

# **Sustainability Action Plan of Expo 2025 Osaka, Kansai, Japan**

1st Edition

**April 2023**

**Japan Association for the 2025 World Exposition**

# Sustainability Action Plan of Expo 2025 Osaka, Kansai, Japan

Sustainability in the operation of Expo 2025 Osaka, Kansai, Japan (hereinafter referred to as “the Expo”) will be pursued based on the event theme “Designing Future Society for Our Lives.” Considering the theme, acting accordingly, and committing to the Sustainable Development Goals (SDGs), to be achieved by 2030, toward solving challenges shared globally – this is the significance of holding the Expo.

In December 2020, the Japan Association for the 2025 World Exposition (hereinafter referred to as “the Organiser of the World Expo 2025”), the secretariat of the Expo, established the Master Plan for Expo 2025 Osaka, Kansai, Japan (hereinafter referred to as “the Master Plan,”) setting out the necessary projects and their policies for ensuring the sustainability of the Expo. To enable the SDGs to be achieved in the operation of the Expo, the Master Plan has been designed to ensure sustainability in the operation of the Expo through appropriate management of the impacts of the event on society and the environment.

The Expo is a large-scale event with a long duration from the preparation to the end of the operation and involves a wide variety of stakeholders both directly and indirectly, raising the expectation that the event will have a long-term and wide-ranging impact on the environment, society, economy, etc. An event like the Expo has “power” to change the behaviours of many people through its connection with stakeholders. The Organiser of the World Expo 2025 has the responsibility of appreciating such “power” correctly and utilising its impact.

Sustainability Action Plan of Expo 2025 Osaka, Kansai, Japan (hereinafter referred to as “the Action Plan”) has been prepared to stipulate specific efforts to be made by the Organiser of the World Expo 2025 so that the Organiser of the World Expo 2025 can contribute to addressing social challenges indicated in the SDGs through the operation and organisation of the Expo, help with the creation of legacies through the realisation of social and public benefits as a return from investment in the Expo, and utilise the Expo as an opportunity not only for achieving the SDGs but also for making a leap toward the “SDGs + Beyond” and present a role model for the next generation.

The Action Plan begins with Chapter 1 “Introduction”, which sets forth the Expo’s purposes, governing principles, sustainability policy, the scope of the Action Plan, and other issues related to the Action Plan. Chapter 2 describes the relationships between the Action Plan and ISO20121, which serves as the cornerstone of the Action Plan. Chapter 3 describes the commitment policies established based on the Expo sustainability policy and the commitments made so far. Finally, Chapter 4 presents indexes for the entire Expo as representative examples of the actions.

Based on the Action Plan, the Organiser of the World Expo 2025 will implement PDCA (Plan-Do-Check-Action) cycle of the Event Sustainability Management System (ESMS) to continuously improve the organisation and operation of the Expo. While doing so, the Organiser of the World Expo 2025 will revise the Action Plan based on the identification of the relevant commitments and release revisions as necessary.

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# Chapter 1: Introduction

## 1.1 The Expo's Aims

The theme of the Expo is “Designing Future Society for Our Lives.” As an opportunity for the world to come together in one “place,” this event is intended to facilitate interactions between people with diverse values from around the world, resulting in opportunities to build new human connections and create value.

Through the preparation and operation of the Expo, the Japan Association for the 2025 World Exposition (hereinafter referred to as “the Organiser of the World Expo 2025”) will return to “life” as a starting point, encourage people to continue to build awareness of each other’s lives, take a careful look at life in diverse forms around the world, and hold an Expo that provides new solutions for the challenges of sustainability.

The series of activities based on the theme of “Designing Future Society for Our Lives” are in alignment with the United Nations (UN) Sustainable Development Goals (SDGs), whose ultimate purpose resides in achieving a diverse and inclusive society in a sustainable manner underpinned by the pledge of “Leaving No One Behind.”

The year 2025, when the Expo will be held, is five years before 2030, the target year for achieving the SDGs. Thus, the event will serve as a great opportunity to see the progress toward the SDGs and accelerate the actions toward their achievement. At the same time, by considering the future society from a medium- to long-term perspective, it is expected that the SDGs will not only be achieved by 2030, but will also present a vision beyond the SDGs (+beyond).

## 1.2 Governing Principles in the Operation of the Organiser of the World Expo 2025

The Organiser of the World Expo 2025 operates under four governing principles:

(1) Stewardship

Strive to appropriately manage environmental and social impacts from the planning stage to execution of the Expo to ensure positive outcomes following the Expo.

(2) Inclusivity

Ensure the inclusion of diverse stakeholder opinions from the perspective of sustainability, notably the Sustainable Development Goals (SDGs) of the UN 2030 Agenda for Sustainable Development.

(3) Integrity

Equitably carry out the process of value creation for a future society by acting with integrity toward visitors, participants (corporations, educational and research institutions, national governmental agencies, international organisations, local governments, NGOs/NPOs, grassroots bodies, etc.), and many other stakeholders.

(4) Transparency

Set goals from a diverse range of perspectives and verify the appropriateness of the operation, thereby creating a mechanism for disseminating information to many people.

The Organiser of the World Expo 2025 understands the needs and expectations of its stakeholders and ensures its compliance with and adherence to legal and other requirements.

### 1.3 Sustainability Policy of Expo 2025 Osaka, Kansai, Japan

In April 2022, the Organiser of the World Expo 2025 established the Sustainability Policy of Expo 2025 Osaka, Kansai, Japan, as the basic concept and approach for ensuring the sustainability of the Expo. Released externally, this policy is intended for not only each member of the Organiser of the World Expo 2025, but also all the other stakeholders (governmental agencies, suppliers, licensees, citizens, visitors, etc.). The Organiser of the World Expo 2025 will act to ensure sustainability in the operation of the Expo based on the understanding of this policy.

To elaborate further on the discussion of “life” as the central piece of the theme of the Expo, the Organiser of the World Expo 2025 has established three subthemes in the policy: Saving Lives, Empowering Lives, and Connecting Lives. Based on these sub-themes, the Organiser of the World Expo 2025 has set the following five major goals to guide various activities.

#### **People (Life, People, Health and Wellbeing)**

**The Expo promotes the importance of protecting and nurturing all “life” that makes up our ecosystems.**

[Direction to Pursue]

The Expo has adopted the concept of "People's Living Lab" as an approach to realizing the Theme with the aim of realizing Society 5.0 and solving social issues. The Expo also strives to be a place for creating value in diverse forms, including livelihoods, diet and learning.

#### **Planet (Ecosystems and Environment)**

**The Association aims to develop and operate venues that contribute to the realisation of international agreements (the Paris Agreement, Osaka Blue Ocean Vision, and Kunming-Montreal Global Biodiversity Framework).**

[Direction to Pursue]

- The Expo strives to reduce greenhouse gas emissions by introducing CO<sub>2</sub> emissions reduction technology, energy conservation technology and renewable energy.
- The Expo shall use resources effectively by actively leveraging the 3R initiatives (Reduce, Reuse and Recycle) and procuring renewable materials.
- The Expo shall conserve and restore the natural environment and ecosystems around the venue where there are important ecological hubs in the coastal zone in the Osaka region.

#### **Prosperity (Supply Chain and Value Chain)**

**The Expo fosters knowledge about society and the environment that enriches not only tangible commodities but also livelihoods. This knowledge expands the scope of possibilities and shall be passed on to the next generation as a legacy.**

[Direction to Pursue]

- The Expo shall establish a supply chain in compliance with the Sustainable Procurement Code and take account of sustainability throughout the value chain, including the process of cyclical use and disposal of resources.

- The Expo shall contribute to the revitalization of local industries by collaborating with private companies in the preparation and operation of the Expo site.

## **Peace (Peace, Justice, and Inclusiveness)**

**The Association creates a favourable environment for diverse people to actively and safely participate in the Expo, and aims to operate the Expo in an inclusive manner which respects each person so that the Expo will be a place for sharing diverse values based on the Theme.**

[Direction to Pursue]

- The Association shall operate the Expo in accordance with the UN "Guiding Principles on Business and Human Rights".
- The Association shall ensure a sound and favourable working environment for the diverse people involved in the preparation and operation of the Expo.

## **Partnership (Collaboration)**

**The Association provides the opportunity for everyone to participate in the Expo, freely exchange ideas and create communities where they can connect with each other.**

[Direction to Pursue]

Together with corporations, educational and research institutions, national and governmental organisations, international organisations, local governments, NGOs/NPOs and grassroots bodies, the Association shall promote Japan, particularly the Osaka and Kansai region, to the world. In addition, the most distinctive characteristic of the Expo will be the endeavour to give a realistic picture of a future society not just through thought but also through action. In this regard, the Association shall invite diverse participants to come together before the Expo and connect with various initiatives in their respective positions and tackle challenges with a view to support achievement of the SDGs at or outside the Expo site.

Furthermore, as the plans for the Expo take shape, provide opportunities for the next generation, who will be leaders for future urban development, to continue to make impactful strides forward.

## **1.4 Sustainable Operation**

The Expo will be held not only during the event period, but also for a long-term, from the pre-event planning phase, the Expo event period, and after the event. In addition, the Expo involves the construction of many structures in extensive areas. Accordingly, it is assumed that the event will have an impact on the environment, society, economy, and many other fields. In order to achieve the SDGs in the operation as well, the Organiser of the World Expo 2025 will manage the environmental and social impacts appropriately and strive to ensure sustainability in the operation.

### **(1) Sustainable Expo Operation**

Through all the pre-event planning, event, and post-event phases, the Organiser of the World Expo 2025 will establish a carbon-free society, realise a recycling-oriented society, pursue harmony with nature, and achieve a comfortable environment, thereby ensuring sustainability in the operation of the Expo.

The Organiser of the World Expo 2025 will strive to reduce GHG emissions by introducing CO<sub>2</sub> emissions reduction technology, energy conservation technology and use of renewable energy, as well as promoting the effective use of resources through 3R

initiatives, such as the active use of recycled materials and reusable/recyclable parts and materials.

## (2) Inclusive Expo Operation

The Expo will be realized through the cooperation of a diverse range of countries and people. The Organiser of the World Expo 2025 will create a favourable environment for diverse people, including visitors and staff, to participate in the Expo actively and safely. The Organiser of the World Expo 2025 will also operate the Expo in an inclusive manner so that the Expo will serve as an opportunity to transmit diverse ideas based on the theme.

For the operation of the Expo, the Organiser of the World Expo 2025 will respect each participant by, for example, providing a wide variety of opportunities to participate and establishing a proper working environment for staff working at the Expo.

In addition, the Organiser of the World Expo 2025 diverse values such as life, food and learning at the venue based on the theme, thereby it is expected to contribute to the achievement of the SDGs.

In December 2021, “Expert Committee for the Sustainable Expo” was established to explore measures for realising sustainability through the preparation and operation of the Expo. The Committee presents opinions and suggestions from a professional perspective on areas that should be considered from the perspective of sustainability, such as decarbonisation and resource recycling, while discusses on how to ensure sustainability in the operation of the Expo. The Committee is held in accordance with the progress of the sustainable management of the Expo, and continuously discusses the formulation of action plans, monitoring of the progress of individual departmental targets and initiatives, and revision and improvement of initiatives. The Committee’s proceedings are available on the Organiser of the World Expo 2025’s official website.

Under the Expert Committee for the Sustainable Expo, there are working groups for discussing specific actions and projects designed to address each challenge related to sustainability.

In March 2022, “Sustainable Procurement Working Group” was established to explore how to achieve sustainable procurement. This working group discusses “Code of Sustainable Procurement”, which presents standards and operational methods to realise procurement with consideration of environmental issues such as prevention of global warming and resource depletion, and issues concerning human rights and labour, and also promotion of fair business practices, and contribution to the stimulation of the local economies.

In July 2022, the Decarbonisation Working Group was established to embody and implement the measures described in the EXPO 2025 Green Vision toward ensuring sustainability in the preparation and operation of the Expo. This working group discusses an appropriate energy mix during the event, energy management, GHG emissions calculation, reduction measures, etc.

In August 2022, the Resource Circulation Study Group was established to discuss measures for reducing waste and food loss. In February 2023, the study group was upgraded into the Resource Circulation Working Group, which discusses the calculation of the generated waste and reduction targets as well.

(For the convening of the Expert Committee for the Sustainable Expo, the working groups, and other meetings, see the Reference Material.)

For specific commitments for ensuring sustainability in the operation of the Expo, see Chapter 2 and beyond, which include the topics below:

- Sustainable Management System in accordance with ISO20121

- Association's indexes and action toward ensuring sustainability in the operation of the Expo
- Establishment and operation of the Code of Sustainable Procurement

## 1.5 Scope of the Action Plan

The Expo is a large-scale event with a long duration from the preparation to the end of the operation and involves a wide variety of stakeholders both directly and indirectly, raising the expectation that the event will have a long-term and wide-ranging impact on the environment, society, economy, etc.

