-related issues and measures differ depending on the region, Toyota established the Toyota Water Environment Policy and takes action in order to achieve the Challenge of Minimizing and Optimizing Water Usage on a global level. Under the Toyota Water Environment Policy, we are assessing our impact on water environments and working to minimize those impacts from two perspectives: the input side, where we thoroughly reduce the amount of water usage, and the output side, where we purify wastewater thoroughly and return. We take action from three directions—the pursuit of environmental technologies, community-rooted operations and cooperation with society—and strive to become the No. 1 regional plant leading to prosperity throughout the entire society.



Reduction of Water Usage According to the Actual Water Environment in Each Region and Water Quality Management

Toyota introduced innovative technologies in conjunction with planned upgrades to production lines, reduced the use of steam in manufacturing processes and implemented other measures, and as a result, in 2020, water usage was 36.8 million m³ (down 16 percent year on year) and water usage per vehicle produced was 4.0 m³ (down 2.5 percent year on year). We also assessed the impact of water environments at global plants, identified four Challenge-focused plants in North America, Asia and South Africa, and are now implementing comprehensive water management. With regard to the water quality discharged from plants, we assessed the impact on wastewater at each global plant where it is discharged directly into the river, set water discharge quality under internal standards that are stricter than regulatory standards and is continuously conducting water management. Moving ahead, we will continue striving to minimize our impacts on the water environment through water-saving and water recycling, and engage in activities that have positive effects on local water environments.

[Environmental Data p. 42-O](#)

Substantial Reduction in Water Usage Through Expanded Use of Recycled Water (China)

At Tianjin FAW Toyota Motor Co., Ltd. (TFTM), particular efforts are being put into raising the water discharge recycling rate and increasing the use of recycled water during vehicle production to reduce water withdrawal throughout its plants. In 2020, measures were taken to increase the use of recycled water including wastewater from its new plant, and a total of 484,000 tons of recycled water was used including 308,000 tons used on production lines (up 28,000 tons) and 176,000 tons used to irrigate green areas (up 32,000 tons). As a result, water withdrawal was substantially reduced, and water usage per vehicle was down 5 percent compared to 2014.



Wastewater recycling production facility

Recycled water is used to irrigate green areas on the plant site

Water Usage Reduced Through Repeated Kaizen Activities (South Africa)

At Toyota South Africa Motors (Pty) Ltd. (TSAM), since 2018, efforts have been focused on reducing water used in the chassis electrodeposition painting process. In 2020, the conductivity of cleaning water used in the cleaning process was controlled and the timing of water supply and discharge was optimized through automation. By reusing cleaning water to the maximum degree possible, the amount of water used in the process has been significantly reduced. In addition, steady improvements are being made such as reducing water used for cleaning by preventing liquid leakage from valves and splashing in all production processes to keep the plant clean. In conjunction with these measures, rainwater collection tanks have been installed to reduce water usage by using rainwater in production processes and by other means. As a result of these improvements, total water usage reduction effects were 49,000 tons, a 43 percent reduction throughout all processes compared to before *kaizen*. Despite an increase in vehicle production volume, water usage throughout the plant was reduced by 2 percent compared to 2013 levels. These measures have been commended for the extensive analysis of each process and the repeated implementation of numerous *kaizen* activities, and TSAM was presented the Bronze Award of the 2020 Global ECO. Awards, which is given in recognition of the environmental initiatives inside Toyota.



Water usage reduction *kaizen* team members standing in front of rainwater collection tanks

Challenge



Challenge of Establishing a Recycling-based Society and Systems

Promote Global Deployment of End-of-life Vehicle Treatment and Resource Recycling Technologies and Systems Developed in Japan

GRI 102-15, 103-1, 306-2

Contribution to SDGs



Six Challenges

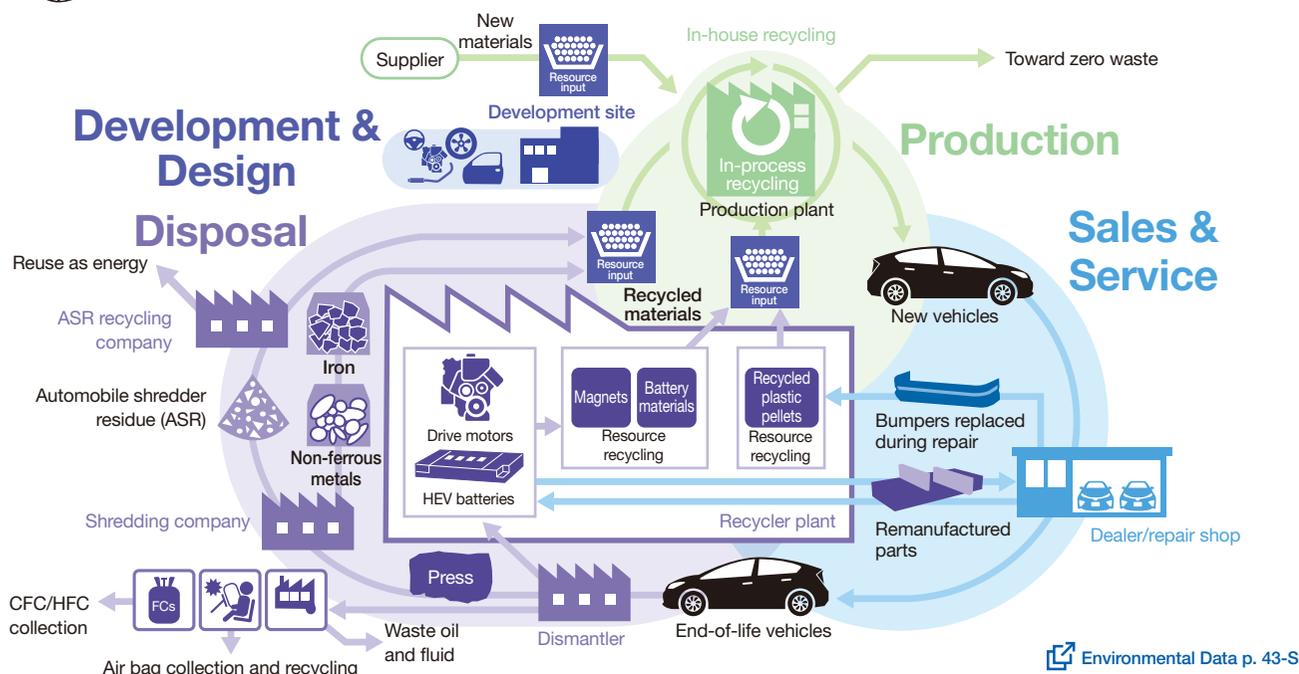
Fundamental Approach

Due to global population growth along with the pursuit of economic growth and convenient lifestyles, the pace of resource consumption is accelerating. If large-scale exploitation continues without change, natural resources will be depleted, and if waste increases due to mass consumption, appropriate treatment and recycling will be unable to keep pace, resulting in risks of environmental pollution.

To prepare for such circumstances, we launched and have been promoting the Toyota Global 100 Dismantlers* Project to establish social systems for appropriate treatment and recycling of End-of-life vehicles to prevent the environmental load caused by End-of-life vehicles. On the other hand, to create a resource recycling-based society, it is necessary to address the risk of resource depletion and to reduce substances of concern, as well as to address recycling throughout the entire vehicle life cycle through the business opportunities we create.

We aim to realize the ultimate recycling-based society, and is promoting the Toyota Global Car-to-Car Recycle Project so that we can utilize resources from End-of-life vehicles for manufacturing new vehicles.

* Dismantlers: Operators of vehicle dismantling businesses



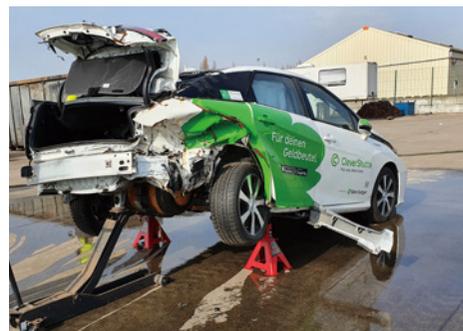
Environmental Data p. 43-S

| | 2025 Target | CY2020/FY2021 Initiatives |
|---|---|---|
| Toyota Global 100 Dismantlers Project | <ul style="list-style-type: none"> Complete setup of 15 model facilities for appropriate treatment and recycling of End-of-life vehicles Continuously accelerate easy-to-dismantle designs <ul style="list-style-type: none"> Integrate easy-to-dismantle designs to respond to appropriate treatment and recycling of End-of-life vehicles and resource issues, and provide appropriate information (large batteries, fuel cell (FC), hydrogen tank) | <ul style="list-style-type: none"> Completed setup of model facilities in Malaysia, Brazil, Argentina, Belgium and Japan (Belgium and Japan are sites for appropriate treatment and recycling of End-of-life FCEVs) Continued to integrate easy-to-dismantle designs in new vehicles and increased provision of information to the dismantling industry operators through mass advertisements (trade papers) in Japan |
| Toyota Global Car-to-Car Recycle Project | <ul style="list-style-type: none"> Establish a safe and efficient system for battery 3R (Rebuild, Reuse and Recycle), eyeing the widespread use of electrified vehicles <ul style="list-style-type: none"> Aim to maximize collection and detoxification of End-of-life batteries globally Start operating battery 3R throughout 5 regions—Japan, U.S., Europe, China and Asia Develop technologies to utilize recycled materials (especially plastics) in accordance with the conditions in each region <ul style="list-style-type: none"> Promote utilization by technological development to optimally exploit recycled materials in Europe and to increase the supply of recycled materials in Japan | <ul style="list-style-type: none"> Continuously promoted utilization of renewable resources and recycled materials (HEV batteries, motor magnets, plastic bumpers, etc.) |

Toyota Global 100 Dismantlers Project to Establish Social Systems for Appropriate Treatment and Recycling of End-of-life Vehicles

GRI 203-1

When End-of-life vehicles are not properly disposed or dismantled, it may not only affect local environments, but also causes risks to the health and safety of local residents. To prevent these problems, we promote the establishment of social systems for appropriate treatment and recycling of End-of-life vehicles, using our long-established technologies and know-how to not impose environmental load. In the process, we also contribute to the prevention of global warming by collecting and properly treating of waste oil and CFCs/HFCs. In FY2021, we set up model facilities for appropriate treatment and recycling of End-of-life vehicles in Japan (Toyota Metal Co., Ltd.), Malaysia (Car Medic Sdn Bhd), Belgium (Comet), Argentina (Toyota plants) and Brazil (GWA). When Comet conducted a demonstration of appropriate fuel cell electric vehicle (FCEV) dismantling in accordance with a video manual on appropriate treatment and recycling, we checked via webcam to remotely confirm the effectiveness of the manual. In this way, we worked with local affiliates to clarify requirements for facilities, operations and waste treatment and recycling at the site, and established a system that enables remote confirmation of appropriate End-of-life vehicle treatment even remotely, using photos and videos.



Demonstration of hydrogen gas removal process for FCEVs (Belgium)



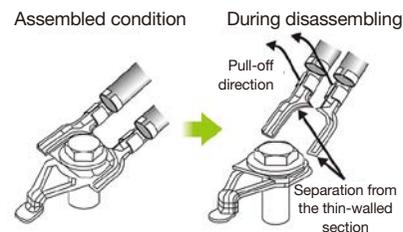
Treatment of waste oil and fluid from End-of-life vehicles (Malaysia)

Achieving Industry-leading Levels in Easy-to-dismantle Design for Effective Resource Recycling

In order to promote resource recycling of End-of-life vehicles, we continue to use easy-to-recycle materials, and have confirmed that vehicles introduced in Europe achieved a recyclability rate of 85 percent or more and a recoverability rate of 95 percent or more, including energy recovery. Since launch of the Raum passenger car in 2003, we have been directly visiting dismantling companies around the world to investigate actual conditions. Based on this, we are actively adopting vehicle structures that makes it easy to dismantle and separate parts for new vehicles. With the new RAV4 PHEV, Harrier, Yaris Cross and Mirai launched in FY2021, we continue to integrate easy-to-dismantle designs to ensure safe and speedy dismantling operations. In light of recent circumstances, we placed advertisements in trade papers in Japan focusing on the ease of removing wiring harness, a representative example, in order to gain the understanding of more dismantlers concerning Toyota's eco-friendly designs.

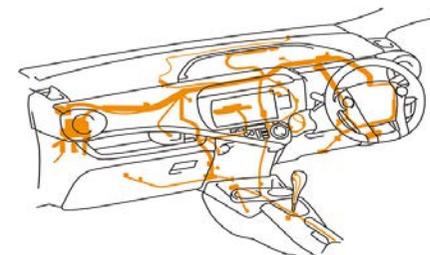
Easy-to-dismantle design

Examples of Easy-to-dismantle Design



Wiring Harness: Use of Pull-tab Type Ground Terminal

It is designed to be easily dismantled by simply pulling it like the lid of a can.



Wiring Harness Layout Innovation

Wiring harness can be separated with minimal interference to other parts.

Toyota Global Car-to-Car Recycle Project—A Resource Recycling Initiative that Considers the Entire Vehicle Life Cycle

SASB TR-AU-440b.2

GRI 203-1, 301-3

Toyota strives to reduce the generation of waste, and repeatedly uses reusable materials to improve resource efficiency in four stages of the vehicle life cycle: development and design, production, sales and disposal. We are also working to make waste recyclable.

1. Resource Recycling of Plastics

In the lead up to 2050, Toyota aims to build a society that maximizes plastic recycling on a global scale. In addition to existing initiatives for collection and recycling of bumpers replaced during repairs at dealers, in order to reuse automobile shredder residue (ASR) from End-of-life vehicles as a material, which until now had been reused as heat, we are planning to use recycled plastic materials from ASR in new vehicles by utilizing crushing and sorting technologies of Toyota Metal Co., Ltd.

