

Toyota Environmental Challenge 2050—Going Beyond Zero Environmental Impact and Achieving a Net Positive Impact

We have formulated the Toyota Earth Charter based on the Guiding Principles at Toyota, considering environmental issues as a paramount importance, and have established its promotion structure to address such issues. In the course of perceiving public opinions or world trends and while considering our focus in the years to come, Toyota is working on this problem with new ideas and technologies ahead of future challenges. In October 2015, we formulated six challenges based on piles of environmental issues and we have been moving ahead, aiming to establish a future society in harmony with nature.

Six Environmental Challenges to Be Achieved by Toyota Toward 2050

In the “estimation of greenhouse gas concentrations and rising temperatures by 2100” scenario from the Fifth Assessment Report of the IPCC Working Group, there are several scenarios in which the atmosphere temperature in 2100 rises will be suppressed by less than 2°C over pre-industrial levels, but in any case, it is estimated that:

- Greenhouse gas emissions in 2050 will be reduced 40–70 percent over 2010
- Greenhouse gases will be almost zero or minus by 2100

Toyota has promoted a wide range of initiatives to address increasingly severe global environmental issues, such as extreme weather phenomena attributed to greenhouse gas emissions, biodiversity depletion due to development, and water shortages caused by population growth. In October 2015, we announced the “Toyota Environmental Challenge 2050,” and we have been striving to reduce the environmental burden attributed to automobiles to as close to zero as possible, while developing measures to contribute a positive impact on the Earth and its societies with the aim of achieving a sustainable society.

Serious Environmental Issues of the Earth and Society

- Extreme weather attributed to GHG emissions
- Aggravated air pollution in cities
- Water shortages due to population growth
- Resource depletion such as metals
- Fragmentation of ecosystem due to development progress
- Degrading biodiversity due to ecosystem changes and climate change

TOYOTA ENVIRONMENTAL CHALLENGE 2050



Processes to Identify and Implement the Key Challenges (Materiality)

Environmental challenges may involve both business risks and opportunities. It is therefore essential to identify key challenges (materiality) from both risk and opportunity perspectives when formulating a long-term vision. In order to grasp the potential risks and business opportunities, Toyota has collected information, analyzing and identifying environmental challenges from the standpoints of their importance for both stakeholders and our business.

STEP

1

Collect and Analyze Information

We examined a wide range of global trends in collecting and analyzing information. These include scientific predictions for the environment in 2050, global frameworks and policy trends, development in emerging countries, major index from external rating agencies, and world leaders' remarks on environmental issues at G7 Summits. This broad examination provided us with an understanding of macroeconomic trends and important needs of societies, leading us to grasp potential risks and opportunities.

STEP

2

Identify Environmental Challenges (Materiality)

We identified environmental challenges (materiality) through analysis of both the external and internal environments. Our analysis of the external environment is derived from ESG investor and research organization surveys and major indices, along with communication with stakeholders including international organizations, NGOs, and consumers, while the internal analysis is based on the Guiding Principles at Toyota, the Toyota Earth Charter, and discussions among internal concerned divisions.

STEP

3

Identify Key Challenges (Materiality)

We identified the key environmental challenges (materiality) by considering two aspects, which are the influence on stakeholders, and impacts on our potential business risks and opportunities. This helped us prioritize the importance of key challenges.

STEP

4

Toyota Environmental Challenge 2050 Formulation, Regular Review, and Information Disclosure

High priority challenges for both stakeholders and Toyota were formulated in the Toyota Environmental Challenge 2050 (Six Challenges) and approved by the Corporate Planning Meeting (current “Sustainability Meeting”), which decides our medium- to long-term strategies. Steady implementation of our challenges requires management's recognition of environmental activities as potential business opportunities and effective investments, in addition to involving Group companies to strengthen collaboration with our business partners. We will review and evaluate our action plans on a regular basis.