The Organiser of the World Expo 2025 plays the leading role in ensuring sustainability in the preparation and operation of the Expo, while the Sustainability Department represents the Organiser of the World Expo 2025 in cooperation with other departments. The structure of the Organiser of the World Expo 2025 is indicated as below:

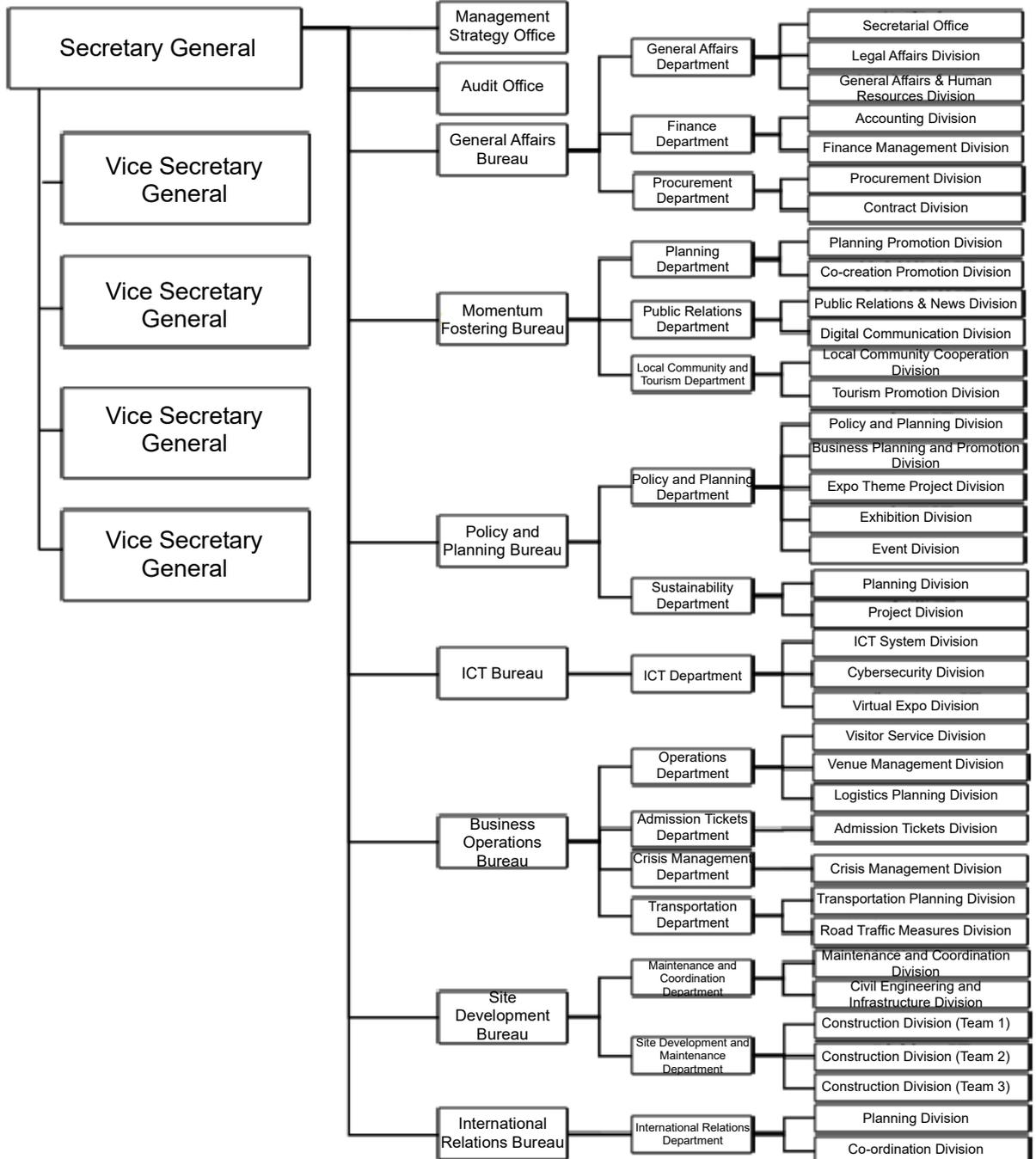


Fig. 1-1 Structure of the Organiser of the World Expo 2025 (as of May 2023)

The Organiser of the World Expo 2025 is primary responsible for ensuring sustainability in the operation of the Expo. However, since the event has an impact in a range of fields for a long duration from pre-event planning phase until after the event dismantling phase, the Organiser of the World Expo 2025 will encourage related organisations (corporations, educational and research institutions, national governmental agencies, international organisations, local governments, NGOs/NPOs, grassroots bodies, etc.), and visitors to work together, thereby striving to make the Expo an opportunity for participants and visitors to make a further commitment to sustainability.

The Expert Committee for the Sustainable Expo (Chair: Motoshige Itoh, Professor Emeritus, the University of Tokyo) is leading the discussion of the sustainability, and the results of the discussion are used as the basis for the actions.

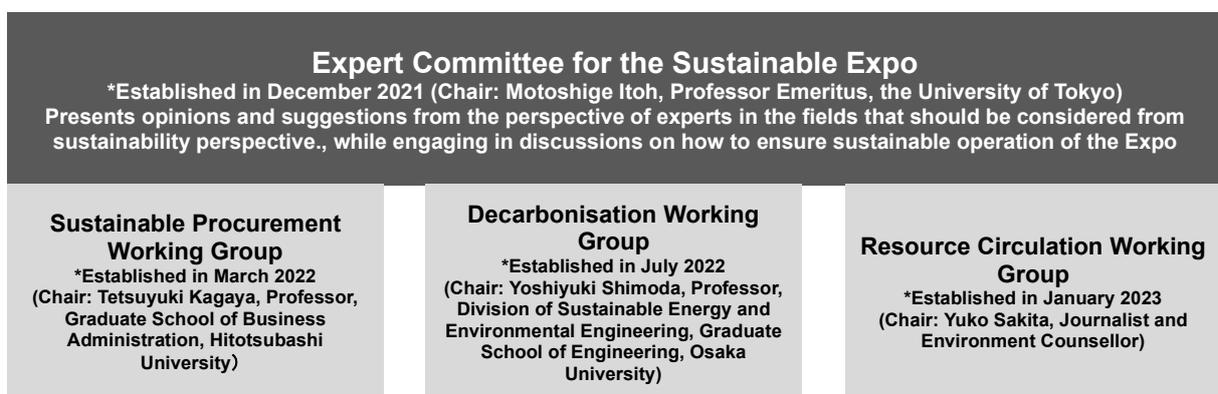


Fig. 1-2 Structure of the Expert Committee for the Sustainable Expo

## Chapter 2: Event Sustainability Management System in Accordance with ISO20121

In order to achieve the goals set in the Action Plan and to steadily implement specific actions, it is important to establish a management framework for implementing the plan.

Toward ensuring sustainability throughout the preparation and operation phases of the Expo, the Organiser of the World Expo 2025 will establish an Event Sustainability Management System (hereinafter referred to as the "ESMS") in accordance with the international standard ISO20121:2012 (hereinafter referred to as "ISO20121") within the organisation and obtain the certification. The ESMS is intended to achieve the success of the event for all generations from the perspectives of the environment, society, and economy by, for example, minimising the potentially negative impact on the environment, and providing support for people's healthy lives. The ESMS allows anyone to participate and leave behind both tangible and intangible positive legacies after the event. The Organiser of the World Expo 2025 will strive to increase the positive impact on the environment, economy, and society through event operation, and reduce its negative impact by using the ESMS and continuous improvement.

The specific process of the ESMS is as follows: 1) set priority challenges and targets to be addressed by the Organiser of the World Expo 2025; 2) establish and implement a sustainability plan to be addressed by each implementation body (department) with responsibility; 3) monitor and evaluate the actions and conduct internal/external audits, as well as management reviews by the leaders of the relevant organisations; and 4) release periodical reports to stakeholders. The Organiser of the World Expo 2025 will work as one organization to realize sustainability in the operation of the Expo by continuously improving the ESMS, deploying appropriate resources from various perspectives such as, age, gender, nationality, etc., and provide adequate training. In addition, the Organiser of the World Expo 2025 will continue to exchange opinions with a wide variety of stakeholders, including experts in various fields, which has been conducted since the Action Plan was formulated. While steadily monitoring progress and watching social trends, the Organiser of the World Expo 2025 will review its actions and continuously improve them .

The Organiser of the World Expo 2025 is operated by the Executive Committee, which consists of the Executive Board Members selected by the Governing Body, and the Organiser of the World Expo 2025 Secretariat, chaired by the Secretary General selected by the Executive Committee. The Sustainability Department in the secretariat will play the key role for the actions to ensure the sustainability of the Expo. An ESMS Staff member is assigned in each department as a member in charge of sustainability in order to reinforce cooperation within the secretariat in proceeding with the actions. The ESMS Staff members play an important role in their departments regarding the actions to sustainability by fulfilling the functions below:

- Serve as a point of communication and coordination with the Sustainability Department;
- Proceed with the actions to sustainability, check and compile the progress,;
- Compile ESMS-related documents; and
- Promote sustainability considerations in daily operations

To proceed with the sustainability related actions, it is necessary for each staff members to be aware of sustainability and to share its importance throughout their organisation. In this regard, the Organiser of the World Expo 2025 shares information and knowledge on sustainability at various meetings held by the secretariat, while continuously organising training sessions regarding the basic concepts on sustainability for all staff members, including those newly appointed. In addition, the Organiser of the World Expo 2025 shares information on sustainability with the sustainability managers and personnel in charge of sustainability in each department within the Organiser of the World Expo 2025 at the "ESMS Promotion Meeting" which is held on a regular basis.

## 2.1 Event Sustainability Management System in Accordance with ISO20121

ISO20121 is a standard which was published in 2012 inspired by the development of a sustainability management system (hereinafter referred to as the “ESMS”) at the London Olympic/Paralympic Games. ISO 20121 provides a framework for identifying the potentially negative environmental, social and economic impacts of event operations and manage them, and they will contribute to sustainability consideration for the event. Prior to the establishment of the Action Plan, the Organiser of the World Expo 2025 formulated “Sustainability Policy of Expo 2025 Osaka, Kansai, Japan (Sustainability Policy)” in compliance with ISO20121 to present the basic concepts for ensuring sustainability in the operation of the Expo, and declared the establishment of the ESMS in accordance with ISO20121. The Action Plan and the targets provided therein are acknowledged as “Setting objectives and plans to achieve them,” which is a requirement stipulated in ISO20121. The Organiser of the World Expo 2025 will work toward implementing the plan steadily while making continuous improvements based on the PDCA cycle, including controlling operations in accordance with ISO20121, monitoring and evaluating the relevant performance, correcting nonconformities, and taking other necessary actions.

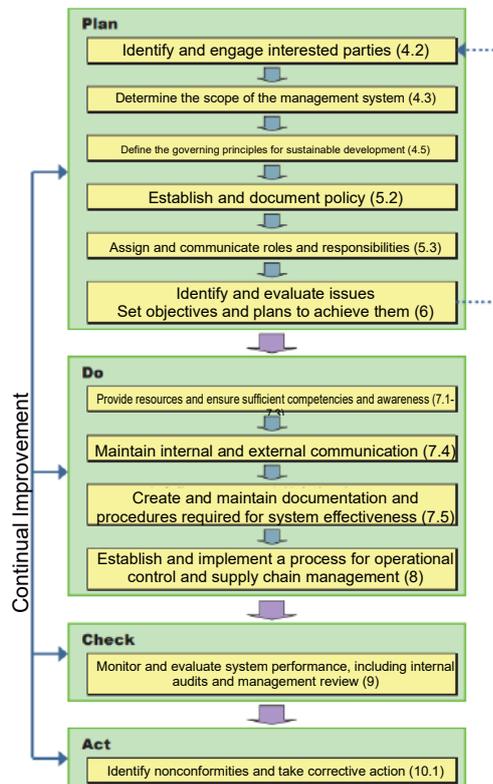


Fig. 2-1: ISO20121 Management System Model  
(Source: Sustainable Event Guidelines [September 2019, the Ministry of the Environment])

## Chapter 3: Indexes and Efforts toward Ensuring Sustainable Operation of the Expo

### 3.1 People (Life, People, Health and Wellbeing)

**The Expo promotes the importance of protecting and nurturing all 'life' that makes up our ecosystems.**

**[Direction to Pursue]**

The Expo has adopted the concept of "People's Living Lab" as an approach to realizing the Theme with the aim of realizing Society 5.0 and solving social issues. The Expo also strives to be a place for creating value in diverse forms, including livelihoods, diet and learning.

**[Background]**

The recent global rampage of COVID-19 has led the world to squarely face the difficulties and importance of protecting "life". The frequent occurrence of natural disasters caused by climate change also provide opportunities for people to consider "life". In Japan and many other countries where there is a need to address declining birth rates, it is becoming crucial to realize the importance and pleasure of nurturing "life". With the enhancement of longevity backed by medical advancements, there is also a call for establishing a society in which citizens can live energetically over a long period of time.

With this background, the theme of the Expo has been set as "Designing Future Society for Our Lives", which is underpinned by the three subthemes of "Saving Lives", "Empowering Lives", and "Connecting Lives".

To ensure sustainability for people and the Earth, it is necessary to promote the importance of protecting and nurturing all the "life" that makes up the ecosystems, which is why "People (Life, People, Health and Wellbeing)" has been selected as one of the main goals of the Expo. The concept of "People's Living Lab" has been adopted as an approach to realising the main theme of the Expo. The direction to pursue is to ensure that the Expo serves as a testing ground to create diverse forms of value that have never been experienced by people before, so that visitors can have opportunities to realize and learn more about the importance of protecting and nurturing "life" and to change their behaviours.

**[Efforts]**

Guided by the Expo's theme "Designing Future Society for Our Lives" and the venue design concept "Unity in Diversity" the Organiser of the World Expo 2025 is striving to realise universal design, which ensures accessibility to the Expo for people from around the world regardless of their nationality, culture, ethnicity, gender, age group, or impairments. Accordingly, the Organiser of the World Expo 2025 will proceed with the following actions:

The Organiser of the World Expo 2025 will fully communicate the main theme and subthemes to participating countries, ensure that the themes are reflected in their exhibitions and distributions, and provide opportunities for visitors to consider "life".

To realise the theme "Designing Future Society for Our Lives", the Organiser of the World Expo 2025 will operate the venue so that various forms of value can be created through the involvement of all participants in and visitors to the Expo. To that end, while leveraging a wide variety of technologies toward accomplishing Society 5.0, the Organiser of the World Expo 2025 will use multilingual translation services.

To incorporate barrier-free designs for venue facilities as far as possible, the Organiser of the World Expo 2025 will consider the following measures:

- Multilingual displays and announcements at the venue and the use of pictograms
- Introduction of signage using technology for converting speech into multilingual text (digital signage)
- Installation of block tiles guiding for people with visual impairments, installation of spaces for people with intellectual, mental, or development impairments, and installation of nursing rooms and rest benches
- Installation of barrier-free designed toilets on the assumption of use by a wide variety of users
- Installation of toilets accessible for ostomy bag users in both regular male and female restrooms and installation of large booths for users with children

The venue will be used by an unspecified number of people, therefore, the use of pictograms, signage, voice guidance, etc. will be considered to provide information on various objects and situations. Therefore, the Organiser of the World Expo 2025 will consider using pictograms, signate, voice guides, etc.

To establish a safe and secure environment with consideration given to the health of all people, the Organiser of the World Expo 2025 will consider measures against heatstroke and infectious diseases, etc., and reflect this in the relevant plans and manuals.

#### [Main Implemented Actions and Matters under consideration]

Many of the articles indicated in the above “Background” and “Commitments” are challenges to be addressed from now on, but the Organiser of the World Expo 2025 launched some actions in the past year as indicated below:

- The Organiser of the World Expo 2025 introduced the Expo’s theme and subthemes at the International Planning Meeting, the first international meeting for the Expo held at the Osaka International Convention Center in October 2022, not only for countries/regions and international organisations that had officially announced their participation, but also for others that had not yet announced their participation.
- To further enhance visitors’ accessibility to the Expo venue, the Organiser of the World Expo 2025 established and released “Universal Design Guidelines for Facility Implementation” (hereinafter referred to as the UD Guidelines) based on the three basic principles of the Accessibility Guide of the International Paralympic Committee: equity, dignity, and functionality. Toward realising universal design in accordance with the international standard, the Organiser of the World Expo 2025 prepared the UD Guidelines while involving in the relevant discussions people with various forms of impairment, such as physical (e.g. auditory, visual, motor), intellectual, mental, and development impairment, reflecting their perspectives in the UD Guidelines, and taking into account new global issues surrounding the impaired people.