2030 Target

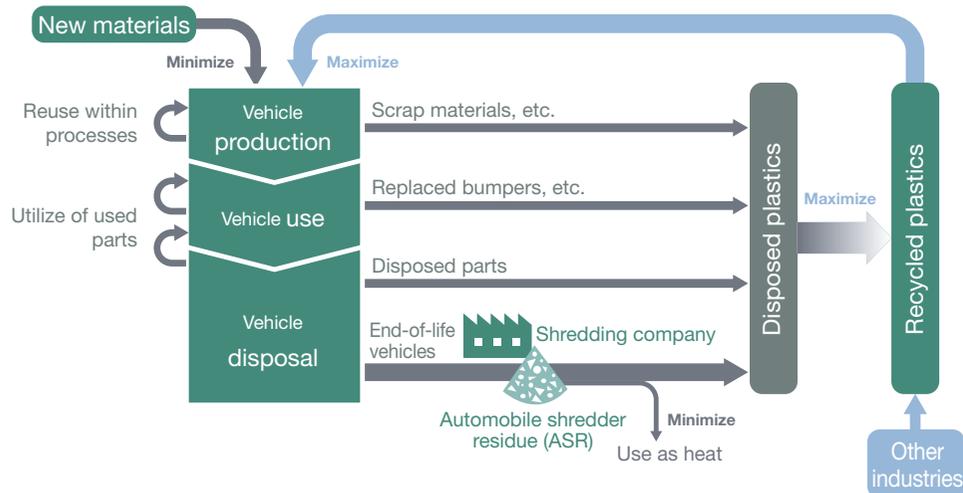
Increase the use of recycled plastics by more than three times compared to current levels by 2030, with the aim of building a society in 2050 that maximizes plastic recycling on a global scale (Scope: Vehicles produced in Japan and Europe)

2. Resource Recycling of Rare Metals and Rare Earth Elements

With a view to curbing the use of natural resources, we promote the collection of rare resources used in electrified vehicles such as hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs) and fuel cell electric vehicles (FCEVs), and the reuse of recycled materials. We are collaborating with partner companies to establish a system for collecting and recycling HEV batteries and motor magnets, along with tungsten carbide tools and other materials used in production, aiming to achieve the ultimate goal of closed-loop recycling.

In order to make more effective use of limited resources, and to increase resource input efficiency, we are striving for car manufacturing that takes recycling into consideration, by feeding back results of these activities into the development and design stages.

Maximization of Utilization of Recycled Plastics in Toyota Vehicles



Recovered End-of-life HEV batteries



New HEV battery

Challenge



Challenge of Establishing a Future Society in Harmony with Nature GRI 102-15, 103-1

Connect the Reach of Nature Conservation Activities Among Communities, with the World, to the Future Six Challenges

Contribution to SDGs



Fundamental Approach

It is critical for humans to conserve forests and other natural environments in all regions for coexistence in harmony with nature. However, deforestation, fragmentation of habitats for various wildlife and loss of biodiversity are increasing across the world. These developments entail a range of issues including depletion of biological resources that are essential to society, causing natural disasters and driving global warming, and we believe that they pose risks to the sustainability of the entire society. Toyota launched programs promoting harmony with nature around the world and is taking action to expand “Connecting Communities” activities under the Toyota Green Wave Project, and is “Connecting with the World” by promoting activities for achieving harmony with nature and conserving biodiversity globally under the Toyota Today for Tomorrow Project in cooperation with international organizations and NGOs. In addition, we conduct environmental educational programs for employees, future generations and others, and carry out “Connecting to the Future” activities under the Toyota ESD* Project.

* Education for Sustainable Development



Scenes from activities promoting agroforestry at primary and middle schools in Kenya

| | 2025 Target | 2020 Initiatives |
|--|---|--|
| Toyota Green Wave Project | <ul style="list-style-type: none"> Realize “Plant in Harmony with Nature”—6 in Japan and 4 in other regions Promote activities to connect with local communities in collaboration with affiliated companies Start activities promoting harmony with nature in collaboration with local communities and companies toward biodiversity conservation | <ul style="list-style-type: none"> Implemented wildlife habitat maintenance and improvement measures at global plants and conducted indicator species surveys to confirm the effects Implemented activities promoting harmony with nature such as creating forests at plant sites and conserving biodiversity in collaboration with Toyota Group companies and other affiliated companies |
| Toyota Today for Tomorrow Project | <ul style="list-style-type: none"> Globally strengthen conservation of endangered species, which symbolize biodiversity in collaboration with NGOs and others | <ul style="list-style-type: none"> Completed assessment of 29,830 species for the International Union for Conservation of Nature (IUCN) Red List and donated vehicles to conduct surveys and conservation activities of species listed as threatened on the IUCN Red List in Nepal, Argentina, Madagascar and other countries Supported 27 projects of NPOs and other non-profit organizations and groups addressing biodiversity and climate change (17 in Japan and 10 in other regions) |
| Toyota ESD Project | <ul style="list-style-type: none"> Implement globally unified initiatives to foster environmentally conscious persons responsible for the future <ul style="list-style-type: none"> Offer environmental education opportunities by utilizing biotopes and others in collaboration with the Plant in Harmony with Nature Foster environmentally conscious persons at both in-house and outside sites, including plants and the Forest of Toyota, by utilizing educational tools in harmony with nature for the next generation | <ul style="list-style-type: none"> Conducted tree-planting activities participated by employees. Also, carried out multiple environmental education programs to the public and children at the Forest of Toyota and the Toyota Shirakawa-Go Eco-Institute. |

Toyota Policy on Harmony with Nature

Toyota renewed the Biodiversity Guidelines formulated in 2008 as the Toyota Policy on Harmony with Nature in January 2021. This policy sets forth our approaches on activities that promote harmony with nature and will serve as the basis for future activities. We will expand the reach of activities promoting harmony with nature, including the conservation of biodiversity, from communities to the world in collaboration with various people throughout society.

 [Toyota Policy on Harmony with Nature](#)

Toyota Policy on Harmony with Nature

Humans enjoy prosperous and fulfilling lives by harmonizing various elements of nature such as water and air as well as conserving biodiversity. However, as environmental issues such as climate change and water shortages interact and become more severe, this harmony of natural elements is disrupted, and biodiversity is being lost. To improve the current situation, Toyota seeks to realize a sustainable society in harmony with nature by fully utilizing the technology and know-how it has developed through various businesses.

1. Recognizing that nature underlies our life and economy through resource supply and climate stabilization, we will promote activities that harmonize various elements of nature and conserve biodiversity.
2. We will expand the reach of activities among communities and connect them with the world by not only acting spontaneously, but also collaborating strongly with society.
3. We will promote environmental education to change the awareness of employees and generations based on the recognition that the biodiversity that forms the foundation of our prosperous life is facing a critical situation. At the same time, we will offer related information to society through both in-house and outside activities.

Toyota Today for Tomorrow Project

Collaboration with IUCN, WWF and Other Organizations to Conserve Biodiversity

After entering into a five-year partnership agreement with the International Union for Conservation of Nature (IUCN) in 2016, we provided annual grants of approximately 1.2 million U.S. dollars, which is the largest scale grant provided by a private-sector company. This enabled the IUCN to enhance the IUCN Red List¹, a global indicator of wildlife species, and they conducted assessments of extinction risk of species. This comprehensive inventory of the global conservation status of animals, fungi and plants is effectively used, and plays an important role supporting implementation of the United Nations 2030 Agenda.

In 2016, Toyota became the first car company and Japanese company to sign a five-year Global Corporate Partnership agreement with the World Wide Fund for Nature (WWF). We have made 1 million U.S. dollar annual grants to support the Living Asian Forest Project, to conserve tropical forests and wildlife in Southeast Asia and helped improve the sustainability of natural rubber production.

¹ The IUCN Red List of Threatened Species™: A list of threatened species throughout the world managed by the IUCN

Toyota Environmental Activities Grant Program: Agroforestry Activities at Primary and Middle Schools in Kenya

In 1999, Toyota was honored with the Global 500 Award from the United Nations Environment Programme (UNEP). To commemorate this, in FY2001, we launched a grant program to support the environmental activities of NPOs and other non-profit organizations and groups. Over the 20 years since the program was established, we have supported 440 projects in 57 countries and regions worldwide. One project promotes agroforestry², primarily at primary and middle schools, in semi-arid regions of Kenya where forest destruction is progressing with the aim of creating model agricultural villages in harmony with nature. The participating educators and students have increased the varieties of crops and trees growing at their schools and homes to start sustainable agriculture.

² Agroforestry: Agricultural and forestry business whereby trees are planted, and livestock and crops are raised and cultivated between the trees

 [Environmental Data p. 43-X](#)  [Toyota Environmental Activities Grant Program](#)

Toyota Green Wave Project

Initiatives of Toyota Technical Center Shimoyama Promoting Harmony with Nature and Local Communities GRI 304-3, 304-4

At the Toyota Technical Center Shimoyama, construction of which is proceeding, we are undertaking satoyama conservation and other measures based on the concept of a “technical center in harmony with nature and local communities.” In 2020, we invited experts to serve as the instructor of an environmental education program for local high school students (21 students participated) on the Japanese eight-barbel loach, which inhabits satoyama environments. Going forward, we will actively foster persons responsible for the future.

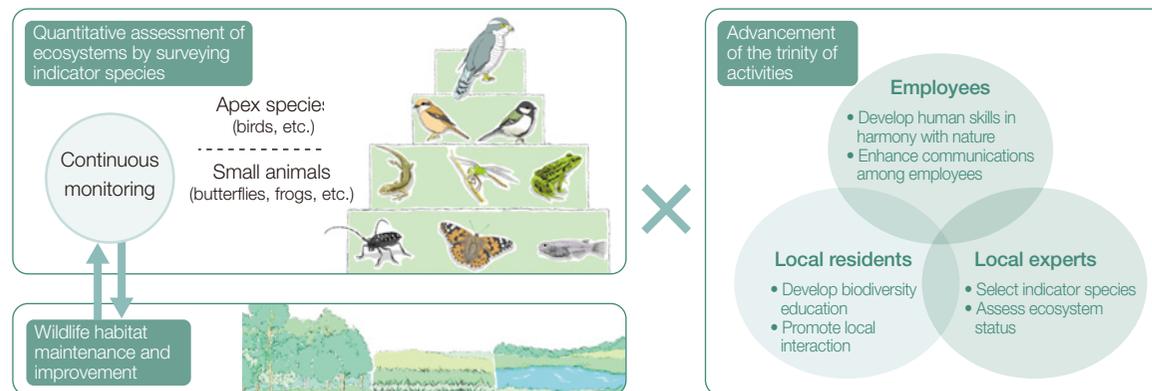


Conservation of Japanese eight-barbel loaches
Designated as an endangered species in the Red Data Book published by the Ministry of the Environment of Japan

Development of the Plant in Harmony with Nature (China)

As a part of the Plant in Harmony with Nature project, GAC Toyota Motor Co., Ltd. (GTMC) is communicating the importance of biodiversity conservation using a biotope to build good relationships with local ecosystems and promote harmony and coexistence between human and nature. In 2020, GTMC employees created a biotope as a site for experiencing nature and relaxing. Currently, the company is surveying and working to preserve the ecosystem for more than 90 designated species. The company established the China All-Toyota Harmony with Nature Working Group in November 2020 and is working to expand activities while sharing their know-how by conducting tours with other Toyota Group companies in China and other measures.

Overview of the Plant in Harmony with Nature



Toyota ESD* Project

Global Implementation of Environmental Education for the Next Generation

Toyota believes that good relationships with local communities has a positive impact on business. We see environmental education as an opportunity to engage in communication with local communities, and based on this, we implement the Toyota ESD Project in each region. This project emphasizes learning and action by members of the local community and employees. In Japan, we hold study sessions and other events for children, who will be responsible for the future, from a medium- to long-term perspective. For example, we distributed a booklet on endangered animals and held a coloring contest in collaboration with the Japan Environment Association. Toyota Argentina S.A. (TASA) built a 1-hectare lagoon on its 21-hectare Toyota-Zárate Natural Reserve. The Reserve was set up originally in an attempt to realize Plant in Harmony with Nature, but it is now also utilized as a place for carrying out the ESD Project. To raise environmental awareness and teach about biodiversity, TASA holds educational workshops and other activities.

* Education for Sustainable Development



Toyota Argentina S.A. (TASA), Zárate Plant site
(bottom: Toyota-Zárate Natural Reserve)



Toyota-Zárate Natural Reserve's lagoon

Strategy and Management

Life Cycle Zero CO₂
Emissions ChallengeNew Vehicle Zero CO₂
Emissions ChallengePlant Zero CO₂
Emissions ChallengeChallenge of Minimizing
and Optimizing Water UsageChallenge of Establishing a
Recycling-based Society and SystemsChallenge of Establishing a Future
Society in Harmony with Nature

Environmental Data

Results of the Sixth Toyota
Environmental Action Plan (Detail)

Environmental Data

Environmental Management

A VOC* Emissions: Global GRI 305-7

(thousand tons)

| 2018 | 2019 | 2020 |
|------|------|-------------|
| 28.5 | 24.7 | 21.3 |

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

* Volatile organic compound

B Waste: Global SASB TR-AU-440b.1 GRI 306-3 Third Party Verification 12

(thousand tons)

| By region | 2018 | 2019 | 2020 |
|--|------|------|------------|
| Japan (Toyota Motor Corporation) | 29 | 29 | 26 |
| Japan (consolidated subsidiaries) | 145 | 134 | 112 |
| North America | 34 | 32 | 31 |
| Europe | 11 | 11 | 20 |
| China | 16 | 18 | 18 |
| Others (Asia (excluding Japan), Latin America, South Africa) | 39 | 37 | 26 |
| Total | 275 | 261 | 234 |

(thousand tons)

| By disposal operations | 2018 | 2019 | 2020 |
|------------------------|------|------|------------|
| Recycling for a fee | 216 | 193 | 175 |
| Incineration | 40 | 45 | 42 |
| Landfilling | 18 | 23 | 17 |
| Total | 275 | 261 | 234 |

(thousand tons)

| By type | 2018 | 2019 | 2020 |
|---------------------|------|------|------------|
| Non-hazardous waste | 245 | 235 | 219 |
| Hazardous waste | 30 | 26 | 15 |
| Total | 275 | 261 | 234 |

(kg/unit)

| Per vehicle produced | 2018 | 2019 | 2020 |
|----------------------|------|------|-------------|
| | 26.0 | 24.4 | 25.4 |

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

C Packaging Materials Used: Toyota Motor Corporation

(thousand tons)

| FY2019 | 2019 | 2020 |
|--------|------|-------------|
| 46.4 | 47.1 | 38.1 |

<Organizational Boundary>

Toyota Motor Corporation

D NOx & SOx Emissions: Global GRI 305-7

(tons)

| By region | 2018 | 2019 | 2020 |
|-----------|------|------|------------|
| NOx | 262 | 252 | 184 |
| SOx | 556 | 511 | 406 |

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

<Calculation Method>

NOx emissions volume = Σ (Fuel consumption \times Emissions factor for each fuel)

SOx emissions volume = Σ (Fuel consumption \times Density \times Sulfur content)

<Emission Factors>

Ministry of the Environment of Japan, Environmental Activity Evaluation Program

In principle, fractions are rounded down to the nearest unit.
For this reason, the total and the breakdown totals do not always match.

Strategy and Management

Life Cycle Zero CO₂
Emissions ChallengeNew Vehicle Zero CO₂
Emissions ChallengePlant Zero CO₂
Emissions ChallengeChallenge of Minimizing
and Optimizing Water UsageChallenge of Establishing a
Recycling-based Society and SystemsChallenge of Establishing a Future
Society in Harmony with Nature

Environmental Data

Results of the Sixth Toyota
Environmental Action Plan (Detail)

Life Cycle Zero CO₂ Emissions Challenge

E Logistics CO₂ Emissions: Global

| | (million tons) | | |
|--------------------------|----------------|-------|--------------|
| | FY2019 | 2019 | 2020 |
| Global | 2.20 | 2.45 | 1.94 |
| Toyota Motor Corporation | 0.289 | 0.292 | 0.266 |

<Organizational Boundary>

Global:

- Logistics activities managed by head regional affiliates that handle logistics in the 7 regions (Japan, North America, Europe, China, Asia, South America and South Africa)
- Total CO₂ emissions from transportation of production parts, service parts and completed vehicles
 - Transportation excluded from the scope of calculations—
 - Transportation between regions (e.g., Japan to North America)
 - Transportation other than that directly arranged by head regional affiliates that handle logistics (production and sales affiliates in North America, China and Southeast Asia)

<Emission Factors>

Global:

Emission factors have been calculated according to the calculation methods of each affiliate in each region

Toyota Motor Corporation:

Ministry of Economy, Trade and Industry and Ministry of Land, Infrastructure, Transport and Tourism of Japan, "Guidelines on Disclosure of CO₂ Emissions from Transportation & Distribution" and others

| | |
|-------------|------------------------------|
| Railway | 22.0 g-CO ₂ /t-km |
| Vessel | 39.0 g-CO ₂ /t-km |
| Gasoline | 2.32 kg-CO ₂ /L |
| Diesel oil | 2.62 kg-CO ₂ /L |
| Heavy oil C | 2.98 kg-CO ₂ /L |

F CO₂ Emissions: Scope 3 (Other Indirect Emissions); Global

TCFD Metrics and Targets b GRI 305-3 Third Party Verification 5

| | (million t-CO ₂) | | |
|--|------------------------------|--------|---------------|
| | 2018 | 2019 | 2020 |
| 1 Purchased goods and services | 63.29 | 65.10 | 54.40 |
| 2 Capital goods | 4.54 | 4.23 | 3.93 |
| 3 Fuel- and energy-related activities (not included in Scope 1 or 2) | 0.93 | 0.96 | 0.84 |
| 4 Upstream transportation and distribution | 0.89 | 0.91 | 0.79 |
| 5 Waste generated in operations | 0.12 | 0.09 | 0.08 |
| 6 Business travel | 0.15 | 0.17 | 0.05 |
| 7 Employee commuting | 0.64 | 0.68 | 0.74 |
| 8 Upstream leased assets ¹ | — | — | — |
| 9 Downstream transportation and distribution | 0.01 | 0.01 | 0.01 |
| 10 Processing of sold products | 1.17 | 1.24 | 0.77 |
| 11 Use of sold products | 339.25 | 320.50 | 276.21 |
| 12 End-of-life treatment of sold products | 3.84 | 3.96 | 3.46 |
| 13 Downstream leased assets ¹ | — | — | — |
| 14 Franchises ² | — | — | — |
| 15 Investments | 0.08 | 0.09 | 0.07 |
| Total | 414.91 | 397.94 | 341.35 |

<Organizational Boundary>

Mainly covers automotive business of Toyota Motor Corporation and consolidated subsidiaries

<Scope of Calculations>

Category 11 is calculated from the average fuel efficiency and estimated lifetime mileage of vehicles in each country and region—Japan, U.S., Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand and Indonesia; the consolidated number of vehicles sold in 2020; and the following emission factors

<Emission Factors>

| | |
|--------------------------|--|
| Categories 1, 2, 3, 5, 7 | Ministry of the Environment of Japan, "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain" |
| Categories 3, 9, 11 | Japanese Act on Promotion of Global Warming Countermeasures, "Greenhouse Gas Emissions Accounting and Reporting Manual" |
| Categories 3, 7, 9, 11 | Japan Environmental Management Association for Industry, "Carbon Footprint of Products Communication Program, Basic Database" |
| Category 11 | Ministry of Land, Infrastructure, Transport and Tourism of Japan, automobile fuel efficiency list |
| Category 6 | IDEA v2.3 |

1 Calculated in other categories in accordance with the GHG Protocol

2 Excluded in accordance with the GHG Protocol

G CO₂ Emissions: Scope 1 Through 3; Global

TCFD Metrics and Targets b GRI 305-1, 305-2, 305-3 Third Party Verification 5, 6

| | (million t-CO ₂) | | |
|-------------------------------------|------------------------------|---------|---------------|
| | 2018 | 2019 | 2020 |
| Scope 1 (Direct emissions) | 1.92 | 1.90* | 1.64 |
| Scope 2 (Energy indirect emissions) | 4.08 | 3.78* | 3.26 |
| Scope 3 (Other indirect emissions) | 414.91 | 397.94 | 341.35 |
| Total | 420.91 | 403.62* | 346.25 |

* Revised in January 2022 1.92→1.90, 4.54→3.78, 404.40→403.62

- Calculated in accordance with the GHG Protocol

<Organizational Boundary and Coverage>

Scope 1 & 2:

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

Scope 3:

Mainly covers automotive business of Toyota Motor Corporation and consolidated subsidiaries (for details, refer to the Verification Statement)

[Verification Statement pp. 44-45](#)

<Emission Factors>

Scope 1 & 2 (Electricity):

Emission factor method by electric companies (used 2018 emission factors from the "IEA Emissions Factors 2020")

Scope 1 & 2 (Other than electricity):

"2006 IPCC Guidelines for National Greenhouse Gas Inventories" and Japanese Act on Promotion of Global Warming Countermeasures, "Greenhouse Gas Emissions Accounting and Reporting Manual"

Scope 3:

Refer to the notes for data F

In principle, fractions are rounded down to the nearest unit.
For this reason, the total and the breakdown totals do not always match.

Strategy and Management

Life Cycle Zero CO₂
Emissions ChallengeNew Vehicle Zero CO₂
Emissions ChallengePlant Zero CO₂
Emissions ChallengeChallenge of Minimizing
and Optimizing Water UsageChallenge of Establishing a
Recycling-based Society and SystemsChallenge of Establishing a Future
Society in Harmony with Nature

Environmental Data

Results of the Sixth Toyota
Environmental Action Plan (Detail)

New Vehicle Zero CO₂ Emissions Challenge

H Average CO₂ Emissions from New Vehicles: Global **Third Party Verification 1**
TCFD Metrics and Targets b **SASB** TR-AU-410a.1 **GRI** 302-5, 305-5

| By country & region | 2020 |
|---------------------|-------|
| U.S. | 150.2 |
| Canada | 142.6 |
| Brazil | 100.4 |
| Europe | 96.1 |
| Russia | 188.0 |
| Japan | 131.2 |
| China | 127.9 |
| Taiwan | 147.7 |
| India | 148.5 |
| Thailand | 165.4 |
| Indonesia | 161.5 |
| Saudi Arabia | 162.8 |
| Australia | 177.1 |
| South Africa | 194.0 |

I Electrified Vehicles Sales: Global **Third Party Verification 3**
SASB TR-AU-410a.2

| By type | 2018 | 2019 | 2020 |
|--|-------|-------|-------|
| Hybrid electric vehicles (HEVs) | 1,584 | 1,864 | 1,905 |
| Plug-in hybrid electric vehicles (PHEVs) | 46 | 56 | 48 |
| Battery electric vehicles (BEVs) | 0 | 0 | 3 |
| Fuel cell electric vehicles (FCEVs) | 2 | 2 | 1 |
| Total | 1,632 | 1,922 | 1,957 |

(thousand vehicles)

| Ratio of electrified vehicles sold | 2018 | 2019 | 2020 |
|------------------------------------|------|------|------|
| | 17.1 | 19.8 | 22.5 |

(%)

Strategy and Management

Life Cycle Zero CO₂ Emissions Challenge

New Vehicle Zero CO₂ Emissions Challenge

Plant Zero CO₂ Emissions Challenge

Challenge of Minimizing and Optimizing Water Usage

Challenge of Establishing a Recycling-based Society and Systems

Challenge of Establishing a Future Society in Harmony with Nature

Environmental Data

Results of the Sixth Toyota Environmental Action Plan (Detail)

Plant Zero CO₂ Emissions Challenge

J CO₂ Emissions: Scope 1 (Direct Emissions) & Scope 2 (Energy Indirect Emissions); Global TCFD Metrics and Targets b GRI 305-1, 305-2

| By region | (million t-CO ₂) | | |
|--|------------------------------|-------------|-------------|
| | 2018 | 2019 | 2020 |
| Japan (Toyota Motor Corporation) | 1.10 | 0.97 | 0.83 |
| Japan (consolidated subsidiaries) | 1.94 | 1.89 | 1.56 |
| North America | 1.03 | 0.97 | 0.89 |
| Europe | 0.16 | 0.09 | 0.08 |
| China | 0.66 | 0.71 | 0.75 |
| Others (Asia (excluding Japan), Latin America, South Africa) | 1.11 | 1.05 | 0.79 |
| Total | 6.00 | 5.68 | 4.90 |

• Calculated in accordance with the GHG Protocol

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

<Emission Factors>

Electricity: Emission factor method by electric companies

(used some 2018 emission factors from the "IEA Emissions Factors 2020")

Other Than Electricity: "2006 IPCC Guidelines for National Greenhouse Gas Inventories" and Japanese Act on Promotion of Global Warming Countermeasures, "Greenhouse Gas Emissions Accounting and Reporting Manual"

M Energy Used: Global GRI 302-1, 302-4 Third Party Verification 8

| By region | (PJ ¹) | | |
|--|--------------------|-------------|-------------|
| | 2018 | 2019 | 2020 |
| Japan (Toyota Motor Corporation) | 12.1 | 12.6 | 10.9 |
| Japan (consolidated subsidiaries) | 22.8 | 22.9 | 20.5 |
| North America | 14.6 | 13.8 | 12.1 |
| Europe | 3.4 | 3.5 | 3.1 |
| China | 6.2 | 6.7 | 7.1 |
| Others (Asia (excluding Japan), Latin America, South Africa) | 11.1 | 10.6 | 7.8 |
| Total | 70.3 | 70.0 | 61.5 |

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

<Conversion Factors>

Electricity: 3.6 GJ/MWh

Other Than Electricity: "2006 IPCC Guidelines for National Greenhouse Gas Inventories" and Japanese Act on Promotion of Global Warming Countermeasures, "Greenhouse Gas Emissions Accounting and Reporting Manual"

1 Peta joule: Peta represents 10¹⁵ and a joule is a unit of energy

K CO₂ Emissions Intensity: Scope 1 (Direct Emissions) & Scope 2 (Energy Indirect Emissions); Global TCFD Metrics and Targets b GRI 305-4

| Per vehicle produced | (t-CO ₂) | | |
|-----------------------------------|----------------------|------|-------------|
| | 2018 | 2019 | 2020 |
| Third Party Verification 7 | 0.57 | 0.53 | 0.53 |

• Calculated in accordance with the GHG Protocol

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

<Emission Factors>

Electricity: Emission factor method by electric companies

(used some 2018 emission factors from the "IEA Emissions Factors 2020")

Other Than Electricity: "2006 IPCC Guidelines for National Greenhouse Gas Inventories" and Japanese Act on Promotion of Global Warming Countermeasures, "Greenhouse Gas Emissions Accounting and Reporting Manual"

L Greenhouse Gas (GHG) Emission: Scope 1 (Direct Emissions); Global TCFD Metrics and Targets b GRI 305-1

| By type | (million t-CO ₂ e) | | |
|------------------|-------------------------------|--------------|--------------|
| | 2018 | 2019 | 2020 |
| CO ₂ | 1.922 | 1.903 | 1.642 |
| CH ₄ | 0.013 | 0.013 | 0.014 |
| N ₂ O | 0.007 | 0.006 | 0.007 |
| HFCs | 0.009 | 0.009 | 0.010 |
| PFCs | 0.013 | 0.000 | 0.000 |
| SF ₆ | 0.003 | 0.001 | 0.004 |
| Total | 1.967 | 1.932 | 1.676 |

• Calculated in accordance with the Japanese Act on Promotion of Global Warming Countermeasures

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

<Global Warming Potential>

IPCC Fourth Assessment Report

N Energy Intensity: Global GRI 302-3, 302-4

| Per vehicle produced | (GJ ² /unit) | | |
|-----------------------------------|-------------------------|------|-------------|
| | 2018 | 2019 | 2020 |
| Third Party Verification 9 | 6.65 | 6.53 | 6.68 |

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

<Conversion Factors>

Electricity: 3.6 GJ/MWh

Other Than Electricity: "2006 IPCC Guidelines for National Greenhouse Gas Inventories" and Japanese Act on Promotion of Global Warming Countermeasures, "Greenhouse Gas Emissions Accounting and Reporting Manual"

2 Giga joule: Giga represents 10⁹ and a joule is a unit of energy

In principle, fractions are rounded down to the nearest unit. For this reason, the total and the breakdown totals do not always match.