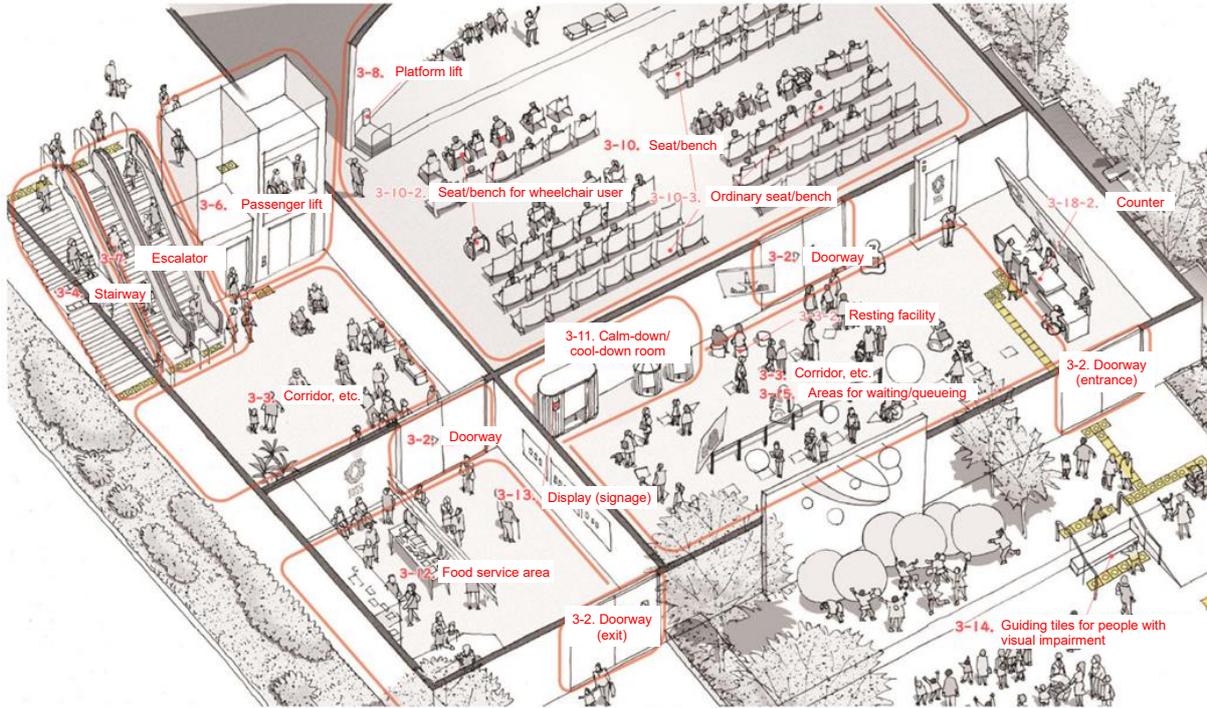
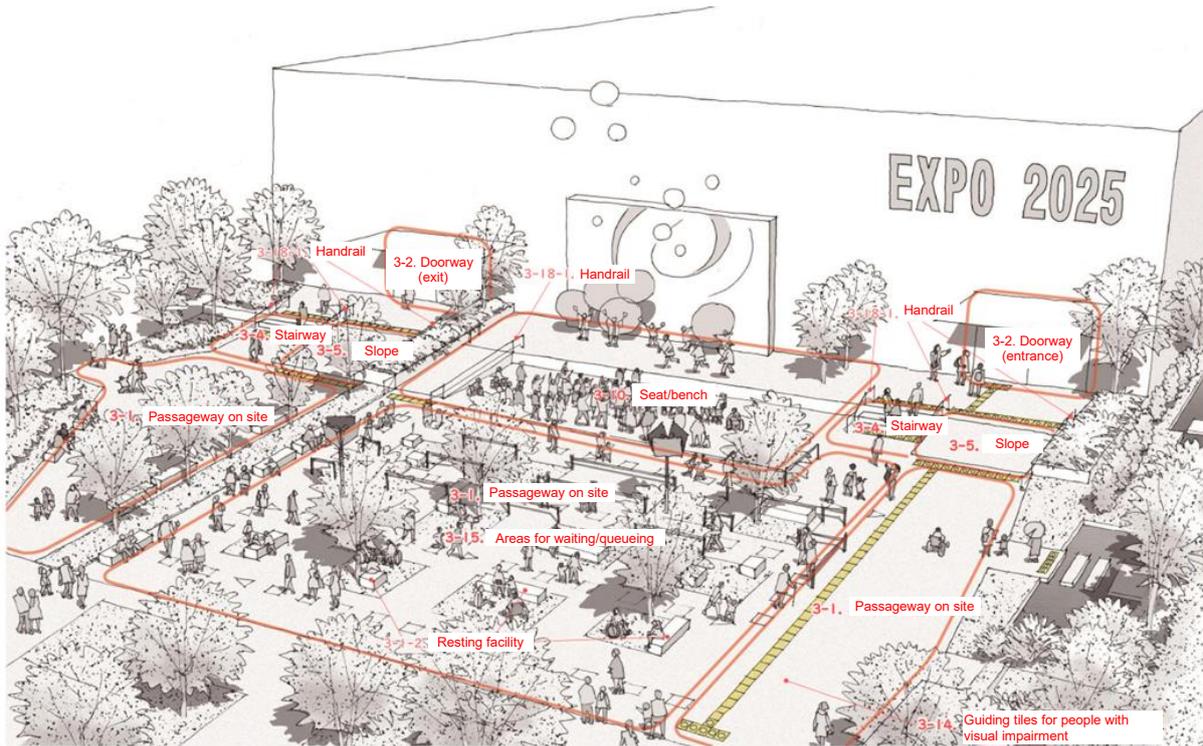
The UD Guidelines is based on the main concept as:

- Realising an accessible, inclusive society guided by the concept “Leaving No One Behind”;
- Striving to achieve an even higher standard of universal design, inspired by the “Accessible, Inclusive Expo”;
- Basic principles indicated in the IPC Accessibility Guide; and
- Involvement of the impaired people for evaluation and perspective reflection

In order to ensure accessibility, the Expo will ensure a comfortable environment for visitors from around the world regardless of their nationality, culture, ethnicity, gender, age group, or impairments. To that end, the Organiser of the World Expo 2025 has established

standard indexes for facility implementation at the venue, specifically, standards for passageways on site, corridors, stairways, toilets in structures, information centres, etc.

The standards were prepared after the opinions of the impaired people and academic experts were collected at the Universal Design Discussion Panel.



**3-1. Passageways on Site (Outdoor Passageways)**

A passageway on site (outdoor passageway) indicates an outdoor passageway installed between site boundary and entrance of a building, such as a pavilion. It is necessary to ensure anyone to use same route safely.

**3-1-1. General Guidelines**

(Flowline)

**C1-1.** No stairs or steps along the passageways on plot. Where level change/steps are unavoidable, a slope, lift, or alternative means of vertical mobility must be provided along the path (refer to 3-4 for stairways, 3-5 for slopes, and 3-6 for lifts).

**C1-2.** No level changes at the junctions between the passageways on plot and the plot borders or doorways.

Fig. 3-1 Site Preparation Concept Plan based on the Universal Design Guidelines  
(Source: Universal Design Guidelines for Facility Implementation (July 2021))

- The Organiser of the World Expo 2025 is considering measures against summer heat at the venue, including the provision of shade for alleviating summer heat and the establishment of a medical aid system to take care of heatstroke patients.
- In June 2020, the Infectious Disease Control Review Conference began to check the necessity of the basic measures against COVID-19 and other infectious diseases, vaccination-based prevention, quarantine, and measures against food poisoning, as well as the flow of the infection control measures to be adopted for the Expo. In December 2022, this conference was merged into the Site Sanitation Council, which has begun considering specific efforts to be made during the event period, including site sanitation management and infection control measures.
- The Organiser of the World Expo 2025 is considering how to handle smoking at the venue in light of the Expo's theme "Designing Future Society for Our Lives".

### 3.2 Planet (Ecosystems and Environment)

**The Association aims to develop and operate venues that contribute to the realisation of international agreements (such as the Paris Agreement, Osaka Blue Ocean Vision, and Kunming-Montreal Global Biodiversity Framework).**

**[Direction to Pursue]**

- 1) The Expo strives to reduce greenhouse gas emissions by introducing CO<sub>2</sub> emissions reduction technology, energy conservation technology and renewable energy.

[Background]

Even after the Kyoto Protocol came into force in 2005, international frameworks for reducing GHG emissions, which cause global warming have been discussed. In December 2015, at the 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21), held in Paris, the Paris Agreement was adopted as a fair and effective framework with participation from all countries. The Paris Agreement set a goal of keeping the average temperature increase from pre-industrial times well below 2°C (the 2°C target) and to strive to limit the increase to 1.5°C. Also, a common global long-term goal was set to balance anthropogenic GHG emissions with anthropogenic absorption in the second half of the century. Calling for each country to establish a long-term low GHG emission development strategy and update its emission reduction target every five years, the agreement is intended to facilitate the progress of measures against global warming. According to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), in order to limit global warming to 2°C or below, it is highly necessary to reduce GHG emissions to near zero or below by 2100.

In April 2021, Japan announced its aim to cut GHG emissions by 46% (from 2013 levels) by fiscal year 2030 and continue to strive toward the higher goal of 50%. In October of the same year, the Global Warming Prevention Headquarters set Japan's Nationally Determined Contributions (NDCs) and submitted them to the Secretariat of the UN Convention on Climate Change. Toward realising a carbon-free society, an increasing number of local governments are declaring their actions to net zero CO<sub>2</sub> emissions by 2050. Announcing "Zero Carbon City" as a concept to be realised by 2050, Osaka Prefecture and Osaka City, the hosts of the Expo, are taking further measures for achieving a carbon-free society.

In the field of Economy, the Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB) on the request of the G20 Finance Ministers and Central Bank Governors, fearing that climate change might impair the stability of financial systems. In June 2017, the TCFD presented recommendations on consistent, comparable, reliable, clear, and effective information disclosure to encourage appropriate investment decisions related to climate change factors. The recommendations encourage companies and other organisations to identify climate-related "risks" and "opportunities" that might affect their business activities and disclose information on their governance, strategy, risk management, and metrics and targets. In Japan, at TCFD Summit 2020, hosted by the Ministry of Economy, Trade and Industry, the then Prime Minister Yoshihide Suga announced that Japan would create innovation for realising "Beyond-Zero" as an approach to reducing the accumulated amount of CO<sub>2</sub> emissions and present a vision of a positive cycle of environmental protection and economic growth, thereby contributing to global decarbonisation. He also announced that the Japanese government would support the TCFD. Meanwhile, in June 2021, the Japan Exchange Group revised the Corporate Governance Code (CGC), calling for companies listed on the Tokyo Stock Exchange to disclose information in accordance with the TCFD or an equivalent framework.

## [Efforts]

Looking ahead to 2030 and beyond, the Expo will maximize what can be done in 2025 to achieve carbon neutrality by 2050. At the same time, the Organiser of the World Expo 2025 will ensure that visitors can experience technology and an ideal vision of society presented with focus on 2050 and beyond.

To do so, the Organiser of the World Expo 2025 will first ensure the maximum environmental performance in site construction through, for example, facility construction with consideration given to reduction of the use of energy to the extent possible, procurement of construction materials and equipment with a small impact on the environment, and adoption of the Comprehensive Assessment System for Built Environment Efficiency (CASBEE).

The Organiser of the World Expo 2025 will proceed with energy management for air-conditioning control and other functions in each pavilion and quantification of calculated GHG emissions.

For energy that is necessary at the venue, the Organiser of the World Expo 2025 will consider procuring renewable energy and carbon neutral energy, such as that from hydrogen and ammonia power generation.

In the field of transportation, while considering the reduction of GHG emissions, the Organiser of the World Expo 2025 will ensure the safe and smooth transportation of visitors to the Expo and minimise the impact on the traffic and logistics of the Osaka and Kansai regions, which underpin socioeconomic activities in these regions.

In addition, the Organiser of the World Expo 2025 will emphasise GHG emission reduction with an eye on the entire supply chain. To reduce emissions, the Organiser of the World Expo 2025 will establish schemes designed for participants and visitors to change their behaviours toward the future, rather than simply considering short-term reductions.

Looking to 2050 and beyond, the Organiser of the World Expo 2025 will introduce innovative technology for decarbonisation, such as methanation, concrete produced with maximised volumes of CO<sub>2</sub> emissions reduction and CO<sub>2</sub> fixation, and direct-air capture (DAC) technology, and disseminate the decarbonisation actions made both in and outside the venue to the world.

## [Main Implemented Actions and Matters under consideration]

- For the actions to decarbonisation, the Organiser of the World Expo 2025 is working in consultation with the Decarbonisation Working Group under the Expert Committee for the Sustainable Expo (hereinafter referred to as “the Decarbonisation WG” (Chair: Prof. Yoshiyuki Shimoda, Osaka University).

Toward “realising carbon neutrality,” indicated as a direction to pursue in the EXPO 2025 Green Vision, the Decarbonization WG considers the calculation of GHG emissions, energy mix, technologies referred to in the EXPO 2025 Green Vision and the Action Plan, an appropriate approach to off-sets, and other matters.

For numerical targets related to decarbonisation, the Organiser of the World Expo 2025 plans to consider a target period for realising carbon neutrality, a boundary (for GHG emission calculation), and necessary measures, and set targets by the end of fiscal year 2022. To set such targets, it is necessary to consider not only indexes for the use of energy at the venue, but also indexes to be applied throughout the supply chain.

<Measures that can be implemented as of 2025>

- Preparations for pavilion construction is underway as individual actions. The Organiser of the World Expo 2025 has presented participants with guidelines showing the planning and management points to observe when designing a pavilion. The guidelines provide the following decarbonisation standards:

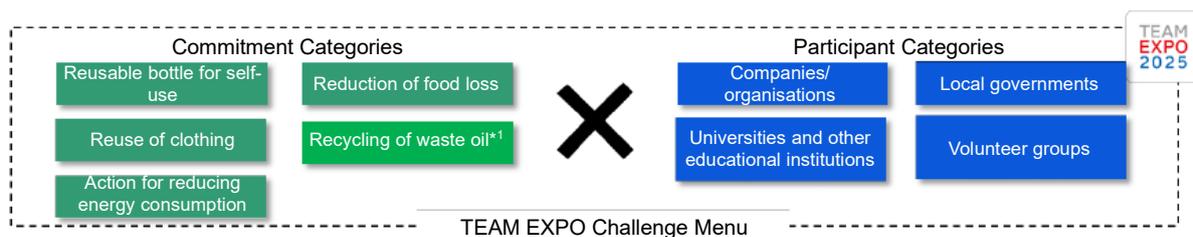
2-4-2. Energy and Global Environment

- C-23 Participants must install equipment and apparatus with high energy efficiency. With regard to the apparatus covered by the Top Runner Programme, participants must install the ones that satisfy the programme's energy saving criteria. (However, this does not apply when the participant will install leased and/or reused apparatus to reduce waste.)
- G-14 In order to achieve carbon neutrality, it is recommended that participants should proactively pursue energy saving and the adoption of renewable energies in designing their pavilion. Please note that the Organiser plans to develop sustainability standards for Expo 2025, Osaka, Kansai, Japan to be published in the future.
- G-15 It is recommended that participants should adopt heat insulating/shielding methods and materials for the pavilion exterior (roof/outer wall/window/floor) or introducing eaves etc. as sunshine blinds to reduce heat loss/gains.
- G-16 It is recommended that participants should adopt methods that use natural energy such as natural ventilation and natural lighting.
- G-17 It is recommended that participants should adopt renewable energy systems such as solar power generation and wind power generation.
- G-18 It is recommended that participants should adopt the EMS (energy management system) that enable monitoring of energy usage by intended use (air conditioning, ventilation, lighting, hot-water supply, wall sockets, etc.) and/or by apparatus. Participants are encouraged to strive to reduce energy consumption by quantifying the usage of energy and adopting energy efficient systems.
- G-19 It is recommended that participants should adopt equipment with lower ozone depletion potential and global warming potential values.
- G-20 It is recommended that participants should install equipment with low NOx emissions.