Strategy and Management

Life Cycle Zero CO₂
Emissions ChallengeNew Vehicle Zero CO₂
Emissions ChallengePlant Zero CO₂
Emissions ChallengeChallenge of Minimizing
and Optimizing Water UsageChallenge of Establishing a
Recycling-based Society and SystemsChallenge of Establishing a Future
Society in Harmony with Nature

Environmental Data

Results of the Sixth Toyota
Environmental Action Plan (Detail)

Challenge of Minimizing and Optimizing Water Usage

O Water Usage: Global GRI 303-3

| By region | (million m ³) | | |
|--|---------------------------|-------------|-------------|
| | 2018 | 2019 | 2020 |
| Japan (Toyota Motor Corporation) | 7.9 | 7.7 | 6.2 |
| Japan (consolidated subsidiaries) | 16.2 | 16.6 | 14.0 |
| North America | 6.5 | 6.6 | 5.7 |
| Europe | 1.5 | 1.5 | 1.3 |
| China | 3.8 | 3.4 | 3.4 |
| Others (Asia (excluding Japan), Latin America, South Africa) | 8.5 | 8.1 | 6.3 |
| Total | 44.4 | 44.0 | 36.8 |

| By water source | (million m ³) | | |
|-------------------|---------------------------|-------------|-------------|
| | 2018 | 2019 | 2020 |
| Surface water | 35.6 | 35.4 | 30.0 |
| Groundwater | 8.8 | 8.6 | 6.8 |
| Seawater | 0.0 | 0.0 | 0.0 |
| Produced water | 0.0 | 0.0 | 0.0 |
| Third-party water | 0.0 | 0.0 | 0.0 |
| Total | 44.4 | 44.0 | 36.8 |

| Per vehicle produced | (m ³ /unit) | | |
|----------------------|------------------------|------|-------------|
| | 2018 | 2019 | 2020 |
| | 4.20 | 4.10 | 4.00 |

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

P Water Discharge: Global GRI 303-4

| By water discharge destination | (million m ³) | | |
|--------------------------------|---------------------------|-------------|-------------|
| | 2018 | 2019 | 2020 |
| Surface water | 33.5 | 33.1 | 27.7 |
| Groundwater | 0.7 | 0.7 | 0.2 |
| Seawater | 2.3 | 2.1 | 2.0 |
| Third-party water | 2.5 | 2.4 | 1.3 |
| Total | 39.0 | 38.4 | 31.2 |

<Quality Management of Water Discharge>

Indicators specified in the regulations of each country (BOD, COD, nitrogen, phosphorous, pH, etc.) are strictly managed by each plant by setting its own control standards that are stricter than the standard values specified by the regulations of each country

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

Q Water Consumption: Global GRI 305-5

| | (million m ³) | | |
|--|---------------------------|------|------------|
| | 2018 | 2019 | 2020 |
| | 5.4 | 5.6 | 5.6 |

<Calculation Method>

Calculated using the formula below in accordance with GRI 303

water consumption = water usage – water discharge

* The term "water usage" corresponds to "water withdrawal" in GRI

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

R Recycled Water: Global

| | (million m ³) | | |
|--|---------------------------|------|------------|
| | 2018 | 2019 | 2020 |
| | 3.1 | 3.3 | 1.1 |

<Organizational Boundary and Coverage>

All plants of Toyota Motor Corporation and consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries (100% coverage)

Strategy and Management

Life Cycle Zero CO₂
Emissions ChallengeNew Vehicle Zero CO₂
Emissions ChallengePlant Zero CO₂
Emissions ChallengeChallenge of Minimizing
and Optimizing Water UsageChallenge of Establishing a
Recycling-based Society and SystemsChallenge of Establishing a Future
Society in Harmony with Nature

Environmental Data

Results of the Sixth Toyota
Environmental Action Plan (Detail)

Challenge of Establishing a Recycling-based Society and Systems

S Raw Materials Used and Recycled Materials Use

Rate: Global **GRI** 301-1, 301-2, 306-4

| | (million tons) | | |
|---|--------------------------------------|-------|-------|
| | 2018 | 2019 | 2020 |
| Amount of raw materials used | 14.03 | 14.54 | 12.32 |
| All materials | 14.03 | 14.54 | 12.32 |
| Iron | 9.07 | 9.40 | 7.97 |
| Aluminum | 1.27 | 1.33 | 1.12 |
| Others | 3.69 | 3.81 | 3.24 |
| | Ratio of recycled materials used (%) | | |
| | 2018 | 2019 | 2020 |
| Ratio of recycled materials used in raw materials | 24 | 24 | 24 |

T Vehicles Recycled in Accordance with the End-of-life Vehicle Recycling Law: Toyota Motor Corporation

GRI 301-3
SASB TR-AU-410b.3

| | (thousand vehicles) | | |
|---|---------------------------------------|--------|--------|
| | FY2021 | | |
| Amount of appropriate End-of-life vehicle treatment and recycling processed | 623 | | |
| | Recycling rate (%) | | |
| | FY2019 | FY2020 | FY2021 |
| Vehicle recovery rate ¹ (converted into a per-vehicle value) | 99 | 99 | 99 |
| ASR ² recycling rate ³ | 97 | 96 | 96 |
| | ASR processing volume (thousand tons) | | |
| | FY2021 | | |
| | 143 | | |

1 Calculated by combining the percentage recycled through the dismantling and shredding processes, approximately 83% (quoted from the report by the council of the End-of-Life Vehicle Recycling Law), with the remaining ASR rate of 17% and the ASR recycling rate of 96%

2 Automobile Shredder Residue: Residue after End-of-life vehicles are shredded

3 Recycling volume/amount collected

U Remanufactured and Used Parts Supplied (for Repair and Replacement): Toyota Motor Corporation

SASB TR-AU-440b.2 **GRI** 301-1, 301-2, 301-3, 306-4

| | (units) | | | | | |
|------------------------|-------------------------------|--|-------------------------------|--|-------------------------------|--|
| | FY2019 | | FY2020 | | FY2021 | |
| | Remanufactured/ used parts | Reference: Replacement with new parts | Remanufactured/ used parts | Reference: Replacement with new parts | Remanufactured/ used parts | Reference: Replacement with new parts |
| Automatic transmission | 1,077 | 78 | 855 | 52 | 714 | 49 |
| Remanufactured parts | 3,613 | 1,609 | 3,391 | 1,673 | 3,102 | 1,654 |
| Power steering gear | | | | | | |
| Torque converter | 1,015 | 6,266 | 794 | 2,569 | 750 | 2,230 |
| Used parts | 30,264 | — | 26,716 | — | 24,100 | — |

V Parts Recycled: Toyota Motor Corporation

SASB TR-AU-440b.2 **GRI** 301-3

| | (units) | | |
|--|----------------------------|--------|--------|
| | FY2019 | FY2020 | FY2021 |
| Drive battery | 33,390 | 39,184 | 40,694 |
| | FC stack (units) | | |
| | FY2019 | FY2020 | FY2021 |
| FC stack | 19 | 4 | 3 |
| | Magnet ⁴ (tons) | | |
| | FY2019 | FY2020 | FY2021 |
| Magnet ⁴ | 6.0 | 6.0 | 10.0 |
| Lead wheel balance weight ⁵ | 63.8 | 69.7 | 59.7 |
| | Bumper (million units) | | |
| | FY2019 | FY2020 | FY2021 |
| Bumper | 0.765 | 0.658 | 0.535 |

4 Magnets used in drive motors

5 Weights used to adjust rotation balance when joining a wheel and tire

W Bulk Supply System⁶ Oil Supply Rate⁷: Toyota Motor Corporation

GRI 306-2

| | FY2021 (%) | | |
|--|------------|--------|--------|
| | FY2019 | FY2020 | FY2021 |
| | 64.8 | 64.0 | 63.7 |

6 A system of directly filling tanks at dealers or supplying oil using tanker trucks rather than oil cans and so on to reduce container usage

7 Percentage of oil (by bulk supply system) in volume sold by parts distributors

Challenge of Establishing a Future Society in Harmony with Nature

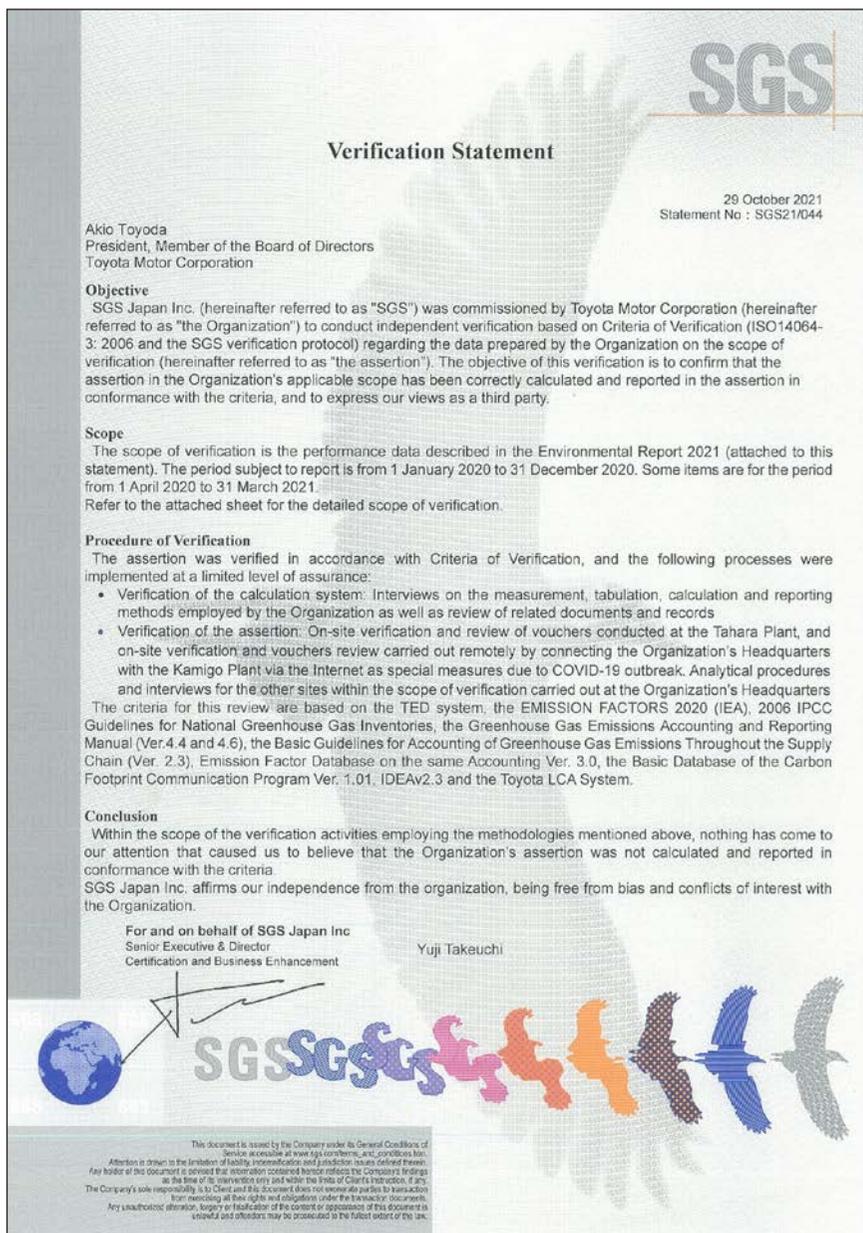
X Granted Programs Under the Toyota Environmental Activities Grant Program: Toyota Motor Corporation

| | (granted programs) | | | |
|------------------------------|--------------------|------|------|-------------------------------|
| By region | 2018 | 2019 | 2020 | Cumulative total ⁸ |
| Japan | 17 | 15 | 17 | 233 |
| North America, Latin America | 2 | 1 | 1 | 24 |
| Europe | 1 | 0 | 1 | 16 |
| Asia-Pacific | 6 | 8 | 6 | 130 |
| Africa | 1 | 2 | 2 | 37 |
| Total | 27 | 26 | 27 | 440 |

8 Cumulative total number of granted programs since 2000

In principle, fractions are rounded down to the nearest unit.
For this reason, the total and the breakdown totals do not always match.

Verification Statement



SGS

Verification Statement

29 October 2021
Statement No : SGS21/044

Akio Toyoda
President, Member of the Board of Directors
Toyota Motor Corporation

Objective
SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by Toyota Motor Corporation (hereinafter referred to as "the Organization") to conduct independent verification based on Criteria of Verification (ISO14064-3: 2006 and the SGS verification protocol) regarding the data prepared by the Organization on the scope of verification (hereinafter referred to as "the assertion"). The objective of this verification is to confirm that the assertion in the Organization's applicable scope has been correctly calculated and reported in the assertion in conformance with the criteria, and to express our views as a third party.

Scope
The scope of verification is the performance data described in the Environmental Report 2021 (attached to this statement). The period subject to report is from 1 January 2020 to 31 December 2020. Some items are for the period from 1 April 2020 to 31 March 2021.
Refer to the attached sheet for the detailed scope of verification.

Procedure of Verification
The assertion was verified in accordance with Criteria of Verification, and the following processes were implemented at a limited level of assurance:

- Verification of the calculation system: Interviews on the measurement, tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records
- Verification of the assertion: On-site verification and review of vouchers conducted at the Tahara Plant, and on-site verification and vouchers review carried out remotely by connecting the Organization's Headquarters with the Kamigo Plant via the Internet as special measures due to COVID-19 outbreak. Analytical procedures and interviews for the other sites within the scope of verification carried out at the Organization's Headquarters

The criteria for this review are based on the TED system, the EMISSION FACTORS 2020 (IEA), 2006 IPCC Guidelines for National Greenhouse Gas Inventories, the Greenhouse Gas Emissions Accounting and Reporting Manual (Ver.4.4 and 4.6), the Basic Guidelines for Accounting of Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.3), Emission Factor Database on the same Accounting Ver. 3.0, the Basic Database of the Carbon Footprint Communication Program Ver. 1.01, IDEAv2.3 and the Toyota LCA System.