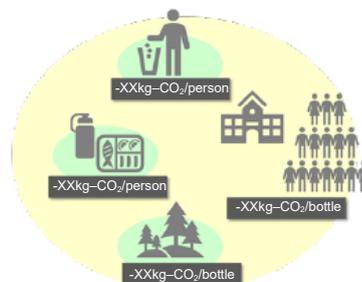
(Source: Design Guidelines for Type A [Self-Built] Pavilions (Private Pavilions))

- For air-conditioning at the venue, the Organiser of the World Expo 2025 will introduce a zone air-conditioning system consisting of cooling water plants that intensively produce cooling water for air conditioning, and pipes to supply such water to structures. Such cooling plants will be installed at several locations in the venue. They will be remotely monitored and operated by the central monitoring facility/automatic control system for effective operation and quantification in terms of the control of the number of heat source units, the forecast of thermal load, and the reduction of power consumption for conveying cooling water. For renewable energy, the Organiser of the World Expo 2025 will establish aquifer thermal energy storage facilities for precooling groundwater in winter and using it as cooling water in summer, and facilities using seawater as cooling water for freezers.
- For decarbonisation, the actions made by the Organiser of the World Expo 2025 and participants at the venue alone are not sufficient. The Organiser of the World Expo 2025 believes that it is important to organise the Expo as an opportunity for participants and citizens to commit to decarbonisation even outside the venue and change their behaviours toward achieving a sustainable society.

In this regard, the Organiser of the World Expo 2025 will launch the EXPO Green Challenge (tentative), in which companies, universities, volunteers, and others engaging in activities indicated below, participate in the Expo cooperation program TEAM EXPO 2025, and count and calculate the volume of GHG emissions reduction achieved by the efforts they have started with inspiration from the Expo. After considering the details, the Organiser of the World Expo 2025 will begin to call for entries in fiscal year 2023.



- Ministry of the Environment – A nudge demonstration project
- EXPO Green Point (tentative)
- Companies and other organisations' own commitments launched with inspiration from the Expo
- Promotion of sustainable school excursions
- Promotion of off-set travel\*2
- Contribution of credits from companies and local governments\*2
- Other commitments



\*1: Contribute to the reduction of GHG emissions at the Expo by using high-purity biodiesel from waste oil for venue operation and for site construction machinery

\*2: Use carbon credits and other schemes certified by third-party certification bodies as off-set with the Expo GHG emissions

Fig. 3-2 Conceptual Image of the EXPO Green Challenge (Tentative)

- In July 2021, in order to ensure the safe and smooth transportation of visitors to the Expo and minimise the impact on the traffic and logistics of the Osaka and Kansai regions, which underpin socioeconomic activities in these regions, the Organiser of the World Expo 2025 established the Council for Visitor Transportation Measures for Expo 2025 Osaka, Kansai, Japan. Consisting of academic experts and officials from related governmental agencies and organisations, the council engages in discussion and coordination of specific measures for the transportation of visitors.

In June 2022, the Organiser of the World Expo 2025 formulated the Basic Policy on Visitor Transportation of Expo 2025 Osaka, Kansai, Japan. In October of the same year, the Organiser of the World Expo 2025 established the Specific Policy on Visitor Transportation (Action Plan) for Expo 2025 Osaka, Kansai, Japan (1st edition) to present specific measures for realising the basic policy. The Action Plan sets out access route plans and traffic management details.

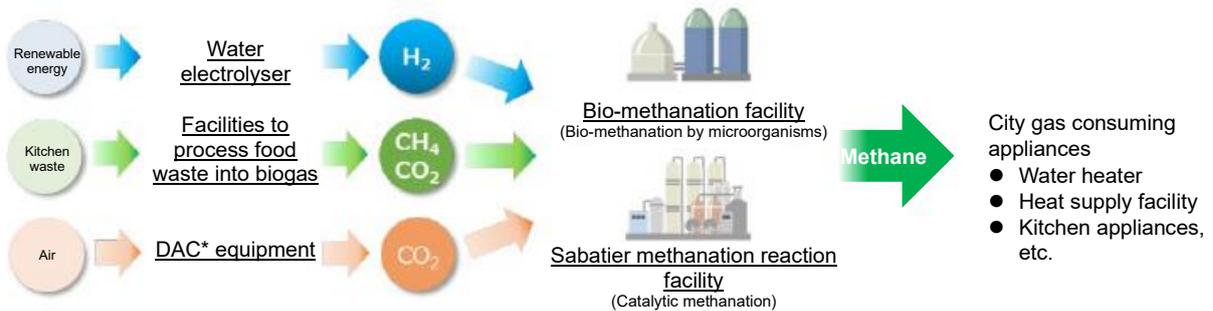
<Overview of the Visitor Transportation Action Plan>

- Strive to curb the use of private cars as much as possible and encourage people to use public transportation (railway/bus).
- Guide visitors who have no choice but to use their own vehicles due to difficulties in using public transportation to use the site external parking and ride parking lots in Amagasaki and Sakai. Restrict the use of site external parking and ride parking lots in Maishima to the extent that it would not affect the shuttle bus service or logistics traffic.
- Adopt ticket control that discounts the price of admission tickets and systems for reserving admission time to the site and parking lot entry time to equalise the peak of the day and time of visit.
- Enhance transportation by, for example, increasing the number of trains, utilising the Hanshin Expressway Yodogawa-Sagan Route (2nd term) as an access route, and expanding traffic capacity.

- Encourage the implementation of transportation demand management (TDM) for the purpose of controlling, dispersing, and levelling general traffic, because the implementation of demand levelling measures, transportation enhancement measures, etc. are expected to be insufficient for addressing the impact caused by transportation for the Expo on railways and roads.
- The Organiser of the World Expo 2025 will introduce 100 electric vehicles (EV buses) to ensure access to, within, and around the venue, and demonstrate technology that realises both operation and charging through the use of the energy management system (EMS) combined with a fleet management system (FMS), by leveraging the know-how and technology of sponsor companies. Also, the Organiser of the World Expo 2025 will integrate such technology with Level 4 autonomous-driving, power supply during driving, and other new technologies, and demonstrate globally unprecedented large-scale technology, thereby presenting a vision and evolution for next-generation mobility.
- The Code of Sustainable Procurement, established and released in June 2022, sets out standards for promotion of enhanced energy efficiency, utilisation of low- or zero-carbon energy, initiatives to reducing GHG emissions, and use of feedstock etc. that contribute to the mitigation of GHG emissions across the entire value chain, and calls for suppliers, licensees, pavilion organisers, and their supplier chains to comply with the procurement standards.

<Exhibition of Technology with an Eye on 2050 and beyond>

- In April 2022, the “Hydrogen Supply Chain Demonstration Project of Methanation Utilising Renewable Hydrogen and Food Waste Biogas in Urban Areas,” a collaboration project with the Ministry of the Environment, was announced. Used in this project are hydrogen from renewable energy sources and biogas, consisting of CO<sub>2</sub> and methane, produced through fermentation of food waste. The CO<sub>2</sub> in the biogas is combined with the hydrogen from the renewable energy (i.e., methanation), and the resulting synthetic methane is transported through pipes and used for cooking. The Organiser of the World Expo 2025 is also considering the installation of other large-scale decarbonisation facilities.



\* Direct Air Capture: Direct CO<sub>2</sub> capture technology from the atmosphere

Fig. 3-3 Conceptual Image of Establishing a Methanation-based Hydrogen Supply Chain  
(Source: Osaka Gas Website)

**Develop and operate venues that contribute to the realisation of international agreements (such as the Paris Agreement, the Osaka Blue Ocean Vision, and the Kunming-Montreal Global Biodiversity Framework).**

**[Direction to Pursue]**

- 2) The Expo shall use resources effectively by actively leveraging the 3R initiatives (Reduce, Reuse, and Recycle) and procuring renewable materials.

[Background]

Global resource consumption is increasing, largely due to the economic growth of emerging countries. The global resource consumption will be more than doubled by 2050, and there is concern about further environmental impact caused by increasing pressure of sourcing and consumption of resources, obtaining and consumption of resources. With this background, international attention is now being placed on the sustainable use of resources in an extensive range of fields, including supply chains. “Sustainable Development Goals” (SDGs) include “ensuring sustainable consumption and production patterns” as one of the 17 goals to be achieved by 2030.

At the G7 Ise-Shima Summit, held in 2016, the G7 leaders declared that they would commit to controlling the consumption of natural resources so that consumption would not exceed the capacity of the global environment, and proceeding with the use of recycled materials and recyclable resources, thereby striving to realise a society in which resources are used effectively and continuously throughout their life cycles. They also announced their commitment to establishing a society in which environmental impact is managed by recycling resources in order to minimise the emission of waste into the natural environment. Presenting these common visions, the G7-Leaders’ Declaration endorsed “Toyama Framework on Material Cycles”, which encourages cooperation in taking specific actions. The Declaration also reaffirmed the G7’s commitment to marine litter based on the recognition that their commitment to resource efficiency and the 3Rs (reduce, reuse and recycle concept) would contribute to the prevention and reduction of marine litter, particularly plastics, from land-based sources. At the declaration, the leaders also supported scientific work to enhance global ocean observation and assessment for the science-based management, conservation, and sustainable use of marine resources.

At the G20 Osaka Summit, held in June 2019, “Osaka Blue Ocean Vision”, intended to reduce additional pollution by marine plastic litter to zero by 2050, was shared. Also, the G20 Implementation Framework for Actions on Marine Plastic Litter was adopted, which calls for the following voluntary actions: 1) appropriate waste management; 2) clean-up of marine plastic litter; 3) deployment of innovative solutions (innovation); and international cooperation to enhance national capacities. At the Fifth Session of the United Nations Environment Assembly (UNEA5), held from February to March 2022, a resolution was adopted to establish an Intergovernmental Negotiating Committee in charge of discuss a legally binding international instrument (agreement) on measures against plastic pollution, including marine plastic pollution. International negotiations are underway toward the adoption of such an agreement by the end of 2024.

[Efforts]

For waste and recycling, while taking into account the national government’s basic policy “3Rs+Renewable” and food recycling priority, the Organiser of the World Expo 2025 will strive to 1) reduce the generation of waste to the extent possible in the operation of the Expo site; 2)

recycle as much waste as possible (excluding heat recovery); and 3) achieve full-amount recycling including heat recovery.

The recycling efforts for the Expo can be categorised into roughly two parts: the 1<sup>st</sup> part is reduction and recycling of food and plastic waste and other types of waste generated at the Expo site every day; and the 2<sup>nd</sup> part is recycling conducted at facilities and equipment from the period of site construction to the end of the event.

The Organiser of the World Expo 2025 will strive to recycle resources in a manner that will be cutting-edge and feasible as of 2025 with low environmental impact. Not seeing the current environmental impact as the critical decision factor, the Organiser of the World Expo 2025 will adopt several methods with consideration given to the possibility and feasibility of reducing environmental impact as of 2050.

Regarding waste generated at the Expo site every day, the Organiser of the World Expo 2025 will consider the awareness-raising effects that will promote behaviour changes both in and outside the venue, and enable participants, visitors, and citizens to participate in this initiatives and leave a positive legacy after the Expo. Such schemes need to be designed to ensure that participants and suppliers at the Expo site work together.

The Organiser of the World Expo 2025 will reduce the use of paper by using IT and digital technology.

The Organiser of the World Expo 2025 will encourage visitors and participants to bring reusable shopping bags and bottles for self-use and take their waste home, while reinforcing the dissemination and communication of information on sorting waste at the official website and through other means.

The Organiser of the World Expo 2025 will reduce the generation of waste, including plastic waste, by, for example, recycling items as far as possible, reducing the use of plastic, and introducing biodegradable materials for food containers. For waste that is difficult to recycle into resources, the Organiser of the World Expo 2025 will proceed with heat recovery through incineration to the extent possible and reduce disposal to landfills.

For commitments related to facilities and equipment for the entire event period, the Organiser of the World Expo 2025 will ensure the adoption of construction structures and methods enabling easy separation of construction materials at the time of dismantling, the simplification and weight-reduction of buildings, and the use of recyclable materials, such as wood. The Organiser of the World Expo 2025 will establish the venue with consideration of global environment and effective use of resources as far as possible by, for example, reusing construction materials and equipment after the event.

The Organiser of the World Expo 2025 will select environmentally-friendly products, and also use lease and rental services as much as possible, as well as use recycled items.

The Organiser of the World Expo 2025 will also proceed with these actions from the perspective of contribution to decarbonisation.

#### [Main Implemented Actions and Matters under consideration]

- Toward achieving a circular economy during, and even before and after the event, the Organiser of the World Expo 2025 will set the targets on 3R+Renewable by the end of fiscal year 2022. The Organiser of the World Expo 2025 will consider overall target including reuse, and consider individual index, such as food loss and plastic.

#### <Recycling of Daily Waste Generated at the Expo site>

- The Organiser of the World Expo 2025 is proceeding with the necessary actions in consultation with the Resource Circulation Working Group, established under the Expert Committee for the Sustainable Expo, regarding the directions to take for reducing the generation of waste, establishing recycling schemes, and taking other recycling-related measures of demand side of the Expo site. The Organiser of the World Expo 2025 will incorporate the necessary points into the Concessionaire Application Guidelines and other documents.

The Resource Circulation Working Group has so far been engaged in discussions mainly on essential actions, issues related to the Expo as a whole, and items that need to be incorporated into the Concessionaire Application Guidelines. As the details of concession facilities and pavilion exhibitions become clear, the Organiser of the World Expo 2025 will seek consultations regarding individual Actions.

The Organiser of the World Expo 2025's present action policy is indicated below:

(Food containers)

- Consider the introduction of reusable containers made of plastic or other materials at food trucks and other settings where disposable containers are highly likely to be used.
- Consider the use of compostable, single-use containers and the composting of such containers together with food waste, in case of a supply shortage of reusable containers made of plastic or other materials, or consider the introduction of other means for recycling.
- Consider materials for single-use containers from the perspectives of 1) degradability; 2) environmental impact caused by the relevant raw material and contribution to the conservation of the environment; and 3) availability of procurement
- For products that are specified plastic-using products under the Plastic Resource Recycling Law and will be used frequently at venues (forks, spoons, knives, muddlers, straws), consider measures that also take into account the purpose of the law. .

(Drink containers)

- Encourage visitors to come with reusable bottles for self-use, while taking into account security concerns, and establish an environment allowing the use of such bottles. Also collaborate with outside partners in considering schemes that will lead many more citizens to use such bottles both in and outside the venue and the continuance of such a trend in their local communities even after the event.
- Allow the concession of drinks in PET bottles or other containers as part of the measures against heatstroke, but ensure that the concessionaires consider using the latest material (e.g., non-fossil, recyclable materials), increasing the recovery rate, and implementing cutting-edge horizontal recycling.

(Food loss)

- Call for food service providers at the venue to consider controlling the amount of procured food in accordance with the number of reserved admission tickets.
- Call for concessionaires to introduce some scheme for reducing food loss in their procurement of ingredients.
- Call for concessionaires to consider providing portions in appropriate volumes or sizes to prevent the generation of food loss.
- Call for visitors not to leave leftovers as an action by the entire Expo and consider introducing nudges and other measures.
- Consider establishing a scheme allowing *bento(lunchbox)* and other food products that might remain unsold to be obtained easily by visitors who want them, after ensuring food hygiene and quality control.
- Consider establishing a scheme allowing unused ingredients that might be used for Children's Cafeterias to be handed out to food banks and other institutions while taking account of food hygiene, as long as their use-by dates and quality are guaranteed.

(Food waste)

- Form a food recycling group in cooperation with food business operators outside the Expo site and compost part of the food waste. For this action, consider a scheme enabling visitors to learn about the recycling of food resources.
- Ensure methanisation of part of the food waste at methane fermentation facilities and consider the possibility of making the residual waste into compost.

(Containers/Packaging, Novelties and Other Distribution Items, and Ordinary Plastic)

- For containers/packaging for products, consider reducing the use of such items.
- For plastic bags, consider the following options 1) charging a fee; 2) not only charging a fee, but also allowing only biodegradable items; and 3) not distributing or selling plastic bags (and having reusable shopping bags available for purchase in unavoidable cases).
- For novelties to be distributed at each pavilion, encourage the provision of items with low environmental impact, including electronic items (e.g., game apps). For the distribution of physical items, encourage 1) reducing the use of plastic; 2) taking into account the environment in terms of, for example, biodegradability, if plastic is used; and 2) ensuring that such physical items are designed so that they are not thrown away too soon.
- For covers for wet umbrellas, consider the possibility of banning single-use items.
- For fans, consider banning the use of plastic. (Ensure the use of environmentally-friendly materials, such as paper, bamboo, and other types of wood.)
- For maps and pamphlets, ensure the reduction of the use of paper through the adoption of electronic versions to the extent possible.
- For unwoven-cloth hand towels, consider reduction measures.

(Others)

- Encourage the use of recyclable transportation equipment for delivery of items (such as returnable containers).
- Ensure sustainability in the uniforms to be provided by the Organiser of the World Expo 2025, and consider calling for the exhibitors of pavilions to ensure sustainability in their uniforms.
- Consider announcing and commending participants and concessionaires that especially excel in the actions above.
- Consider encouraging off-site hotels in Osaka City to reduce the use of plastic amenities (toothbrushes, combs, shavers, and shower caps).

<Resource Recycling at Facilities and Equipment in the Construction Phase in Anticipation for Post-Event Use>

Past Expo events show that it is becoming a trend to relocate part or all of the pavilions or reuse other facilities.

For the Expo, whose symbolic facility (the Grand Roof Ring) is a wooden structure, the Organiser of the World Expo 2025 will consider dismantling the structure carefully before reprocessing the dismantled pieces into reusable items.

Moreover, the Organiser of the World Expo 2025 is now considering using online sources to find large-scale users in order to promote the reuse of the construction materials and equipment, not limited to the Organiser of the World Expo 2025's assets, but including the pavilions to be constructed at the Expo site.

**The Association aims to develop and operate venues that contribute to the realisation of international agreements (such as the Paris Agreement, Osaka Blue Ocean Vision and Kunming-Montreal Global Biodiversity Framework).**

**[Direction to Pursue]**

- 3) The Expo shall conserve and restore the natural environment and ecosystems in the venue, where there are important ecological hubs in the coastal zone in the Osaka region.

[Background]

In terms of ecosystems and biodiversity, Japan has been leading and promoting international commitments toward conserving biodiversity and ensuring sustainable use of biological resources, as indicated by the fact that the 10th Conference of Parties (COP10) to the Convention on Biological Diversity, an international framework for conserving biodiversity and ensuring sustainable use of biological resources, was held in Japan in 2010.

At the COP10, the Aichi Targets were adopted as a global target for achieving the purposes of the Convention of Biological Diversity, as well as the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity (ABS). However, Global Biodiversity Outlook 5 (GBO5), released in September 2020, indicated that although there had been considerable progress toward achieving almost all the Aichi Targets, none of the 20 individual targets had been completely accomplished. According to the outlook, to accomplish the 2050 Vision of Living in Harmony with Nature, it is necessary not to respond individually but to form linkages between actions taken in various fields, such as scaling up efforts to conserve and restore biodiversity at all levels, implementing climate change measures, addressing factors causing biodiversity loss, and transforming the way in which we produce, consume, and trade sustainable goods and services.

Accordingly, at the 15th Conference of Parties (COP15) to the Convention of Biological Diversity, held in December 2022, the Aichi Targets, international targets to be achieved by 2020, were replaced with the Kunming-Montreal Global Biodiversity Framework as a new international target to be accomplished in 2021 or after (post-2020 biodiversity framework). Under the new framework, “30 by 30” is set as one of the main targets, with the aim of halting and reversing biodiversity loss by 2030 by protecting at least 30% of the land and oceans effectively as sound ecosystems by 2030. Another target of the framework is to mainstream biodiversity in business.

In the field of the economy, inspired by the World Economic Forum (Davos Meeting) in 2019, the Task force on Nature-related Financial Disclosure (TNFD) has been launched to establish a framework to report and address nature-related risks and shift global financial flows from negative to positive outcomes for nature. Under the TNFD framework, not only the possible impacts of nature on organisations, but also the impacts of organisations on nature are covered. Meanwhile, methods are currently being developed for setting Science Based Targets for Nature (SBTs for Nature), which are science-based, measurable and actionable targets allowing companies and other organisations to act in alliance with the Earth’s limits and societal sustainability goals regarding systems with interrelationships between water, biodiversity, land, and sea in their value chains.

[Efforts]

In committing to ensuring harmony with nature and a comfortable environment, the Organiser of the World Expo 2025 will cooperate with local communities to help protect threatened animals living or flying in and around the Expo site and the invaluable plants growing there. Construction works will proceed with consideration of conservation and creation of natural environments and ecosystems to the extent possible.

In addition, the Organiser of the World Expo 2025 will check the impact of the event on the environment and take appropriate environmental conservation measures as needed.

[Main Implemented Actions and Matters under consideration]

- For the Expo, the Organiser of the World Expo 2025 conducted an environmental impact assessment (environmental assessment) based on the Osaka City Environmental Impact Assessment Ordinance, and submitted the assessment report to Osaka City in June 2022. Based on the report, the Organiser of the World Expo 2025 will take appropriate measures.

(Specific Actions)

(1) During Construction

○ General Considerations

- Prohibit unnecessary access by construction workers to off-site areas.
- For construction machinery, which is a source of noise and vibration, use low-noise and low-vibration versions as far as possible.
- For night-time construction, minimise such construction, adopt appropriate shading hoods, and install lighting fixtures at appropriate positions, thereby reducing the impact on species inhabiting areas around the Expo site and the Maishima Parking Lot (tentative) to the extent possible.

○ Considerations for Animals (Birds)

- For areas around the inland waters of Maishima Plot 1, mow the grass and take other measures, while co-ordinating with Osaka City and other organisations, so that the areas will be available to birds that can use bare ground.
- In a case where the flying of a little tern is identified, take nest-building prevention measures, such as installing bird nets, based on the “Conservation Guidelines for Little Tern Breeding Places”. In a case where nesting is identified, will take measures, such as prohibiting access to nearby areas in principle.
- For the sedimentation basin in the southern part of the Expo site, there is no plan for ground reinforcement construction, leading to the assumption that birds can use the willows for resting. For the south-eastern part of the venue, consider working with Osaka City to return part of the river bottom sediment removed for construction to appropriate places and restoring the willow water levels so that the places are available to birds using the waterside.

○ Considerations for Animals (Mammals)

- For construction of the Maishima Parking Lot (tentative), enable harvest mice to migrate to inhabitable areas around the lot, by beginning pre-construction mowing from the centre in the grassland to the periphery and performing the mowing work in batches.

○ Considerations for Plants

- Perform pre-construction checking of the growth of important plant species in the Expo site. In cases where growth is confirmed, take appropriate measures based on instructions from experts.

○ Confirmation of the Implementation of Conservation Measures

- Check the flying of birds in and around the Expo site once a month from every April to July during the construction period.

(2) During the Event

- General Considerations
  - For air-conditioning and other equipment, use low-noise and low-vibration versions as far as possible and ensure appropriate operation and maintenance.
  - Adopt appropriate shading hoods and install lighting fixtures at appropriate positions, thereby reducing the impact on species inhabiting areas around the venue and the Maishima Parking Lot (tentative) to the extent possible.
- Considerations for Animals (Birds)
  - Consider ensuring greenery space at the Expo site so that it will be available to animals.
  - For areas around the inland waters of Maishima Plot 1, mow the grass and take other measures, while co-ordinating with Osaka City and other organisations, so that the areas will be available to birds that can use bare ground.
  - Ensure open water in the Expo site as far as possible to consider birds inhabiting the waterside. Also, for the south-eastern part of the Expo site, consider working with Osaka City to return part of the river bottom sediment removed for construction to appropriate places and restoring the willow water levels so that the places are available to birds using the waterside.
- Confirmation of the Implementation of Conservation Measures
  - Check the flying of birds in and around the Expo site once a month from every April to July during the event period.

- The Code of Sustainable Procurement, formulated and released in June 2022, presents suppliers, licensees, pavilion organisers, and their supply chains with sustainable procurement standards, covering the protection of biodiversity related to procured goods. The procurement standards prohibit the use in procured goods etc. of feedstocks that are derived from endangered species and other wild animals and plants for which measures for resource conservation and reproduction security are not taken to ensure their sustainable use. The standards also call on suppliers etc. to endeavour to reduce the impact on biodiversity and ecosystems through the manufacture, distribution, etc. of procured goods etc., including the cultivation and harvesting of feedstocks, in a way that pursues the protection of endangered species and other wild animals and plants, including production that imposes less impact on wildlife and their habitats.
- The Organiser of the World Expo 2025 shares information on the conservation of natural environments and ecosystems with natural conservation related NGOs and other organisations and exchanges opinions.

### 3.3 Prosperity (Supply Chain and Value Chain)

The Expo fosters knowledge about society and the environment that enriches not only tangible commodities but also livelihoods. This knowledge expands the scope of possibilities and shall be passed on to the next generation as a legacy.

**[Direction to Pursue]**

- 1) The Expo shall establish a supply chain in compliance with the Sustainable Procurement Code and take account of sustainability throughout the value chain, including the process of cyclical use and disposal of resources.

[Background]

The activities conducted by each entity have a direct or indirect impact on each level of its value chain. To address these issues, the entity needs to keep an eye not only on its direct activities, but also on the activities conducted by various suppliers, local governments, and individuals, including the use of natural resources, procurement of raw materials and components, purchase, transportation, logistics and use of products, and disposal and recycling of waste. If an entity has a value chain that has expanded to include operators in foreign countries, for example, it is possible that the entity's procurement of raw materials and components, operations in the foreign countries, and sales, use and disposal of products and services might have an impact on mineral resources, water resources, and biodiversity, even though they are out of the scope of the entity's direct activities. Meanwhile, the trend of reinforcing international legal regulations and frameworks related to chemical substances, harmful substances is continuing, increasing the necessity to conduct transactions after strictly evaluating the relevant suppliers' systems (frameworks) for eliminating substances that might cause health damage if used for products. If such issues are left without taking any actions, the entity might encounter risks such as the violation of legal regulations, disruption of the supply of items to be procured, trading suspension and contract cancellation by customers, reputational damage among general consumers, and exclusion from investment targets. Since these risks would have a considerable impact on the entity's activities, it is necessary for each entity to work together with various suppliers and individuals involved in the entity's activities and address important challenges related to the entire value chain.

Mainly by leading entities, requests and demands are being made to establish a system for collecting and communicating information with suppliers and a management system such as an environmental management system, and these efforts are increasingly being extended to further upstream suppliers such as secondary and tertiary suppliers.

One of the 17 goals in the Sustainable Development Goals (SDGs) is to minimise the use of natural resources and toxic materials, and the generation of the waste and pollutants, throughout the entire production and consumption process (Goal 12: Ensure sustainable consumption and protection patterns). Value chain management contributes to achieving this goal. In addition, value chain management contributes to ethical consumption, which refers to the selection of socially and environmentally friendly products and services, and leads to the satisfaction of expectations from stakeholders and the acquisition of new market opportunities.

“Sustainable procurement” is the activity of purchasing goods or services with the most positive impact on the environment, society, and economy throughout the life cycle.

For the Expo, the Organiser of the World Expo 2025 will ensure that sustainable products and services are procured, by establishing and releasing regulations for such procurement. By doing so, the Organiser of the World Expo 2025 will clarify to companies and other organisations that will deliver products and services that they need to consider the sustainability of the environment, society, and economy. In addition, this effort will encourage

such companies and other organisations to further work on promoting sustainability, generating a positive effect for the companies and society at large.

#### [Efforts]

In striving to ensure sustainability in the operation of the Expo, the Organiser of the World Expo 2025 will establish and implement the Code of Sustainable Procurement (hereinafter referred to as “the Procurement Code”), which presents standards and operational methods to realise sustainability in the procurement processes of goods and services.

For the procurement (supply chain) of the Expo, the Organiser of the World Expo 2025 will reflect the Procurement Code in guidelines and other requirements. To implement the Procurement Code, the Organiser of the World Expo 2025 will communicate it to exhibitors, sponsors, and suppliers (business operators that supply goods, etc.), licensees (business operators licensed by the Organiser of the World Expo 2025 to produce goods, etc.), and ensure cooperation with them.

The Organiser of the World Expo 2025 will check the procurement plans of suppliers and other entities and encourage them to increase their rates of procurement of certified items by engaging in discussions with them on such increase.