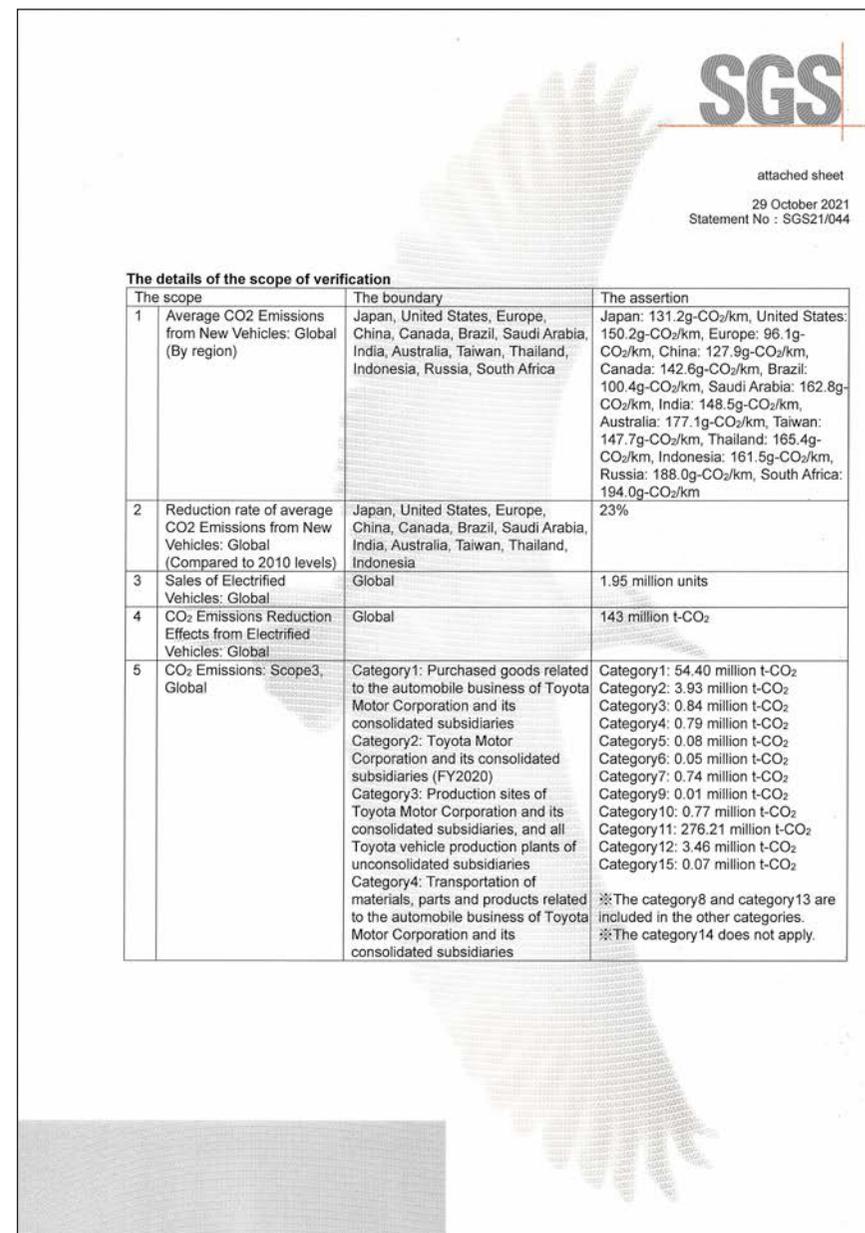
Conclusion
Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's assertion was not calculated and reported in conformance with the criteria.
SGS Japan Inc. affirms our independence from the organization, being free from bias and conflicts of interest with the Organization.

For and on behalf of SGS Japan Inc.
Senior Executive & Director
Certification and Business Enhancement

Yuji Takeuchi



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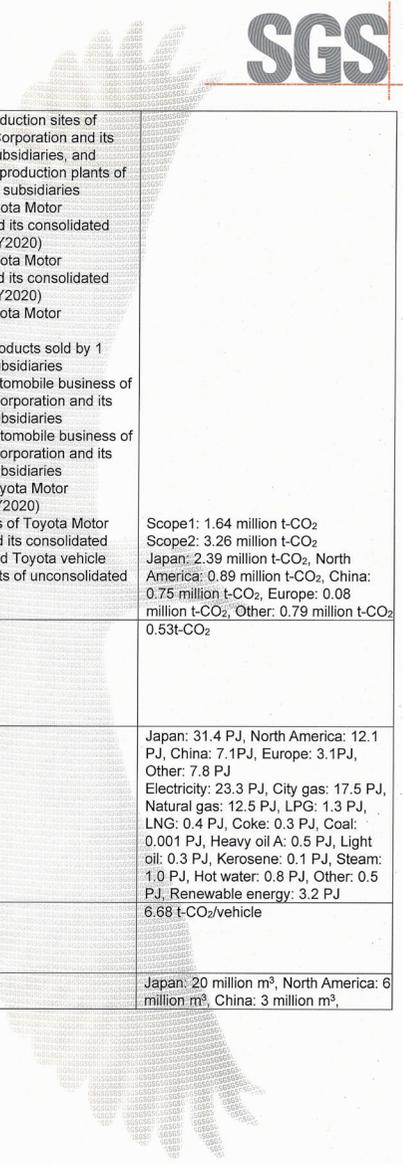
SGS

attached sheet
29 October 2021
Statement No : SGS21/044

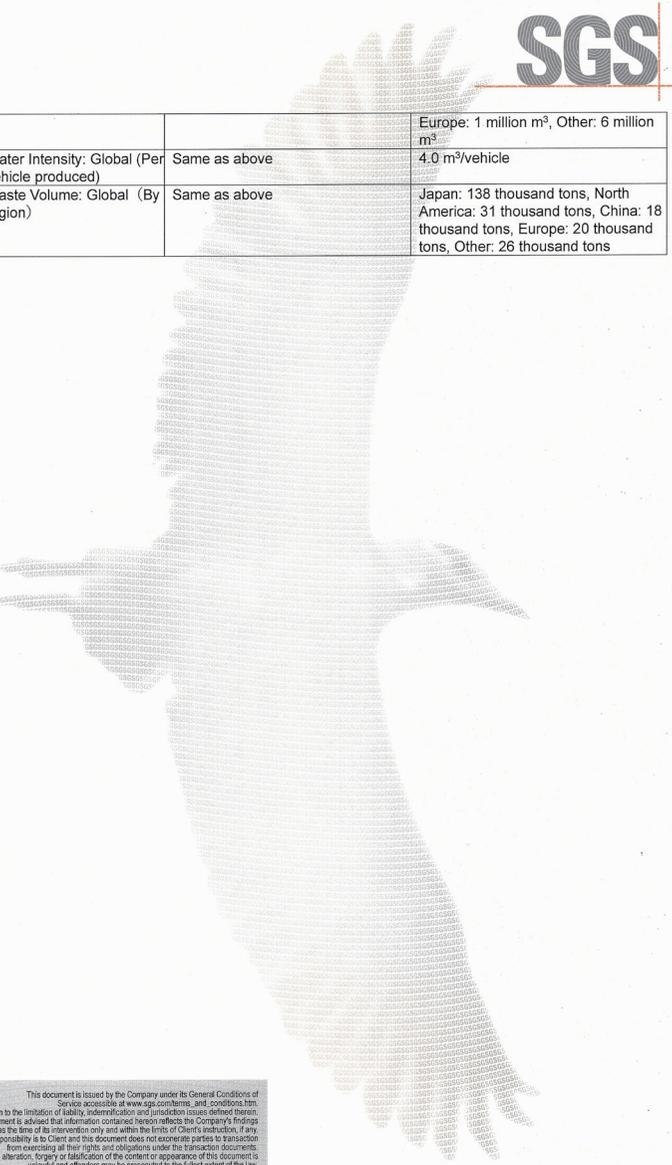
The details of the scope of verification

| The scope | The boundary | The assertion |
|---|--|---|
| 1 Average CO2 Emissions from New Vehicles: Global (By region) | Japan, United States, Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand, Indonesia, Russia, South Africa | Japan: 131.2g-CO ₂ /km, United States: 150.2g-CO ₂ /km, Europe: 96.1g-CO ₂ /km, China: 127.9g-CO ₂ /km, Canada: 142.6g-CO ₂ /km, Brazil: 100.4g-CO ₂ /km, Saudi Arabia: 162.8g-CO ₂ /km, India: 148.5g-CO ₂ /km, Australia: 177.1g-CO ₂ /km, Taiwan: 147.7g-CO ₂ /km, Thailand: 165.4g-CO ₂ /km, Indonesia: 161.5g-CO ₂ /km, Russia: 188.0g-CO ₂ /km, South Africa: 194.0g-CO ₂ /km |
| 2 Reduction rate of average CO2 Emissions from New Vehicles: Global (Compared to 2010 levels) | Japan, United States, Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand, Indonesia | 23% |
| 3 Sales of Electrified Vehicles: Global | Global | 1.95 million units |
| 4 CO ₂ Emissions Reduction Effects from Electrified Vehicles: Global | Global | 143 million t-CO ₂ |
| 5 CO ₂ Emissions: Scope3, Global | Category1: Purchased goods related to the automobile business of Toyota Motor Corporation and its consolidated subsidiaries Category2: Toyota Motor Corporation and its consolidated subsidiaries (FY2020) Category3: Production sites of Toyota Motor Corporation and its consolidated subsidiaries, and all Toyota vehicle production plants of unconsolidated subsidiaries Category4: Transportation of materials, parts and products related to the automobile business of Toyota Motor Corporation and its consolidated subsidiaries | Category1: 54.40 million t-CO ₂ Category2: 3.93 million t-CO ₂ Category3: 0.84 million t-CO ₂ Category4: 0.79 million t-CO ₂ Category5: 0.08 million t-CO ₂ Category6: 0.05 million t-CO ₂ Category7: 0.74 million t-CO ₂ Category9: 0.01 million t-CO ₂ Category10: 0.77 million t-CO ₂ Category11: 276.21 million t-CO ₂ Category12: 3.46 million t-CO ₂ Category15: 0.07 million t-CO ₂ ※The category8 and category13 are included in the other categories. ※The category14 does not apply. |

Verification Statement



| | | | |
|----|---|--|--|
| | | Category5: Production sites of Toyota Motor Corporation and its consolidated subsidiaries, and Toyota vehicle production plants of unconsolidated subsidiaries Category6: Toyota Motor Corporation and its consolidated subsidiaries (FY2020) Category7: Toyota Motor Corporation and its consolidated subsidiaries (FY2020) Category9: Toyota Motor Corporation Category10: Products sold by 1 consolidated subsidiaries Category11: Automobile business of Toyota Motor Corporation and its consolidated subsidiaries Category12: Automobile business of Toyota Motor Corporation and its consolidated subsidiaries Category15: Toyota Motor Corporation (FY2020) | |
| 6 | CO ₂ Emissions: Scope 1&2 (Energy-related CO ₂ emissions), Global (By region) ※Excluded fuel for vehicles at plants | Production sites of Toyota Motor Corporation and its consolidated subsidiaries, and Toyota vehicle production plants of unconsolidated subsidiaries | Scope1: 1.64 million t-CO ₂ Scope2: 3.26 million t-CO ₂ Japan: 2.39 million t-CO ₂ , North America: 0.89 million t-CO ₂ , China: 0.75 million t-CO ₂ , Europe: 0.08 million t-CO ₂ , Other: 0.79 million t-CO ₂ |
| 7 | CO ₂ Emissions Intensity: Scope 1&2 (Energy-related CO ₂ emissions), Global (Per vehicle produced) ※Excluded fuel for vehicles at plants | Same as above | 0.53t-CO ₂ |
| 8 | Energy Consumption: Global (By region, By type) ※Excluded fuel for vehicles at plants | Same as above | Japan: 31.4 PJ, North America: 12.1 PJ, China: 7.1PJ, Europe: 3.1PJ, Other: 7.8 PJ Electricity: 23.3 PJ, City gas: 17.5 PJ, Natural gas: 12.5 PJ, LPG: 1.3 PJ, LNG: 0.4 PJ, Coke: 0.3 PJ, Coal: 0.001 PJ, Heavy oil A: 0.5 PJ, Light oil: 0.3 PJ, Kerosene: 0.1 PJ, Steam: 1.0 PJ, Hot water: 0.8 PJ, Other: 0.5 PJ, Renewable energy: 3.2 PJ |
| 9 | Energy Intensity: Global (Per vehicle produced) ※Excluded fuel for vehicles at plants | Same as above | 6.68 t-CO ₂ /vehicle |
| 10 | Water Usage: Global (By region) | Same as above | Japan: 20 million m ³ , North America: 6 million m ³ , China: 3 million m ³ , |



| | | | |
|----|--|---------------|---|
| | | | Europe: 1 million m ³ , Other: 6 million m ³ |
| 11 | Water Intensity: Global (Per vehicle produced) | Same as above | 4.0 m ³ /vehicle |
| 12 | Waste Volume: Global (By region) | Same as above | Japan: 138 thousand tons, North America: 31 thousand tons, China: 18 thousand tons, Europe: 20 thousand tons, Other: 26 thousand tons |

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Results of the Sixth Toyota Environmental Action Plan (Detail) (FY2017–FY2021)