The Organiser of the World Expo 2025 will accept whistleblowing reports on nonconformities with the Procurement Code and take the necessary measures toward solving them promptly and appropriately while ensuring equity and transparency. In particular, for problems arising due to nonconformities with the Procurement Code, the Organiser of the World Expo 2025 will seek an appropriate solution by, for example, encouraging the parties concerned to engage in constructive dialogue so that they can reach an agreement.

#### [Main Implemented Actions and Matters under consideration]

- The Sustainable Procurement Working Group (hereinafter referred to as “the Procurement WG”), established under the Expert Committee for the Sustainable Expo, explores an appropriate form of sustainable procurement for the operation of the Expo. While conducting interviews with related organisations, the Procurement WG discussed the Procurement Code (draft) to present standards and operational methods to realise procurement with consideration given to the prevention of global warming, resource depletion, and other environmental issues, as well as problems concerning human rights and labour, promotion of fair business practices, and stimulation of active local economies. In June 2022, the Code of Sustainable Procurement (hereinafter referred to as “the Procurement Code”) (1st edition) was formulated.

The Procurement Code (1st edition) is designed to reduce the risks related to the environmental, social, and economic impacts of the Expo and aims to spread positive influences of its sustainable practices, leaving a valuable legacy in the environmental, social, and economic domains. The Procurement Code applies to everything that is procured by the Organiser of the World Expo 2025, including goods and services, and licenced merchandise.

Respecting sustainability-related international agreements and codes of conduct from different sectors (including the Sustainable Development Goals, Paris Agreement, Universal Declaration of Human Rights, ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy [including ILO core labour standards], United Nations Global Compact, OECD Guidelines for Multinational Enterprises, and UN Guiding Principles on Business and Human Rights), the Procurement Code (1<sup>st</sup> edition) presents the standards and operational methods to realise procurement that takes into consideration

compliance with laws and regulations, prevention of global warming, resource depletion, and other environmental issues, as well as problems concerning human rights and labour, promotion of fair competition and business practices, and stimulation of active local economies. For wood and paper materials, the Procurement Code provides more detailed requirements and standards by item regarding how to ensure sustainable procurement, thereby striving to achieve procurement of items produced in a sustainable manner.

The Organiser of the World Expo 2025 will request suppliers, licensees, pavilion organisers, etc. to comply with the Procurement Code as they engage in the manufacture, distribution, etc. of procured goods etc. In fiscal year 2022, site construction of the Expo was launched. Since the construction entails the use of wood and other materials, the Organiser of the World Expo 2025 is communicating the Procurement Code to related companies at meetings and other opportunities.

For agricultural produce, livestock products, marine products, and palm oil as well, standards by item will be published around July 2023 after discussions at the Procurement WG. The establishment of concession facilities need to be considered based on such standards. The Procurement WG is also discussing the establishment of a whistleblowing system (grievance mechanism), allowing all stakeholders, including parties (individuals, groups, or communities) who are negatively affected by nonconformities with the Procurement Code or who are highly likely to be so in the future to raise any concerns they may have, requiring the relevant issues to be handled appropriately. In October 2022, the Organiser of the World Expo 2025 invited the public to offer their opinions about the Whistleblowing Guidelines related to the Code of Sustainable Procurement (draft).



Fig. 3-4 Scope of the Code of Sustainable Procurement

The Expo fosters knowledge about society and the environment that enriches not only tangible commodities but also livelihoods. This knowledge expands the scope of possibilities and shall be passed on to the next generation as a legacy.

**[Direction to Pursue]**

- 2) The Expo shall contribute to the revitalization of local industries by collaborating with private companies in the preparation and operation of the Expo site.

**[Background]**

In the former first half of 2022, when the impact of the COVID-19 pandemic was reduced, the global economy continued to recover, with the real GDP of the major Western countries remaining above pre-pandemic levels overall. Meanwhile, the increase in prices mainly due to the simultaneous global economic recovery since last year was accelerated by rising

international commodity markets affected by the growing tension in Ukraine. This was combined with greater uncertainty in the supply chain caused by the infection control measures adopted in China to address a rebound in COVID-19, as well as with credit-tightening measures implemented in various countries. With this background, the global economy is becoming even more uncertain.

In Japan, the business environment surrounding business operators remains harsh, mainly due to the two-year pandemic, the appreciation of prices of crude oil and raw materials, short supply of components, a shortage of labour, and other supply-related difficulties. Affected not only by the pandemic but also by various other risks, this severe business environment might continue, requiring a wide variety of business challenges to be addressed.

Amidst this environment, participation in the sustainable procurement required for the Expo offers communities and business operators in Japan a valuable experience that should help them become more internationally competitive, invigorate them, and allow them to thrive on a sustainable basis, while handing down not only physical assets but also the richness of the social environment. In addition, the Expo serves as an opportunity for the Osaka and Kansai region to reinforce its ability to attract many more visitors and increase its profile. It is expected that cooperation between the Expo and local Small and Medium Enterprises(SMEs), other private companies, and other entities will advance progress in human resource development and global interaction that will lead to the invigoration of local communities. Furthermore, the Expo will provide opportunities for private companies to develop new technology and disseminate information on new products and ideas. It is expected that such actions will help to enhance the sustainability of local economies.

#### [Efforts]

The Organiser of the World Expo 2025 will disseminate to the world the attractive features and value of companies with future-oriented product concepts, technologies, manufacturing techniques, etc. that conform to the Expo concept “People’s Living Lab”.

While ensuring opportunities for SMEs to participate, the Organiser of the World Expo 2025 will consider and implement procurement measures for realising a transparent procurement process.

The Organiser of the World Expo 2025 will discuss the development of Expo-associated local tourism products and traffic services.

#### [Main Implemented Actions and Matters under consideration]

- The national government is discussing the creation of projects and implementation of innovation both at and outside the Expo site, especially in the fields of mobility, energy, the environment, digitalization, health, medicine, tourism, food, culture, and scientific technology. Behind this discussion is the intention to induce innovation, achieve social implementation of such innovation, and showcase solutions to social problems by using the Expo as an opportunity to take on a wide variety of challenges and promote co-creation and cooperation between various players, such as the national government, local governments, research and educational institutions, large companies, SMEs, start-ups, other organisations, and individuals, even before the start of the event.
- Calling for participation by companies and organisations without large amounts of capital, the Organiser of the World Expo 2025 has launched the Co-Design Challenge (CDC) as a new co-creation programme for embodying the Expo concept “People’s Living Lab”. Serving

as an opportunity to present a future vision of life (community) in Japan by taking advantage of the momentum of the Expo, this programme encourages participants to take on the challenge of producing products from the perspective of design or designing social systems through cooperation with a wide variety of companies and other organisations.

(CDC Proposal Requirements)

- Will comprise goods or services whose “development” will start from now
  - Desirable to involve more than one company or other organisation in the development
  - Will involve a designer/creator
  - Will involve an SME in the applicant team
- 
- The Organiser of the World Expo 2025 is calling for applications for “management participation” as needed. This system allows sponsors’ names, logos, etc. to be displayed on their sponsorship goods, such as tables and chairs used mainly for eating outdoors, outdoor security cameras, and other machinery and equipment installed at or outside the Expo site, which is expected to draw many visitors from various countries.
  - In striving to publicize SMEs and small businesses’ products, technologies, services, etc. to people all over the world, reinforce relationships with suppliers and other stakeholders, and pursue various possibilities, including a new form of co-creation, the Organiser of the World Expo 2025 compiles information related to participation in the Expo and posts such information on its official website.
  - To encourage local SMEs and other organisations to participate in the Expo, the Organiser of the World Expo 2025 disseminates information on management participation and various programmes for SMEs, including CDC, at seminars organised by local governments and SME-related organisations and other opportunities.

### 3.4 Peace (Peace, Justice, and Inclusiveness)

The Association creates a favourable environment for diverse people to actively and safely participate in the Expo, and operate the Expo in an inclusive manner which respects each person so that the Expo will be an opportunity for sharing diverse values based on the Theme.

**[Direction to Pursue]**

- The Association shall operate the Expo in accordance with the UN "Guiding Principles on Business and Human Rights".
- The Association shall ensure a sound and favourable working environment for the diverse people involved in the preparation and operation of the Expo.

[Background]

In 2011, the UN Human Rights Council adopted the Guiding Principles on Business and Human Rights (hereinafter referred to as “the Guiding Principles”) as a framework to be respected by states and companies in terms of business and human rights. The Guiding Principles presents the following three pillars: the State’s duty to protect human rights, corporate responsibility to respect human rights, and access to effective remedy.

Under the Guiding Principles, shared extensively as an international norm, each state has established its own National Action Plan (NAP) and put into force related legal regulations, while many global companies have formulated human rights policies to ensure human rights due diligence (a continuous process of identifying, preventing, mitigating, and remedying adverse human rights impacts).

In Japan, the National Action Plan on Business and Human Rights (2020-2025) was released to the public in 2020. Presenting a wide variety of measures to be taken by the national government regarding business and human rights, the plan shows the government’s expectation of companies to identify, prevent, mitigate, address adverse human rights impacts caused by their activities, share information on such impacts, and introduce human rights due diligence. The principles of the plan reside in the promotion of understanding and awareness of business and human rights among the national government, local public entities, companies, and society at large, the establishment of a framework for promoting respect for human rights in supply chains, and the establishment and improvement of a remedy mechanism. The Action Plan covers the following six interrelated areas:

- (A) Labour (promotion of decent work);
- (B) Promotion and protection of children’s rights;
- (C) Human rights associated with the development of new technologies
- (D) Rights and roles of consumers;
- (E) Equality before the law (persons with disabilities, women, persons of diverse sexual orientation and gender identity, and other groups); and
- (F) Acceptance of and co-existence with foreign nationals

The plan also includes specific points in line with the three pillars of the Guiding Principles.

[Efforts]

For the operation of the Expo site, the Organiser of the World Expo 2025 will make accommodations for various people from the perspectives of gender, ethnicity, culture, etc.

Using virtual technology, the Organiser of the World Expo 2025 will provide opportunities to experience the Expo even for people with difficulty accessing the Expo site, such as overseas residents, senior citizens, and expectant mothers.

By operating a whistleblowing system in accordance with the Code of Sustainable Procurement, the Organiser of the World Expo 2025 will strive to ensure an appropriate human rights and labour environment that covers the supply chain.

To establish an appropriate labour environment for staff members, the Organiser of the World Expo 2025 will implement measures such as ensuring management of working hours, providing diverse working options such as staggered hours and work from home, preventing harassment, complying with laws and regulations, and ensuring mental health care.

[Main Implemented Actions and Matters under consideration]

- To provide opportunities for visitors to think together with the world toward realising an inclusive society in which people can find hope and feel happy regardless of gender, the Organiser of the World Expo 2025 is discussing the establishment of the “Women’s Pavilion” in cooperation with the national government and exhibition participants. The planning, design, construction, exhibition, and direction of the pavilion will be in alignment with the progress of the national government’s gender equity measures and discussions around the world on gender.
- From the perspective of diversity, regardless of occupation or gender, the staff uniforms to be worn at the Expo will adopt materials that are sustainable, functional, durable, in line with the theme and concept of the Expo, and environmentally friendly, as the Expo will be held under the theme of the SDGs. The Organiser of the World Expo 2025 plans to provide uniforms for the diverse range of people involved in the Expo to work and move around easily.
- The Code of Sustainable Procurement, released to the public in June 2022, presents suppliers and other organisations with standards on human rights and labour. In addition, the Procurement Code requires suppliers and other organisations to disclose and explain their efforts to ensure compliance with the Procurement Code, including surveys and engagement on their supply chains based on the types, volumes, etc. of procured goods etc. Moreover, the Organiser of the World Expo 2025 may request suppliers and other organisations, as needed, to explain their special contributions to the attainment of the SDGs through the manufacture, distribution, etc. of procured goods etc.
- The Sustainable Procurement Working Group, established under the Expert Committee for the Sustainable Expo, is discussing a whistleblowing system based on “access to effective remedy,” which is one of the pillars of the UN Guiding Principles on Business and Human Rights.
- While taking specific measures for controlling long working hours, such as refraining from sending e-mail during off-duty hours, the Organiser of the World Expo 2025 has introduced a staggered hours system and a work-from-home system. In addition, the Organiser of the World Expo 2025 has established a physical and mental health counselling counter, as well as harassment counselling counters (internal and external). Their contact information is provided to staff members when they are newly appointed.
- The Organiser of the World Expo 2025 provides mental health care training for its staff members (managers and general officials). For legal compliance, the Organiser of the

World Expo 2025 distributes training materials to newly appointed staff members, while sharing such materials with all staff members.

### 3.5 Partnership (Collaboration)

The Association provides the opportunity for everyone to participate in the Expo, freely exchange ideas and create communities where they can connect with each other.

#### **[Direction to Pursue]**

Together with corporations, educational and research institutions, national and governmental organisations, international organisations, local governments, NGOs/NPOs and grassroots bodies, the Association shall promote Japan, particularly the Osaka and Kansai region, to the world. In addition, the most distinctive characteristic of the Expo will be the endeavour to give a realistic picture of a future society not just through thought but also through action. In this regard, the Association shall invite diverse participants to come together before the Expo and connect with various initiatives in their respective positions and tackle challenges with a view to support achievement of the SDGs at or outside the Expo site.

#### **[Background]**

The concept of the Expo is “People’s Living Lab”, designed for people around the world to exchange ideas and “co-create” a future society. With global challenges becoming more complicated and diversified, partnership for combining various technologies and ideas is crucial for solving such challenges.

One of the subthemes of the Expo is “Connecting Lives”, whose focus lies in the creation of communities where individuals can connect with each other and the realisation of an even richer society. Specific keywords inspired by the subtheme include partnership, power of co-creation, communication progress due to ICT, and an ideal vision of a data society.

For the Expo, the Organiser of the World Expo 2025 has launched TEAM EXPO 2025. Inviting everyone to participate, this programme encourages a wide variety of people to form teams and work on a wide variety of challenges for the Expo and a future beyond the event. As indicated by this, the Expo is characterised by the participation and co-creation of a wide variety of stakeholders.

#### **[Efforts]**

For the TEAM EXPO 2025 programme, the Organiser of the World Expo 2025 will encourage co-creation and interaction by inviting applications for the Co-Creation Challenges, intended to take action for the future, and applications for Co-Creation Partners, who will facilitate co-creation. The Organiser of the World Expo 2025 will provide opportunities for everyone to participate in the Expo freely and take on challenges toward achieving the SDGs.

The Organiser of the World Expo 2025 will disseminate and share information with people participating or engaged in activities related to the Expo (stakeholders), and ensure cooperation with them.

To promote understanding of sustainability, the Organiser of the World Expo 2025 will ensure cooperation with officially participating countries, international organisations and local governments for educational programmes and training.

The Organiser of the World Expo 2025 will prepare a virtual version of the Maishima venue in cyberspace using 3D-Computer Graphics(3D-CG). By ensuring mutual linkage between the physical and virtual venues using augmented reality (AR), virtual reality (VR) and other technologies, the Organiser of the World Expo 2025 will enhance the attractiveness and dissemination of the Expo venues, while realising an Inclusive Expo with accessibility for many

people around the world, including those who cannot access the physical venue due to, for example, disability, old age, or living in a place distant from the venue.