TCFD Metrics and Targets a & c
GRI 103-2, 103-3, 413-1

Evaluation Legend
○ : Achieved
× : Not achieved

| | Action Items | | Specific Actions and Targets | Results from FY2017–FY2021 | Evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|---|-----------------|-----------|-----------------|-------|-----------|--------|---------------|-------------------------------------|--------|---------------------------------------|---------------|---------------------|--|--|---|--------|------|-----------|----------------|-------|-----------|--------|---------------|-------------------------------------|--------|---------------|---------------|----------------------|--|--|---|
| Low Carbon (Climate Change, CO ₂) | (1) New Vehicle Zero CO ₂ Emissions Challenge | 1. Develop technologies to achieve the best fuel efficiency performance | <ul style="list-style-type: none"> Achieve reduction rate in global average CO₂ emissions from new vehicles by 22% or more compared to 2010 global levels, by 2020 <ul style="list-style-type: none"> Develop high-performance powertrain through Toyota New Global Architecture (TNGA) and introduce it in steps Enhance hybrid electric vehicle (HEV) performance further and expand deployment | <ul style="list-style-type: none"> Reduced global average CO₂ emissions from new vehicles in 2020 by 23% compared to 2010 levels (Countries and regions: Japan, U.S., Europe, China, Canada, Brazil, Saudi Arabia, India, Australia, Taiwan, Thailand and Indonesia) <Coverage> 83% of global total vehicle sales Introduced models with powertrains and chassis based on the TNGA concept in stages starting with the fourth-generation Prius in 2015 and announced at a total of 29 models as of February 2021 (approximately 60% of global vehicle sales have been switched to the new models). Also, jointly developed e-TNGA with Subaru as a battery electric vehicle (BEV)-exclusive platform and adopted it on the Toyota bZ series. | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2. Promote development of next-generation vehicles using electric power and widespread adoption by making use of their features | <ul style="list-style-type: none"> HEV: Promote higher performance and expand the lineup to broaden consumer adoption of HEVs, aim to reach annual HEV sales of 1.5 million units and cumulative sales of 15 million units by 2020 Plug-in hybrid electric vehicle (PHEV): Establish PHEV as core electrified vehicle in support of fuel diversification and develop higher-performance PHEVs and promote widespread adoption BEV: Promote technological development for short-distance purposes in combination with low-carbon traffic systems Fuel cell electric vehicle (FCEV): Promote activities to further reduce cost, achieve greater compactness and durability and strengthen product appeal toward effective use of hydrogen as an important future energy source | <ul style="list-style-type: none"> As a result of developing electrification technologies in order to establish a full lineup of electrified vehicles tailored to the energy conditions of each country and region around the world, achieved total electrified vehicle sales of 1.95 million units in 2020, and cumulative sales of 16.98 million units. The lineup of electrified vehicles comprises a total of 56 models (as of December 2020). <ul style="list-style-type: none"> HEV: 46 models PHEV: 4 models (Prius PHEV, RAV4 PHEV, Corolla PHEV and Levin PHEV) BEV: 4 models (C-HR BEV, IZOA BEV, UX BEV and Proace BEV) FCEV: 2 models (New Mirai and Sora) | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (2) Life Cycle Zero CO ₂ Emissions Challenge | 3. Promote environmental management for product development (Eco-VAS) | <ul style="list-style-type: none"> Steadily promote environmental target management using Eco-Vehicle Assessment System (Eco-VAS) at the development stage <ul style="list-style-type: none"> Reduce life cycle environmental footprint or both redesigned models and new models compared with previous models or vehicles of the same class Disclose assessment results on websites, in product catalogs and so on to properly disclose information to customers | <ul style="list-style-type: none"> Conducted assessments using the Eco-VAS on 46 of the total 62 (74% coverage) new and redesigned models (models currently available for sale) in Japan. Achieved life cycle CO₂ emission levels in all subject models equivalent to or lower than those of reference vehicles (e.g., reduced CO₂ emissions of the Yaris Cross HEV model by 16% compared to vehicles of the same class). Used 100% renewable electricity at all R&D centers in Japan as of April 2020. | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4. Study practical use development of catalyst technology-based CO ₂ absorption and new material creation (artificial photosynthesis and others) | <ul style="list-style-type: none"> Develop artificial photosynthesis technologies from CO₂, water and solar power <ul style="list-style-type: none"> Complete basic verification tests for creation of primary CO₂-absorbing material (material or fuel) using the world's most efficient photosynthetic unit in 2020 | <ul style="list-style-type: none"> Achieved artificial photosynthesis that synthesizes organic compounds (formic acid) at room temperature and normal pressure using only CO₂, water and sunlight with a practical solar cell sized (36 × 36 cm), attaining the world's highest solar conversion rate in its class (7.2%) Created a resource recycling system that captures CO₂ generated by plants and other facilities | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5. Pursue transport efficiency and reduce CO ₂ emissions in logistics activities | <ul style="list-style-type: none"> Promote CO₂ emissions reduction activities by further improving transport efficiency (take comprehensive measures to reduce total distance traveled and promote further modal shift) <table border="1"> <thead> <tr> <th>Region</th> <th>Item</th> <th>Base year</th> <th>Target (FY2021)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Japan</td> <td>Emissions</td> <td>FY1991</td> <td>25% reduction</td> </tr> <tr> <td>Emissions per transportation volume</td> <td>FY2007</td> <td>14% reduction (1% reduction per year)</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Measure performance</td> </tr> </tbody> </table> | Region | Item | Base year | Target (FY2021) | Japan | Emissions | FY1991 | 25% reduction | Emissions per transportation volume | FY2007 | 14% reduction (1% reduction per year) | Other regions | Measure performance | | | <ul style="list-style-type: none"> Reduced CO₂ emissions as indicated below, by making further improvements to transport efficiency including loading efficiency improvements, shortening of logistics routes, modal shifts and use of tandem trailers <table border="1"> <thead> <tr> <th>Region</th> <th>Item</th> <th>Base year</th> <th>FY2021 results</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Japan</td> <td>Emissions</td> <td>FY1991</td> <td>40% reduction</td> </tr> <tr> <td>Emissions per transportation volume</td> <td>FY2007</td> <td>16% reduction</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Measured performance</td> </tr> </tbody> </table> | Region | Item | Base year | FY2021 results | Japan | Emissions | FY1991 | 40% reduction | Emissions per transportation volume | FY2007 | 16% reduction | Other regions | Measured performance | | | ○ |
| | | Region | Item | Base year | Target (FY2021) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Japan | Emissions | FY1991 | 25% reduction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Emissions per transportation volume | FY2007 | 14% reduction (1% reduction per year) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other regions | Measure performance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Region | Item | Base year | FY2021 results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Japan | Emissions | FY1991 | 40% reduction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Emissions per transportation volume | FY2007 | 16% reduction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other regions | Measured performance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. Contribute to local communities through the expansion of local grid energy management technologies | <ul style="list-style-type: none"> Establish technology for micro-grids (F-grids) centered on plants and energy management for regional optimization and promote global deployment <ul style="list-style-type: none"> Verify the tests in Chira-mura project in Tohoku and Motomachi Plant project in Toyota City Deploy technologies at other plants in Japan and other countries including Asia | <ul style="list-style-type: none"> Chira-mura project in Tohoku (F-grid): Achieved energy savings of 22% (compared to 2013 levels) and reduced environmental impact by 29% (compared to 2013 levels) Energy management verification in the Tahara and Akemi regions: Commenced demand response verification with 5 local companies in May 2021. Business verification of a hypothetical surplus renewable energy supply model is underway based on the assumption that solar panels will be installed on the roofs of the plants of verification partner companies. Global deployment: Shared results of initiatives in Japan with affiliates in each region | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Strategy and Management

Life Cycle Zero CO₂ Emissions Challenge

New Vehicle Zero CO₂ Emissions Challenge

Plant Zero CO₂ Emissions Challenge

Challenge of Minimizing and Optimizing Water Usage

Challenge of Establishing a Recycling-based Society and Systems

Challenge of Establishing a Future Society in Harmony with Nature

Environmental Data

Results of the Sixth Toyota Environmental Action Plan (Detail)

Evaluation Legend
 ○ : Achieved
 × : Not achieved

| | Action Items | | Specific Actions and Targets | | Results from FY2017–FY2021 | | | | Evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|---|----------------------------|-----------|-----------------|----------------------|----------------------------|-----------------------|---------------|---------------|---|-----------------------|--------|---|-----------------|------|---------------|----------------|---|----------------------------|--------|--|---------------|---|-----------|----------------|--------|-----------------------|--------|---------------|-----|-----------------------|--------|---------------|-----------------|------|---------------|---------------|---|--|
| Low Carbon (Climate Change, CO ₂) | (2) Life Cycle Zero CO ₂ Emissions Challenge | 7. Promote an integrated approach to reduce CO ₂ emissions in road traffic sectors | <ul style="list-style-type: none"> Contribute to realization of smart mobility society through IT and ITS technologies <ul style="list-style-type: none"> Based on the verification test results of the next-generation transportation system Ha:mo, which uses ultra-compact battery electric vehicles (BEVs), in Japan and France, aim to deploy technologies in other regions and establish business models, considering the Olympic and Paralympic Games Tokyo 2020 Actively participate in integrated traffic flow improvement project for establishment of a low-carbon mobility society <ul style="list-style-type: none"> Establish the WBCSD-SMP 2.0 Sathorn Model and formulate roadmap for rollout in Bangkok Promote adoption of eco driving globally <ul style="list-style-type: none"> Promote eco driving globally among customers and employees | <ul style="list-style-type: none"> With regard to the continuous Ha:mo business operation model development project, discussed collaborative relationships with local governments, industry and academic organizations as well as cooperating partners and conducted operations in Tokyo; Toyota City, Aichi Prefecture; Okinawa Prefecture; Okayama City, Okayama Prefecture; Grenoble, France; and Bangkok, Thailand Established the WBCSD-SMP 2.0 Sathorn Model <ul style="list-style-type: none"> In November 2019, the Toyota Mobility Foundation launched a project in cooperation with the Thai Ministry of Transport, Bangkok Metropolitan Administration, Metropolitan Police Bureau, Chulalongkorn University and a private company to utilize big data and AI in order to ease traffic congestion in Bangkok. A deployment roadmap was also formulated. Customer-oriented initiatives <ul style="list-style-type: none"> On vehicles equipped with T-Connect, provided a service that performs automatic diagnostic services of eco driving by drivers Supported continuous educational activities for customers including eco-driving advice provided through dealers and eco-driving support provided through rental and leasing agencies Toyota Daihatsu Engineering & Manufacturing (TDEM), a head regional affiliate in Asia, produced a brochure on eco driving and distributed it to distributors and their regional affiliates Employee-oriented initiatives <ul style="list-style-type: none"> In conjunction with Eco-Driving Month designated by the Japanese government, encouraged eco driving in the company. Encouraged eco driving through "10 Recommendations for Eco Driving," a description of recommended eco-driving techniques, using the company intranet and posters. Shared information on employees' practical eco-driving techniques by posting it on the intranet. Introduced the "Eco-driving e-Learning Content: The Quiz and the Game" created by the Japan Automobile Manufacturers Association, Inc. (JAMA), as a tool to enable employees to learn in a fun manner about eco driving and the environment in general | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | (3) Plant Zero CO ₂ Emissions Challenge | 8. Reduce CO ₂ emissions in production activities | <ul style="list-style-type: none"> Promote activities to reduce CO₂ emissions through the development and deployment of low-CO₂ production technologies and daily <i>kaizen</i> activities <ul style="list-style-type: none"> Pursue further productivity and include offices and other sites in rollout of activities Utilize clean energies in accordance with the particular conditions in each country and region <ul style="list-style-type: none"> Promote introduction in stages toward 2020 Manage greenhouse gases from sources other than energy sources <table border="1"> <thead> <tr> <th>Region</th> <th>Item</th> <th>Base year</th> <th>Target (FY2021)</th> </tr> </thead> <tbody> <tr> <td>Global*</td> <td>Emissions per vehicle</td> <td>FY2002</td> <td>39% reduction</td> </tr> <tr> <td rowspan="2">TMC</td> <td>Emissions per vehicle</td> <td>FY2002</td> <td>48% reduction</td> </tr> <tr> <td>Total emissions</td> <td>1990</td> <td>28% reduction</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Promote regional No. 1 reduction activities</td> </tr> </tbody> </table> <p>* TMC and consolidated subsidiaries (plants)</p> | Region | Item | Base year | Target (FY2021) | Global* | Emissions per vehicle | FY2002 | 39% reduction | TMC | Emissions per vehicle | FY2002 | 48% reduction | Total emissions | 1990 | 28% reduction | Other regions | Promote regional No. 1 reduction activities | | | <ul style="list-style-type: none"> Developed and introduced low-CO₂ production technologies, globally conducted <i>yokoten</i> of daily <i>kaizen</i> practices through shop-oriented environmental activities, accelerated CO₂ emissions reduction activities and achieved the target Purchased renewable energy, taking into consideration the characteristics of each country and region. Maintained 100% renewable electricity introduction rate at all plants in Europe and also achieved it at all plants in South America. Achieved an 11% global introduction rate for renewable electricity in 2020. Started various verification tests to support the utilization of hydrogen at the Honsha Plant and Motomachi Plant <table border="1"> <thead> <tr> <th>Region</th> <th>Item</th> <th>Base year</th> <th>FY2021 results</th> </tr> </thead> <tbody> <tr> <td>Global</td> <td>Emissions per vehicle</td> <td>FY2002</td> <td>39% reduction</td> </tr> <tr> <td rowspan="2">TMC</td> <td>Emissions per vehicle</td> <td>FY2002</td> <td>55% reduction</td> </tr> <tr> <td>Total emissions</td> <td>1990</td> <td>50% reduction</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Implemented reduction scenarios that match local situations</td> </tr> </tbody> </table> | Region | Item | Base year | FY2021 results | Global | Emissions per vehicle | FY2002 | 39% reduction | TMC | Emissions per vehicle | FY2002 | 55% reduction | Total emissions | 1990 | 50% reduction | Other regions | Implemented reduction scenarios that match local situations | |
| Region | Item | Base year | Target (FY2021) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Recycling (Resources, Water) | (4) Challenge of Minimizing and Optimizing Water Usage | 9. Reduce water usage in production activities | <ul style="list-style-type: none"> Promote continual activities to reduce water usage in consideration of the water environment in each country and region <ul style="list-style-type: none"> Introduce innovative initiatives linked with planning of new plants and production line reforms Reduce water usage through daily <i>kaizen</i> and other activities <table border="1"> <thead> <tr> <th>Region</th> <th>Item</th> <th>Base year</th> <th>Target (FY2021)</th> </tr> </thead> <tbody> <tr> <td>TMC (vehicle plants)</td> <td>Usage per vehicle produced</td> <td>FY2002</td> <td>12% reduction</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Promote regional No. 1 reduction activities</td> </tr> </tbody> </table> | Region | Item | Base year | Target (FY2021) | TMC (vehicle plants) | Usage per vehicle produced | FY2002 | 12% reduction | Other regions | Promote regional No. 1 reduction activities | | | <ul style="list-style-type: none"> Introduced innovative initiatives linked with planning of new plants and production line reforms (made painting processes water-free and introduced water recycling technology) and reduced water usage through daily <i>kaizen</i> and other measures <table border="1"> <thead> <tr> <th>Region</th> <th>Item</th> <th>Base year</th> <th>FY2021 results</th> </tr> </thead> <tbody> <tr> <td>TMC (vehicle plants)</td> <td>Usage per vehicle produced</td> <td>FY2002</td> <td>31% reduction</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Promoted reduction activities according to local water conditions</td> </tr> </tbody> </table> | Region | Item | Base year | FY2021 results | TMC (vehicle plants) | Usage per vehicle produced | FY2002 | 31% reduction | Other regions | Promoted reduction activities according to local water conditions | | | ○ | | | | | | | | | | | | | |
| | Region | Item | Base year | Target (FY2021) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | (5) Challenge of Establishing a Recycling-based Society and Systems | 10. Reduce consumption of dwindling natural resources through use of renewable resources and recycled materials | <ul style="list-style-type: none"> Reduce the use of petroleum-based plastics <ul style="list-style-type: none"> Develop technology for recycled plastics and eco-plastics meeting quality and performance requirements Establish collection systems for used plastics Promote reuse of rare resources and use of recycled materials <ul style="list-style-type: none"> Develop carbon fiber reinforced plastics (CFRP) recycling technologies Develop technologies for recycling and reducing use of rare earth elements | <ul style="list-style-type: none"> Reduce the use of petroleum-based plastics <ul style="list-style-type: none"> Continued expanding the utilization of recycled plastic, first in Europe, where the recycled plastic market is large. In conjunction with this, began formulating an action plan for increased use over the medium term (through 2025). Continued to collect and recycle End-of-life bumpers generated through repair work at Toyota dealers; started operation of a new scheme in some regions to reduce costs and began investigation of expanded application Promoted reuse of rare resources and use of recycled materials <ul style="list-style-type: none"> Projected an outlook on carbon fiber separation and recovery technology using a thermal separation technique and CFRP recycling technology for recycling waste CFRP materials and commenced development of applications Continued development of technologies that can reduce the amount of rare earth elements used in HEV motor magnets and other components Utilized fabric portions of End-of-life airbags and recycled them to produce reusable bags With the aim of reusing End-of-life materials, cooperated with local governments to provide materials to craft workshops for reuse | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Strategy and Management

Life Cycle Zero CO₂ Emissions Challenge

New Vehicle Zero CO₂ Emissions Challenge

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Challenge of Minimizing and Optimizing Water Usage

Challenge of Establishing a Recycling-based Society and Systems

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Environmental Data

Results of the Sixth Toyota Environmental Action Plan (Detail)

Evaluation Legend
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| | Action Items | Specific Actions and Targets | Results from FY2017–FY2021 | Evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Recycling (Resources, Water) | (5) Challenge of Establishing a Recycling-based Society and Systems | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 11. Achieve industry-leading levels in easy-to-dismantle design for effective resource collection | <ul style="list-style-type: none"> Maintain and improve industry-leading levels for easy-to-dismantle design <ul style="list-style-type: none"> Apply reliable easy-to-dismantle designs to all models including next-generation vehicles (battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs)) and smart mobility vehicles Develop and apply easy-to-dismantle designs to new technologies and new materials parts | <ul style="list-style-type: none"> Continued to create easy-to-dismantle designs to newly developed vehicles each year (wiring harnesses, hybrid electric vehicle (HEV) batteries, door trim, etc.) Main models: FY2021: RAV4 PHEV, Harrier, Yaris Cross, Mirai FY2020: RAV4, Corolla, Raize, Granace, Yaris FY2019: Century, Crown, Corolla Sport, Lexus ES, Lexus UX FY2018: JPN Taxi, Prius PHEV, Camry, Lexus LS FY2017: Prius PHEV, Lexus LC In light of the recent situation in which many early (starting in 2003) model vehicles with easy-to-dismantle designs are being discarded, placed advertisements in trade papers and periodicals in Japan to emphasize the ease of removing wiring harness, a representative example, in order to gain the understanding of more dismantlers concerning our eco-friendly designs (ongoing since December 2019) Developed techniques for the efficient extraction of hydrogen gas from FCEVs and developed and launched low-cost gas extraction tools | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 12. Contribute worldwide through End-of-life vehicle treatment and recycling technology developed in Japan | <ul style="list-style-type: none"> Deploy proper End-of-life vehicle treatment technology in accordance with conditions in each country and region <ul style="list-style-type: none"> Conduct proper End-of-life vehicle treatment in accordance with local End-of-life vehicle recycling laws and regulations, while enhancing initiatives in countries and regions where laws and regulations are expected to be introduced, based on the guidance prepared by Toyota Set up 100 model facilities for appropriate treatment and recycling of End-of-life vehicles (7 facilities as of 2020) | <ul style="list-style-type: none"> Rolled out guidelines on requirements for setup and maintenance of facilities for appropriate treatment and recycling of End-of-life vehicles to Toyota's affiliates in each region. In the future, we use these guidelines in communications between affiliates and facilities for maintenance and continuation of appropriate treatment and recycling. Completed setup of model facilities in Thailand (FY2018) and Vietnam (FY2019) as well as Japan, Belgium, Malaysia, Brazil and Argentina (FY2021), achieving the target to establish facilities in 7 locations (of these, the facilities in Japan and Belgium are facilities for appropriate treatment and recycling of End-of-life FCEVs) | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 13. Expand original recycling systems for End-of-life vehicle materials to each region | <ul style="list-style-type: none"> Promote advanced development of Toyota's original recycling technologies and provide support in each region <ul style="list-style-type: none"> Enhance technologies for remanufacturing and recycling nickel-metal-hydride batteries (lowering cost) and provide support Establish technologies for remanufacturing and recycling lithium-ion batteries and provide support Achieve practical use of recycled wiring harnesses in Japan (expand scale of operations) Achieve practical use of recycled magnets in Japan (expand scale of operations) Develop power generation and storage systems using HEV units Study and project an outlook on bumper collection and recycling technologies in key regions | <ul style="list-style-type: none"> Since the launch of the first-generation Prius in FY1998, collected a cumulative total of 212,000 batteries from End-of-life vehicles for reuse and recycling Continued 3R (Rebuild, Reuse and Recycle) activities for batteries in Japan, North America, Europe, China and Thailand Continued investigation of storage battery systems in cooperation with electric power companies and others in Japan and China In anticipation of an increase in batteries in Japan, updated collection and receiving systems for nickel batteries and began trial operations at multiple collection and consolidation sites to increase collection efficiency Launched and began operating a joint scheme with JAMA to collect and properly treat lithium-ion batteries in Japan Continued to extract rare earth elements from collected magnets for recycling and reuse as magnetic materials and so on; since FY2013, have collected and recycled a cumulative 57 tons of magnets | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14. Reduce waste and use resources efficiently in production activities | <ul style="list-style-type: none"> Promote activities to reduce waste through development and deployment of waste reduction-oriented production technologies and daily <i>kaizen</i> activities <ul style="list-style-type: none"> Promote waste reductions and efficient use of resources through improving yields and other measures aimed at the sources of waste Promote activities to reduce resources loss by reducing amounts of valuables and waste generated Promote activities to reduce metal scrap generation and implement All-Toyota campaigns to effectively use resources internally <table border="1"> <thead> <tr> <th>Scope</th> <th>Region</th> <th>Item</th> <th>Base year</th> <th>Target (FY2021)</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Waste</td> <td rowspan="2">Japan²</td> <td>Total volume generated</td> <td rowspan="2">FY2002</td> <td rowspan="2">35% reduction</td> </tr> <tr> <td>Waste volume generated per vehicle</td> </tr> <tr> <td rowspan="3">Waste¹</td> <td>Japan</td> <td colspan="3">Zero landfill waste³</td> </tr> <tr> <td>TMC</td> <td>Waste volume generated per vehicle</td> <td>FY2002</td> <td>63% reduction</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Promote regional No. 1 reduction activities</td> </tr> </tbody> </table> | Scope | Region | Item | Base year | Target (FY2021) | Waste | Japan ² | Total volume generated | FY2002 | 35% reduction | Waste volume generated per vehicle | Waste ¹ | Japan | Zero landfill waste ³ | | | TMC | Waste volume generated per vehicle | FY2002 | 63% reduction | Other regions | Promote regional No. 1 reduction activities | | | <ul style="list-style-type: none"> Promoted waste reductions and efficient use of resources through measures aimed at the sources of waste <table border="1"> <thead> <tr> <th>Scope</th> <th>Region</th> <th>Item</th> <th>Base year</th> <th>FY2021 results</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Waste</td> <td rowspan="2">Japan</td> <td>Total volume generated</td> <td rowspan="2">FY2002</td> <td rowspan="2">Promoted yield improvement and reliably collected scrap materials</td> </tr> <tr> <td>Waste volume generated per vehicle</td> </tr> <tr> <td rowspan="3">Waste</td> <td>Japan</td> <td colspan="3">Zero landfill waste</td> </tr> <tr> <td>TMC</td> <td>Waste volume generated per vehicle</td> <td>FY2002</td> <td>65% reduction</td> </tr> <tr> <td>Other regions</td> <td colspan="3">Promoted various activities, such as reuse</td> </tr> </tbody> </table> | Scope | Region | Item | Base year | FY2021 results | Waste | Japan | Total volume generated | FY2002 | Promoted yield improvement and reliably collected scrap materials | Waste volume generated per vehicle | Waste | Japan | Zero landfill waste | | | TMC | Waste volume generated per vehicle | FY2002 | 65% reduction | Other regions | Promoted various activities, such as reuse | | |
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| | | Other regions | Promote regional No. 1 reduction activities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | Waste | Japan | Zero landfill waste | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | Other regions | Promoted various activities, such as reuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15. Reduce packaging and wrapping materials and use resources efficiently in logistics activities | <ul style="list-style-type: none"> Promote <i>kaizen</i> with a focus on increasing use of returnable containers and reducing the weight of wrapping material Japan: Continue <i>kaizen</i> at conventional level (14% reduction compared to FY2007 levels) Other regions: Assess best practices | <ul style="list-style-type: none"> As a result of the following measures, achieved the target of a 14% reduction compared to FY2007 levels in Japan <ul style="list-style-type: none"> Promoted activities to reduce waste through development and deployment of waste reduction-oriented production technologies and daily <i>kaizen</i> activities Promoted waste reductions and efficient use of resources through improving yields and other measures aimed at the sources of waste Promoted activities to reduce metal scrap generation and implemented All-Toyota campaigns to effectively use resources internally Shared information on initiatives by each affiliate in each region | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|---------------------|---|--|---|------------|
| Harmony with Nature | (6) Challenge of Establishing a Future Society in Harmony with Nature | 16. Promote expansion of nature conservation activities "Connecting Communities" <ul style="list-style-type: none"> ● Toyota Green Wave Project—an initiative to connect with local communities through the various activities undertaken by each All-Toyota company and its global affiliates to conserve the natural environment <ul style="list-style-type: none"> — Continue the currently sustainable plant activities and simultaneously expand the various activities of All-Toyota Group companies to subsidiaries in each region, affiliates and local communities and expand the reach of activities in partnership with stakeholders | <ul style="list-style-type: none"> ● Continued activities promoting harmony with nature in collaboration with Toyota Group companies and other affiliated companies (22 companies) Results of 5 years of Activities: Number of participants in activities promoting harmony with nature: 176,908 Number of activities conducted: 971 Number of trees planted: 206,772 (cumulative total: 12,306,351) Tree thinning and forest conservation area: 8,887 ha Number of participants in environmental education: 99,869 Main species targeted for conservation: Green turtle, <i>medaka</i>, little tern, Japanese firefly and honeybee Main non-native species eliminated to protect ecosystems: Lanceleaf tickseed and red swamp crayfish ● Realized Plant in Harmony with Nature Implemented PDCA, such as wildlife habitats maintenance and improvement measures and surveys to confirm the effects at 3 plants in Japan and 3 plants in other regions TMC: Tsutsumi Plant (FY2019), Teiho Plant (FY2020), Kinuura Plant (FY2021) Other regions: Ban Pho Plant (Thailand), Burnaston Plant (U.K.), Cambridge Plant and Woodstock Plant (Canada) (all in FY2021) | ○ |
| | 17. Boost grant for environmental activities "Connecting with the World" | <ul style="list-style-type: none"> ● Toyota Today for Tomorrow Project—an initiative to connect environmental and biodiversity conservation activities to the world through grants for those activities <ul style="list-style-type: none"> — Strengthen grants for projects helping to solve environmental issues as a means to prioritize the area of environment among social contribution activities. Collaborate with global organizations and stakeholders to provide new value and extend the circle of activities globally. | <ul style="list-style-type: none"> ● Built cooperative relationships with international organizations and NGOs as described below, and contributed to the conservation of global biodiversity <ul style="list-style-type: none"> — Conducted the following activities in collaboration with the International Union for Conservation of Nature (IUCN): <ul style="list-style-type: none"> · Conducted assessments of extinction risks for 29,830 species to enhance the IUCN Red List, a global indicator of ecosystems · Jointly organized a side event at the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (February 2020) · Issued updated releases concerning the Red List and released information on a database website — Donated vehicles to BirdLife International and Conservation International in Myanmar, Tahiti and Guyana to conduct surveys and conservation activities of species listed on the IUCN Red List — Continued measures to protect endangered wildlife and conducted patrols to prevent illegal logging as a part of the World Wide Fund for Nature (WWF) Living Asian Forest Project. TMC conducted joint publicity activities on the social media and websites with TDEM and TMMIN, affiliates in Asia. ● Continuously implemented the Toyota Environmental Activities Grant Program to support the biodiversity and climate change related activities of small- and medium-size NGOs and NPOs. In the past 5 years, provided grants to 136 projects in Japan, North America, Latin America, Europe, the Asia-Pacific region and Africa. | ○ |
| | 18. Boost contribution to environmental education activities "Connecting to the Future" | <ul style="list-style-type: none"> ● Toyota ESD* Project—an initiative to strengthen environmental education using plant sites and company-owned lands in each region and thereby connect environmental conservation activities to the future <ul style="list-style-type: none"> — Globally expand education of local residents and children utilizing forests and green biotopes at plants and others — Promote development of educational programs taking advantage of the special characteristics of company-owned land (the Toyota Shirakawa-Go Eco-Institute, Forest of Toyota, Toyota Mie Miyagawa Mountain Forest and others) and promote human resources development to connect to the future <p>* Education for Sustainable Development</p> | <ul style="list-style-type: none"> ● Conducted environmental education around the world using land and other sites owned by affiliates in each region Forest of Toyota: <ul style="list-style-type: none"> — Held hands-on nature programs for local elementary school children and began acceptance from after-school care centers in FY2021 (a total of 48,338 children participated from FY2017 to FY2021; a cumulative total of approximately 198,974 children have participated since 1997) — Focusing on biodiversity and the living creatures of <i>satoyama</i>, held a basic course, presented case studies, held hands-on workshops, conducted field tours and hosted various other events. Starting in FY2021, began distributing original videos for fun and easy learning about wildlife habitats and forest mechanisms on YouTube. Toyota Shirakawa-Go Eco-Institute: <ul style="list-style-type: none"> — Provided hands-on nature programs for children and adults; the cumulative total number of participants from FY2017 to FY2021 reached 49,786 (a total of 68,254 participants visited from FY2017 to FY2021; a cumulative total of approximately 249,045 participants have visited since 2005 (as of March 2021)) — Held the SDGs Education Forum in Toyota Shirakawa-Go Eco-Institute as an activity to enhance the value of the institute — Held a hands-on nature program for wheelchair users | ○ |