When giving an even more concrete form to the plan for the Expo, the Organiser of the World Expo 2025 will provide opportunities for the next generation, who will play the main role in future community development, to make progress.

[Main Implemented Actions and Matters under consideration]

- In October 2020, the Organiser of the World Expo 2025 launched the TEAM EXPO 2025 programme, with 970 registered Co-Creation Challenges and 286 organisations as Co-Creation Partners as of the end of February 2023.
- The Organiser of the World Expo 2025 has implemented educational programmes for children, who will play the main role in the future, to commit to the Expo even prior to the event, learn about the SDGs, and conceive ideas for accomplishing the theme of the Expo, “Designing Future Society for Our Lives”. The programmes are intended to enhance children’s interest so that they will feel like accessing the Expo site.  
 In fiscal year 2020, the Organiser of the World Expo 2025 implemented the programmes for elementary schools and junior high schools in Osaka Prefecture, followed by the rest of the Kansai region in fiscal year 2021. In fiscal year 2022, the Organiser of the World Expo 2025 implemented the programmes throughout Japan.

(Programme Details)

- Using special materials edited by the Organiser of the World Expo 2025, including text and video, elementary school and junior high school teachers guide students to understand more about the Expo and the SDGs over about 10 hours in the Period of Integrated Study and other classes.
- The Research Meetings are held as an online interaction opportunity for students and companies working toward achieving the SDGs. Such companies present their commitments to students, while the children ask the companies about the commitments.
- The Junior EXPO is held as an opportunity for students to give presentations on what they have learned through classes and other means.

	For Elementary Schools	For Junior High Schools
Class flow	◎ What is the Expo? Learn in a fun atmosphere using various photos and videos	
	◎ Designing Future Society for Our Lives Learn from the learner’s own experience or issues in the learner’s immediate environment	
	◎ What are the SDGs? Learn that social problems exist not only in one’s immediate environment but also around the world and that various companies are working to solve such problems to realise the concept “Leave No One Behind”	
	◎ Poster Creation (Junior EXPO)	◎ Research Meetings ◎ Presentations (Junior EXPO)

Fig. 3-1 Educational Programme – Class Flow

- In May 2022, the Organiser of the World Expo 2025 added the Sustainability Initiatives page to its official website to disseminate information on its sustainability policies, visions, meetings, etc. When organising meetings on sustainability, the Organiser of the World Expo 2025 disseminates information not only through its official website but also other official

social media to spread information on the SDGs, publicise the cause, and raise public awareness.

- Under the concept “People’s Living Lab” (PLL), set to realise the theme of the Expo “Designing Future Society for Our Lives”, the Organiser of the World Expo 2025 organises the EXPO PLL Talks. In this online talk event, a wide variety of practitioners and experts disseminate information on their themes from their own perspectives both nationally and internationally as part of the co-creation efforts of the Expo. The Organiser of the World Expo 2025 posts event videos recorded as an archive on its official website after the event.
- The Organiser of the World Expo 2025 invited promising young architects to submit ambitious and bold proposals for 20 facilities, such as lounges and restrooms, in line with the venue concept “Diversity but Unity” in order to create distinctive and attractive Expo facilities. The Organiser of the World Expo 2025 selected 20 contract business operators.
- The Organiser of the World Expo 2025 is discussing the implementation of “Theme Weeks”, an initiative aimed at “Designing Future Society for Our Lives” together with the world by taking advantage of the characteristics of the Expo, where countries from all over the world gather in the same place for six months, bringing together wisdom to solve global issues and exploring solutions through dialogue. The Organiser of the World Expo 2025 is planning to divide such themes into categories containing several issues based on the three subthemes of the Expo, with the specific details being finalised around the spring of 2023.  
For Agenda 2025, a Theme Week programme organised by the Organiser of the World Expo 2025, the Organiser of the World Expo 2025 will hold dialogue programmes and exhibitions in order to disseminate messages from the Expo to the world. In these events, held both physically and online, a wide variety of stakeholders from around the world will be able to cross-sectionally participate in diverse and free dialogue.
- For specific efforts toward ensuring the sustainability of the Expo, the Organiser of the World Expo 2025 will discuss the provision of opportunities for start-ups and future key players for community development to make progress.

## Chapter 4: Indicators to Be Used for the Sustainability of Expo 2025 Osaka, Kansai, Japan

The Sustainability Policy of Expo 2025 Osaka, Kansai, Japan (hereinafter, the “Sustainability Policy”) defines the major goals of the Expo and the directions it should pursue under the concepts of the 5Ps (People, Planet, Prosperity, Peace, and Partnership), which are keywords in the SDGs.

The Organiser of the World Expo 2025 considers representative indicators of the Expo's overall sustainability efforts in line with the Expo's "Goals" for these 5Ps. In this consideration, main global issues to be considered for the Expo and specific targets set by each department based on "Direction to pursue" under 5Ps. Note that for the 5Ps, the indicator and the 5Ps are not necessarily paired, and indicators may cover more than one P. .

These indicators will be decided within FY2023 or when matters concerning the indicators, including details of the facilities and equipment to be used during the Expo, are determined, and they will be used as indicators for progress management, together with specific targets. The direction of typical indicators currently under deliberation and the current status of the deliberation process are as follows:

### (1) Indicators for inclusive Expo operation

Universal Design Guidelines will be formulated for facilities and equipment at the Expo site. The Organiser will prepare the venue in line with these guidelines, while participants will design and construct their pavilions in accordance with these guidelines. Through these measures, an accessible and inclusive Expo site will be prepared.

People with disabilities will participate in formulating the guidelines and preparing site facilities so that their opinions are carefully listened to and incorporated into facility and equipment design.

In addition, Universal Service Guidelines will be established to ensure that the Expo will be operated in such a manner as to bring joy to every visitor. In line with these guidelines, the Organiser of the World Expo 2025, exhibitors, service providers, and participants will co-operate closely with each other in offering better services.

Indicators for these matters will be developed by around the end of FY2023.

### (2) Indicators for the realisation of carbon neutrality

Expo 2025 Osaka, Kansai, Japan, will be held with initiatives to realise carbon neutrality by utilising pioneering, economical, and feasible technologies and mechanisms.

Greenhouse gas (GHG) emissions will be calculated using the GHG Protocol as a major approach, for the first time in the history of World Expos.

Measures will be adopted to reduce the energy consumption of and GHG emissions (Scope 1 and Scope 2 emissions) from facilities and equipment at the venue, transport means within the venue (including peripheral trams, small mobility vehicles, and logistics and waste carriers), and the Organiser of the World Expo 2025 office. These facilities will use a type of electricity whose GHG emission factor is zero. The use of gas and diesel oil, as well as electricity consumption outside the Expo site, will be reduced by implementing such measures as energy consumption reduction measures, electrification, and the introduction of biodiesel, to help realise carbon neutrality. Carbon credits will be used as an alternative if any such measures are found to be insufficient.

GHG emissions (value chain emissions) from the construction of buildings, facilities, infrastructure, etc. at the Expo site; travel, overnight stays, and in-site food and beverage consumption of visitors; and the production, disposal, etc. of licensed and other products will

be decreased by reducing food loss, using reusable products, promoting the purchase of carbon credits to offset GHG emissions from travel, and other means. However, a considerable portion of GHG emissions from these sources will be difficult to reduce, including emissions from production processes for materials used.

In addition to continuing its own efforts to reduce such GHG emissions, from the perspective of leaving a legacy, the Organiser of the World Expo 2025 will request that the parties involved co-operate in reducing the remaining portion of GHG emissions while taking the Expo as the starting point for various measures. More specifically, the Organiser of the World Expo 2025 will call for their participation in an Expo Green Challenge to build a decarbonised society using the Expo as a starting point.

The current estimates of GHG emissions and an outline of possible emissions reduction measures are shown below. These values of GHG emissions have been estimated based on the relevant budgets and project plans. The estimate of GHG emissions and measures to reduce them will become more detailed year by year in accordance with the update budgets and projects.

Emission source	GHG emissions			Major reduction measures other than efforts to reduce energy consumption
	Scope 1	Scope 2	Total	
Facilities and equipment at the venue (such as pavilions)	6,374	23,627	30,001	Using a type of electricity whose emission factor is zero Using gasses with carbon offset certificates
Transport means at the venue (such as peripheral trams and small mobility vehicles)	239	8	247	Electrifying these means and using a type of electricity whose emission factor is zero
Transport means at the venue (such as logistics and waste carriers)	40	–	40	Continuing to work out possible measures, including using biofuels
Organiser office	–	989	989	Considering switching to a type of electricity whose emission factor is zero
Total	6,653	24,624	31,277	

Table 4-1: Estimated GHG business-as-usual (BAU) emissions (Scope 1 and Scope 2 GHG emissions that would result from a lack of reduction measures; unit: metric tons CO<sub>2</sub>e) and major reduction measures

Emission source	Emissions	Reduction measures	Details of the reduction	Reduction efforts through the Expo Green Challenge, including behavioural changes	Reduction subtotal
Construction of buildings, facilities, infrastructure, etc. at the Expo site	76.0	Reusing existing buildings Actively utilising leased goods, wood, etc. Actively utilising low-carbon materials, etc.	Reductions achieved by reusing existing buildings, reducing food loss, and other measures cannot be added together. However, based on past calculations, it is estimated that a total reduction of several hundred thousand metric tons CO <sub>2</sub> e can be achieved.	Reduction efforts through behavioural changes (outside the venue) <ul style="list-style-type: none"> <li>• Encouraging the use of non-disposable bottles for personal use</li> <li>• Reducing food loss</li> <li>• Reusing and recycling clothes</li> <li>• Reusing used cooking oil</li> <li>• Encouraging energy-saving behaviour</li> <li>• Nudging people into behavioural changes</li> <li>• Promoting sustainable school excursions</li> <li>• Using the Expo to inspire companies and other parties to launch original initiatives</li> <li>• Reducing the use of disposable containers and other items at hotels, inns, etc.</li> </ul>	Aiming to reduce remaining emissions
Official trips by staff	0.07	Promoting the use of a type of fuel from which emissions are offset and the introduction of fuel-efficient vehicles			
Travel (including commuting) of staff, participants, and service providers		Recommending the purchase of carbon credits at the time of travel Using transport means with low GHG emissions			
Waste treatment and disposal	0.6	Reducing food loss and recycling food			
Expo operations	19.2	Reducing the use of plastic (by using reusable dishes, cutlery, etc.) Promoting the use of a type of fuel from which emissions are offset and the introduction of fuel-efficient vehicles			
Travel and overnight stays of visitors, food and beverages consumed at the Expo site, and the entire life cycles of licensed and other products, from their manufacturing to disposal	315.2	Recommending the purchase of carbon credits at the time of travel Using transport means with low GHG emissions Introducing fuel-efficient vehicles, EVs, synthetic fuel, biodiesel, etc. in cooperation with external suppliers			
Total	411		Several hundred thousand metric tons CO <sub>2</sub> e		Aiming to reduce remaining emissions

Table 4-2: Estimated GHG business-as-usual (BAU) emissions (Scope 3 GHG emissions that would result from a lack of reduction measures; unit: ten thousand metric tons CO<sub>2</sub>e) and major reduction measures

(3) Indicators for progress toward a circular economy

As a measure to be implemented before, during, and after the Expo to realise a circular economy, waste from Expo site operations will be appropriately sorted and re-sorted into types within the Expo site. Efforts will be made to recycle all types of sortable waste excluding burnable and non burnable waste.

Waste type	Amount (tons)	Percentage (%)	Intensity (gram per capita)
Aluminium cans	15.77	0.16	0.56
Steel cans	27.03	0.28	0.96
Non-plastic bottles	611.50	6.30	21.68
Cans for business use	45.05	0.46	1.60
PET bottles	621.63	6.40	22.04
Plastic items	559.69	5.76	19.85
Cardboard	1711.74	17.63	60.70
Paper other than cardboard	110.36	1.14	3.91
Kitchen rubbish	1501.15	15.46	53.23
Used cooking oil	110.36	1.14	3.91
Burnable waste	4181.38	43.07	148.28
Non burnable waste	212.84	2.19	7.55
Total	9708.51	100.00	344.27



Aiming to recycle all these types of waste

Table 4-3: Amount of waste from Expo site operations by type (estimates)

Initiatives to reduce food loss will be implemented with the aim of setting and achieving higher targets than the target set by the Japanese government of halving food loss from the FY2000 level (5.47 million tons) throughout supply chains by FY2030 and the target of recycling 60% of food waste in the food retailing industry and 50% of food waste in the restaurant industry in FY2024. Efforts will be devoted to achieving 100% food waste recycling.

As for the recycling of waste from construction and demolition works, the targets set in the Expo 2025 Osaka, Kansai, Japan, Environmental Impact Assessment Reports, shown in the table below, will continue to be used.

Waste type	Percentage of recycled waste (%)
Concrete mass	99.3
Asphalt concrete mass	99.5
Wood scraps	97.0
Mixed waste	63.2
Glass and ceramics	73.0
Plastic waste	59.0
Metal scraps	96.0
Paper scraps	77.0
Plasterboard	86.0
Other	63.2

Table 4-4: Target percentage of recycled waste from construction and demolition works by type

The Resource Circulation Working Group will continue to work to update the target values and set reduction and reuse targets.

(4) Indicators for contributing to the revitalisation of local industries

Indicators will be devised to show progress in efforts to increase the number of Small and Medium Enterprises (SMEs) participating in the Expo. Many issues concerning the participation of SMEs in the Expo are still being considered, including what exhibition style will facilitate the participation of SMEs. Indicators will be defined after solutions to these issues are specified.

(5) Indicators for progress in person-to-person community building

Virtual and in-person opportunities to create and foster new Co-creation Challenges will be offered to various participants, including those participating in Co-creation Challenges and Co-creation Partners in the TEAM EXPO 2025 Programme.

To enable as many people as possible to participate in co-creation on their own initiative, themes related to the concept “SDGs + beyond” will be featured mainly in Theme Week .

Indicators for these matters will be developed by around the end of FY2023.

With regards to biodiversity, indicators are difficult to define. However, efforts will be made to find appropriate indicators in line with discussions on the post-2020 framework, the spread and further materialisation of the initiatives of the Taskforce on Nature-related Financial Disclosures (TNFD) and Science-Based Targets (SBTs) for Nature, and the increasingly specific details of exhibits at the Expo.