Strategy and Management

Life Cycle Zero CO₂ Emissions Challenge

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Environmental Data

Results of the Sixth Toyota Environmental Action Plan (Detail)

Evaluation Legend
 ○ : Achieved
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| | Action Items | Specific Actions and Targets | Results from FY2017–FY2021 | Evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Harmony with Nature | (6) Challenge of Establishing a Future Society in Harmony with Nature 19. Promote environmental contributions through biotechnology and afforestation business, automotive peripheral technologies and forest conservation activities | <ul style="list-style-type: none"> Respond to environmental issues with biotechnology <ul style="list-style-type: none"> Promote cellulose ethanol research and development by further improving yeast ferment capacity Contribute natural capital creation by applying to the area of agriculture and farming biomass business Contribute to “Adaptation” in climate change through urban greening business and Group-owned technology <ul style="list-style-type: none"> Respond to heat island | <ul style="list-style-type: none"> Responded to environmental issues with biotechnology <ul style="list-style-type: none"> Developed yeast with ethanol productivity at the world's highest level to contribute to the widespread use of low-carbon fuels Developed technology for ethanol production from biomass that does not compete with food and feed Promoted initiatives in the area of urban greening <ul style="list-style-type: none"> Promoted the use of green building materials (smart green walls), primarily at Toyota Motor Corporation's business sites * Business was transferred to Oshima Landscape Construction Co., Ltd. in July 2019 and these activities were ended | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <ul style="list-style-type: none"> Establish a model to utilize resources effectively at the Toyota Mie Miyagawa Mountain Forest Realize a sustainable technical center in harmony with nature and local communities at the Toyota Technical Center Shimoyama, which is currently in the planning stage | <ul style="list-style-type: none"> Toyota Mie Miyagawa Mountain Forest <ul style="list-style-type: none"> Implemented the Forest Challenge and Development Project, which seeks to create new utilization of trees and forests. Began sales of household goods and furniture made from wood materials. Used local wood materials for company facilities Held workshops and hands-on educational programs to learn about forest cycles Toyota Technical Center Shimoyama <ul style="list-style-type: none"> Set aside approximately 60% of the total project site as areas for environmental conservation and conducted forest and paddy restoration and management with local residents. Started operation as the Toyota Technical Center Shimoyama in April 2019. | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Environmental Management / Value Chains Collaboration | 20. Strengthen consolidated environmental management | <ul style="list-style-type: none"> Enhance activities globally of various environmental committees to improve environmental management activities and ensure superior environmental performance (CO₂, water and others) across all business activities in each country and region | <ul style="list-style-type: none"> Japan <ul style="list-style-type: none"> Held the All-Toyota Production Environment Conference and Liaison Committee (Executives' Meeting) each year to share information, discuss and promote in an integrated manner All-Toyota initiatives in the production and logistics areas Global <ul style="list-style-type: none"> Held the Global Environment Meeting by general manager levels from 7 regions including Japan each year and discussed dissemination of information by Toyota Motor Corporation and issues on initiatives of each region Starting in 2018, periodically held the Environmental Strategy Meeting by executives from 5 key regions (Japan, U.S., Europe, China and Asia) to discuss global environmental strategies from a medium- to long-term perspective Held the Global ECO. Awards each year. Promoted environmental <i>kaizen</i> activities in the area of production and logistics and conducted <i>yokoten</i> of best <i>kaizen</i> practices. | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <ul style="list-style-type: none"> Thoroughly comply with environmental laws and regulations and strengthen proactive prevention measures for environmental risks in each country and region | <ul style="list-style-type: none"> From FY2017 to FY2021, there were no significant violations of environmental laws and regulations and environmental non-compliance issues. Continuously held on-site mutual confirmation meetings targeting those responsible for environmental initiatives at Toyota Group companies in Japan. In FY2021, there were 3 environmental non-compliance issues (3 in Japan and 0 in other regions), but all were minor incidents, for which measures and <i>yokoten</i> were completed | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <ul style="list-style-type: none"> Improve chemical substance management by carefully monitoring trends of laws and regulations in each country and region | <ul style="list-style-type: none"> Enhanced business management regulations (e.g., established conforming business regulations, reviewed management regulations) Steadily revised internal rules based on the Global Automotive Declarable Substance List (GADSL) to reflect the latest laws and regulations in each country Evaluated and improved chemical substance management structures by auditing and investigating suppliers' processes | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 21. Reduce vehicle exhaust emissions to improve urban air quality in each country and region | <ul style="list-style-type: none"> Steadily introduce low-emissions vehicles to improve urban air quality in each country and region Contribute to air quality improvement through air quality research in collaboration with research organizations in each country | <ul style="list-style-type: none"> In response to stricter emissions regulations in each country and region, steadily introduced vehicles that satisfy those regulations Conducted activities that contribute to improved urban environments with various partners such as cooperative air quality research conducted with research organizations in each country | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22. Reduce volatile organic compound (VOC) emissions in production activities | <ul style="list-style-type: none"> Develop and deploy VOC emissions reduction technologies through reducing the use of paint and thinners in painting processes <ul style="list-style-type: none"> Promote continual reduction in VOC emissions through initiatives linked to painting equipment upgrade plans as well as daily <i>kaizen</i> activities | <ul style="list-style-type: none"> Achieved targets for emissions per area painted for bodies and bumpers in Japan by promoting a switch to water-based paint in the bumper painting process and continuously promoting VOC reduction through daily <i>kaizen</i> | ○ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Scope</th> <th>Region</th> <th>Item</th> <th>Target (FY2021)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Vehicle body painting</td> <td>Japan*</td> <td>Emissions volume per area painted</td> <td>26 g/m² or less (average for all lines)</td> </tr> <tr> <td>TMC</td> <td>Emissions volume per area painted</td> <td>19 g/m² or less (average for all lines)</td> </tr> <tr> <td>Other regions</td> <td colspan="2">Promote regional No. 1 reduction activities</td> </tr> <tr> <td>Bumper painting</td> <td>TMC</td> <td>Emissions volume per area painted</td> <td>310 g/m² or less (average for all lines)</td> </tr> <tr> <td>Other painting</td> <td>Japan/Other regions</td> <td colspan="2">Promote VOC emissions reduction activities</td> </tr> </tbody> </table> | Scope | Region | Item | Target (FY2021) | Vehicle body painting | Japan* | Emissions volume per area painted | 26 g/m ² or less (average for all lines) | TMC | Emissions volume per area painted | 19 g/m ² or less (average for all lines) | Other regions | Promote regional No. 1 reduction activities | | Bumper painting | TMC | Emissions volume per area painted | 310 g/m ² or less (average for all lines) | Other painting | Japan/Other regions | Promote VOC emissions reduction activities | | <table border="1"> <thead> <tr> <th>Scope</th> <th>Region</th> <th>Item</th> <th>FY2021 results</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Vehicle body painting</td> <td>Japan</td> <td>Emissions volume per area painted</td> <td>21.5 g/m²</td> </tr> <tr> <td>TMC</td> <td>Emissions volume per area painted</td> <td>13.9 g/m²</td> </tr> <tr> <td>Other regions</td> <td colspan="2">Implemented measures to improve coating efficiency and others</td> </tr> <tr> <td>Bumper painting</td> <td>TMC</td> <td>Emissions volume per area painted</td> <td>148 g/m²</td> </tr> <tr> <td>Other painting</td> <td>Japan/Other regions</td> <td colspan="2">Implemented measures to improve coating efficiency and others</td> </tr> </tbody> </table> | Scope | Region | Item | FY2021 results | Vehicle body painting | Japan | Emissions volume per area painted | 21.5 g/m ² | TMC | Emissions volume per area painted | 13.9 g/m ² | Other regions | Implemented measures to improve coating efficiency and others | | Bumper painting | TMC | Emissions volume per area painted | 148 g/m ² | Other painting | Japan/Other regions | Implemented measures to improve coating efficiency and others | |
| Scope | Region | Item | Target (FY2021) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vehicle body painting | Japan* | Emissions volume per area painted | 26 g/m ² or less (average for all lines) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Bumper painting | TMC | Emissions volume per area painted | 310 g/m ² or less (average for all lines) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other painting | Japan/Other regions | Promote VOC emissions reduction activities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Vehicle body painting | Japan | Emissions volume per area painted | 21.5 g/m ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TMC | Emissions volume per area painted | 13.9 g/m ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Bumper painting | TMC | Emissions volume per area painted | 148 g/m ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other painting | Japan/Other regions | Implemented measures to improve coating efficiency and others | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* TMC and consolidated subsidiaries (plants) in Japan

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| Environmental Management / Value Chains Collaboration | Environmental Management | 23. Bolster global employee education and awareness activities | <ul style="list-style-type: none"> ● Raise awareness of environmental conservation through global environmental education among employees <ul style="list-style-type: none"> – Systemize environmental education programs conducted in cooperation with consolidated affiliates – Conduct environmental education in accordance with situations in each country and region | <ul style="list-style-type: none"> ● Set June of each year as the Toyota Global Environment Month and promoted it globally in an integrated manner <ul style="list-style-type: none"> – Distributed a message from the head of the company and conducted environmental education on the "Know, Learn, Act" cycle ● In Japan, used the company intranet and internal e-Learning system to conduct education on the Toyota Environmental Challenge 2050 <ul style="list-style-type: none"> – Conducted activities to reduce single-use plastics, tree-planting, offered dishes using sustainable seafood in company cafeterias and reimbursed test fees for the Eco Test – Conducted education throughout the year by holding environmental quizzes and introducing the World Water Day, the International Day for Biological Diversity, the Toyota Water Week, etc. Continued environmental lectures conducted by outside speakers, environmental seminars for employees and environmental education for new employees. ● At other regional affiliates, displayed posters, issued environmental declarations, conducted workshops, etc. | ○ |
| | | 24. Enhance active disclosure of environmental information and communication | <ul style="list-style-type: none"> ● Enhance environmental information disclosures <ul style="list-style-type: none"> – Expand affiliates subject to collection of environmental information, and creation of the system – Further enhance the Environmental Report content ● Further enhance environmental communications activities in each country and region | <ul style="list-style-type: none"> ● Revealed in the CDP A List, the highest rank, in both the climate change and water security categories scored by CDP (2016–2017, 2019–2020) ● Enhanced information disclosures in the Environmental Report (information on the relationships between the Toyota Environmental Challenge 2050 and SDGs, responses to recommendations of the TCFD and disclosure standards of the SASB, etc.) ● Engaged in environmental communication activities with stakeholders including investors in each region. In 2019, engaged in a dialogue with the United Nations Environment Programme (UNEP) Asia and the Pacific Office. | ○ |
| | Value Chains Collaboration | 25. Promote environmental activities in cooperation with business partners: suppliers | <ul style="list-style-type: none"> ● Reinforce cooperation with suppliers to further promote environmental activities globally <ul style="list-style-type: none"> – Ensure compliance with each country's laws and regulations while steadily promoting chemical substance management – Pursue cooperative environmental activities in a broad range of areas, including CO₂ emissions reduction, resource recycling, water impact reductions and the establishment of societies in harmony with nature | <ul style="list-style-type: none"> ● Periodically revised the Toyota Green Purchasing Guidelines (GPG) and shared information and engaged in dialogue with suppliers (responded to the Toyota Environmental Challenge 2050 in FY2017; revised chemical substance management methods and added Harmony with Nature in FY2020) ● In Japan, starting in FY2021, requested self-assessments in accordance with the GPG and provided feedback on the scoring results ● Conducted awareness activities using self-assessment sheet at 366 companies in FY2021 to ensure thorough management of chemical substances, continuously implemented measures for use in future activities, and rolled out these activities in the U.S., Europe, China and Thailand ● Continuously implemented the CDP Supply Chain Program, held briefing sessions and provided guidance to participating suppliers each year and engaged in communication regarding risks, opportunities, etc. ● Summarized the results of activities at study sessions on environmental topics at the Kyohokai (a supplier organization) and completed the first phase activities (until FY2020). Increased the number of participating companies and started the second phase of the study session in FY2021. Established the Environmental Activity Awards targeting the members of Kyohokai and continued presenting awards to suppliers that have made significant contributions to environmental initiatives. | ○ |
| | | 26. Promote environmental activities in cooperation with business partners: dealers and distributors | <ul style="list-style-type: none"> ● Promote environmental management in cooperation with dealers and distributors <ul style="list-style-type: none"> Japan: <ul style="list-style-type: none"> – Promote environmental activities by adhering closely to the Toyota Dealer CSR Checklist and promote CO₂ emissions reduction and others, by improving environmental management Other regions: <ul style="list-style-type: none"> – Promote and strengthen the environmental activities led by each regional headquarters and distributors in each country (CO₂ emissions reduction and others) – Promote and strengthen the Dealer Environmental Risk Audit Program (DERAP) | <ul style="list-style-type: none"> ● Japan <ul style="list-style-type: none"> – Updated the check items of the Toyota Dealer's Legal Compliance Manual (formerly the CSR Checklist) each year and encouraged enhanced environmental management of dealers. In 2020, added items concerning the Containers and Packaging Recycling Law in Japan (responded to the provision of plastic shopping bags for a fee) and distributed the updated manual. – Prepared the environmental guidebook in May 2019 to expand the policy for environmental activities to dealers ● Other regions <ul style="list-style-type: none"> – Prepared environmental guidelines for each region and reinforced environmental initiatives including CO₂ emissions reduction – In the past 5 years, dealers participating in the DERAP increased from 4,233 in 81 countries to 4,647 in 97 countries. The percentage of participating dealers that satisfied all 5 audit requirements increased from 91% to 95%. | ○ |