## Appendix 1: Initiatives to be implemented by each entity (department)

### Initiatives for People

Future society		<ul style="list-style-type: none"> <li>• Creating an area where various technologies are utilised toward the realisation of Society 5.0</li> </ul>
	Collaboration with external parties	<ul style="list-style-type: none"> <li>• Realising accessible facilities at the venue as much as possible</li> </ul>
	Manuals	<ul style="list-style-type: none"> <li>• Formulating Universal Design Guidelines</li> <li>• Considering the utilisation of pictograms, signage, audio guides, etc.; assigning the Safety Council (Disaster Management Subcommittee) to conduct case studies and incorporating the case study results into crisis management plans and manuals</li> <li>• Establishing a sales scheme for enabling people with disabilities or low IT literacy to buy admission tickets</li> </ul>
	Equipment	<ul style="list-style-type: none"> <li>• Considering the creation of a space for people with intellectual or mental disabilities or developmental disorders</li> <li>• Considering taking measures for people with visual impairments, such as the use of tactile paving</li> <li>• Considering the creation of nursing lounges for visitors with children</li> <li>• Considering the placement of benches on which elderly visitors can rest</li> <li>• Building various accessible lavatories for diverse users and placing large toilet booths for ostomates and visitors with children in men's and women's lavatories</li> <li>• Operating electric loop bus services at the Expo site to help visitors travel easily around the Expo site while using vehicles that are easy to get on and off</li> <li>• Operating shuttle bus services to enable Official Participants to travel smoothly between their hotels and the Expo site if commuting by public transport is inconvenient</li> </ul>
	Information sharing	<ul style="list-style-type: none"> <li>• Considering the adoption of multilingual signage and announcements at the Expo site, as well as pictograms and digital signage using technology that shows spoken words in written form in multiple languages</li> <li>• Building an official website in consideration of information security</li> <li>• Considering complying with the General Data Protection Regulation (GDPR), adopting an appropriate cookie policy, and implementing other measures to run the website while paying due attention to the handling of personal information</li> <li>• Creating and sharing a visual identity to encourage the rule-based creation of publications and other creative materials</li> </ul>
	Visitor support	<ul style="list-style-type: none"> <li>• Assisting visitors unaccustomed to using IT, such as touch panel input, at entry gates and information desks</li> <li>• Actively utilising multilingual machine translation during the Expo period as a "Future Society Showcase" initiative</li> <li>• Actively promoting ticket sales in cooperation with ticket selling companies so that the Expo will be selected as a school excursion destination and a place for extracurricular activities</li> <li>• Proactively considering the adoption of a low-stress security check method by setting up lanes dedicated to visitors with disabilities, sharing information in multiple languages, introducing state-of-the-art devices, etc.</li> <li>• Operating electric bus services at the venue with the use of vehicles that are easy even for wheelchair users to get on and off smoothly, and considering the use of pictograms, multilingual signage, etc. for the convenience of visitors and other parties involved</li> </ul>

## Initiatives for the Planet

Decarbonisation		<ul style="list-style-type: none"> <li>Calculating GHG emissions from each type of activity concerning the Expo</li> <li>Adopting the Comprehensive Assessment System for Built Environment Efficiency (CASBEE)</li> </ul>
	Introduction of technologies	<ul style="list-style-type: none"> <li>Contributing to CO<sub>2</sub> emissions reduction by introducing direct air capture (DAC) technologies, which separate CO<sub>2</sub> from the air and capture it, storing the captured CO<sub>2</sub> underground or trapping it in concrete, and utilising the CO<sub>2</sub> as a raw material for carbon capture and utilisation (CCU), including methanation</li> <li>Generating electricity using hydrogen and ammonia, neither of which emit CO<sub>2</sub> when burned, and utilising the carbon neutral electricity</li> </ul>
	Construction	<ul style="list-style-type: none"> <li>Constructing facilities with energy conservation measures including reduction of lighting load through natural lighting, etc., and reduction of cooling load through insulation and ventilation,</li> <li>Using construction machinery and methods that entail low GHG emissions, low noise, and low vibration as much as possible</li> <li>Selecting devices that are as energy-efficient as possible, and if there are applicable rules, using devices that meet standards for energy efficiency and other metrics</li> <li>Actively utilising highly energy-efficient devices and equipment, such as LED lights and high-performance air conditioning equipment</li> <li>Actively utilising equipment and devices that perform better in terms of reduced energy consumption</li> <li>Operating construction work-related vehicles efficiently; encouraging eco-driving</li> </ul>
	Association management	<ul style="list-style-type: none"> <li>Ensuring that multifunction printers are switched to power-saving mode when all staff are absent from the office and switching lights off during the lunch break</li> <li>Requiring the Organiser of the World Expo 2025 staff to use public transport during their official trips, in principle</li> </ul>
	Venue operations	<ul style="list-style-type: none"> <li>Encouraging private businesses to provide access to the Expo site by operating electric and fuel-cell bus services in collaboration with relevant government bodies to contribute to CO<sub>2</sub> emissions reduction</li> <li>Considering the introduction of environmentally friendly vehicles as much as possible as mobility means for the use of parties involved, including Association staff and pavilion exhibitors from inside and outside Japan</li> <li>Making efforts to ensure optimal visitor transport by providing information services to visitors</li> <li>Supporting exhibitors' initiatives for carbon neutrality</li> </ul>
	Energy management	<ul style="list-style-type: none"> <li>Promoting reduced energy consumption by introducing an energy management system to monitor and manage energy supply and demand, and by monitoring and optimising the use of lighting and air conditioning at each facility</li> <li>Controlling in-site devices by utilising the energy management system (including virtual power plant [VPP] technologies)</li> </ul>
	Traffic management	<ul style="list-style-type: none"> <li>Making personal mobility means available, formulating rules for personal mobility users, and adopting other related measures</li> <li>Formulating and implementing a traffic demand management policy</li> <li>Defining visitor transport routes</li> <li>Establishing a visitor transport council and formulating a visitor transport plan to ensure smooth visitor transport</li> <li>Formulating an operational plan for goods and waste transport in advance to ensure efficient transport routes</li> <li>Reducing CO<sub>2</sub> emissions from transport by encouraging eco-driving, including switching off the engine when parking the vehicle during in-site transport</li> <li>Adopting a park-and-ride system to reduce CO<sub>2</sub> emissions from visitors' private cars</li> </ul>

(Initiatives for the **Planet**)

Decarbonisation	Visitor awareness-raising	<ul style="list-style-type: none"> <li>• Implementing digital nudging initiatives to stimulate individual visitors to voluntarily change their mindsets and behaviour</li> <li>• Holding exhibitions on environmental and energy related technologies and technologies to contribute carbon neutrality and systems to increase visitors' understanding</li> <li>• Considering enabling visitors to observe mechanisms behind the use of CO<sub>2</sub>-free power sources inside and outside the Expo site and in-site device control using the energy management system</li> <li>• Implementing initiatives to visualise numerical and other data and conducting PR and promotional activities for data visualisation technology</li> </ul>
Resource circulation		<ul style="list-style-type: none"> <li>• Constructing the Expo site with as much consideration for the global environment and effective resource use as possible</li> </ul>
	Construction	<ul style="list-style-type: none"> <li>• Trying as hard as possible to design and construct simple and lightweight buildings and minimise the amount of building materials used</li> <li>• Trying as hard as possible to employ architectural structures and methods that use materials that can be easily separated at the time of demolition</li> <li>• Trying as hard as possible to promote the use of renewable resources, such as wood</li> <li>• Reusing equipment, materials, and buildings as much as possible</li> <li>• Promoting the reduction, reuse, and recycling of building materials as much as possible to minimise waste for final disposal</li> <li>• Observing regulations on the recycling and reduction rate defined in the Ministry of Land, Infrastructure, Transport and Tourism's Construction Recycling Promotion Plan</li> <li>• Encouraging the use of recyclable building materials</li> <li>• Trying as hard as possible to use recycled materials in the construction of parking lots</li> <li>• Using recycled building materials (designated procurement items in the Green Purchase Act and certified items with the "Eco Mark")</li> </ul>
	Association management	<ul style="list-style-type: none"> <li>• Purchasing environmentally friendly apparatuses, fixtures, etc., applying "For Use by the Organiser of the World Expo 2025" and "For Shared Use" stickers to those items, and increasing the number of items available for shared use</li> <li>• Switching to refillable items and trying as hard as possible to recycle and reuse various items</li> <li>• Selecting office supplies that comply with the Green Purchase Act</li> </ul>
	Plastic	<ul style="list-style-type: none"> <li>• Minimising the use of disposable plastic checkout bags by avoiding distributing them and replacing them with bags made of paper or other materials</li> <li>• Requesting businesses to replace non-reusable dishes, cutlery, and packing and wrapping materials with ones made of paper, biodegradable plastic, or other materials</li> <li>• Introducing food containers made of biodegradable plastic, having visitors separate them by type, and informing visitors in an easy-to-understand manner of the process of resource circulation at the Expo venue, where those containers will be decomposed by microorganisms, resulting in the generation of bioethanol, which is used as a fuel in fuel cells, thereby contributing to generating energy</li> <li>• Requesting businesses to reuse dishes, cutlery, beverage cups, etc.</li> </ul>
	Food	<ul style="list-style-type: none"> <li>• Actively introducing various technologies that help achieve zero food waste, including technologies for food demand forecasting and the utilisation of food scraps (for biogas generation, composting, etc.), for verification and practical purposes in order to contribute to the realisation of a circular economy at the Expo site</li> <li>• Devising measures to minimise waste, such as forecasting food demand and avoiding excessive use of containers and packing and wrapping materials to reduce waste generated at the Expo venue</li> </ul>
	Operations	<ul style="list-style-type: none"> <li>• Using the number of visitors as a basis for forecasting the number of meals to be served, optimising inventories, and controlling the amount of ingredients cooked</li> <li>• Conducting awareness-raising activities to encourage visitors to eat up and order an appropriate amount of food</li> </ul>

			<ul style="list-style-type: none"> <li>• Minimising unused food to be disposed of by utilising food banks and food sharing systems</li> </ul>
		Technology	<ul style="list-style-type: none"> <li>• Contributing to the production of carbon neutral gas and increasing the percentage of recycled food waste by using food scraps from the Expo site for biogas generation (methanation) through methane fermentation</li> </ul>

## (Initiatives for the Planet)

Resource circulation	Paper	<ul style="list-style-type: none"> <li>• Reducing the use of paper by introducing e-contracts</li> <li>• Promoting electronic payment</li> <li>• Promoting paperless operations by holding meetings online</li> <li>• Printing two pages on one side or both sides of a sheet</li> <li>• Introducing electronic tickets as the standard admission ticket to minimise the use of paper tickets and prevent deforestation</li> </ul>
	Rental and leased items	<ul style="list-style-type: none"> <li>• Formulating a plan to use rental and leased security devices</li> <li>• Trying as hard as possible to procure goods for preparation of the Expo site through rental and lease services and to reuse them after the Expo period</li> <li>• Considering renting and reusing gate devices and pavilion entrance devices as much as possible</li> <li>• Formulating a procurement plan to make maximum use of rental and leased network devices</li> <li>• Utilising rental apparatuses at event facilities</li> <li>• Using rental, leased, and second-hand items for Expo site preparation as much as possible</li> </ul>
	Operations and Waste	<ul style="list-style-type: none"> <li>• Actively introducing various technologies that help achieve zero waste (including technologies for the verification of circular treatment and recycling of biomass-derived biodegradable containers, which can be used to serve and sell food and beverages, the verification of resource circulation centred around waste treatment and recycling technologies, and the introduction of nudging mechanisms for waste collection) for verification and practical purposes in order to contribute to the realisation of a circular economy at the Expo site</li> <li>• Designing an appropriate layout for main and sub-waste storage areas in consideration of the process of waste collection and discharge, as well as waste recycling, to enable visitors to spend a comfortable time at the Expo site</li> <li>• Monitoring the weight of industrial waste and collecting data thereon by concluding outsourcing contracts with industrial waste collectors</li> <li>• Trying as hard as possible to burn hard-to-recycle waste for heat recovery to minimise landfill disposal</li> <li>• Reusing apparatuses purchased for use at event facilities as much as possible</li> <li>• Using sustainable materials for staff and volunteer uniforms in full consideration of possible heat waves</li> <li>• Making efforts to recycle recyclable waste, such as paper scraps and plastic waste</li> </ul>
	Awareness-raising	<ul style="list-style-type: none"> <li>• Encouraging visitors to use reusable bags in order to reduce resource consumption</li> <li>• Encouraging visitors to bring environmentally friendly reusable bags with them to the Expo site and to take items they have brought back home with them</li> <li>• Providing information about waste separation on the official website and other media in advance</li> <li>• Requesting cooperation from visitors and participants in terms of waste separation as effectively as possible by using clear indications as to how to separate waste</li> <li>• Requesting pavilion exhibitors and sponsors to procure environmentally friendly materials</li> <li>• Holding briefings intended for suppliers and licensees through Master Licence Office (MLO) operators to ensure that those businesses and licensees use sustainable resources and raw materials for PR-related goods and licensed goods, and that they procure, produce, and sell such materials</li> <li>• Devising storage methods and systems based on the results of interviews with related companies, organisations, etc.</li> </ul>
Natural environment	Expo site construction	<ul style="list-style-type: none"> <li>• Trying as hard as possible to preserve and create a natural environment (by implementing initiatives defined in the Environmental Impact Assessment Report, such as protecting important species)</li> </ul>
	Operations	<ul style="list-style-type: none"> <li>• Replacing conventional detergents with highly biodegradable neutral ones</li> </ul>

		<ul style="list-style-type: none"><li>• Encouraging in-venue food and beverage service providers to use detergents made of natural materials</li><li>• Requiring in-site food and beverage service providers to install grease traps in their business facilities and clean them on a regular basis</li></ul>
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### Initiatives for **Prosperity**

Procurement Code	<ul style="list-style-type: none"> <li>Implementing sustainable procurement (supply-chain) initiatives (based on the Code of Sustainable Procurement and using whistleblowing desks)</li> <li>Appointing a Contract Screening Board to inspect and screen procurement contracts on orders placed by the Organiser of the World Expo 2025 for goods and services that cost more than a certain standard amount</li> </ul>	
	Raising awareness of the Procurement Code	<ul style="list-style-type: none"> <li>Holding briefings intended for exhibitors, sponsors, and their stakeholders (or creating and distributing explanatory materials) to raise their awareness of the Procurement Code</li> <li>The Organiser of the World Expo 2025 holding briefings intended for suppliers, licensees, pavilion operators, etc. to raise their awareness of the Procurement Code</li> </ul>
	Complying with the Procurement Code	<ul style="list-style-type: none"> <li>Formulating and announcing guidelines on the construction of type-A pavilions (Special Regulation No. 4)</li> <li>Formulating and announcing guidelines on general services (Special Regulation No. 10)</li> <li>Formulating and announcing commercial guidelines (Special Regulation No. 9)</li> </ul>
Information sharing	<ul style="list-style-type: none"> <li>Sharing information about the Expo's sustainability initiatives on Association-owned media, including its official website and official social media accounts</li> </ul>	

### Initiatives for **Peace**

Inclusiveness	Information sharing	<ul style="list-style-type: none"> <li>Devising effective measures to increase the appeal of the Organiser of the World Expo 2025's website and appropriately disclose information in collaboration with the Public Relations Department in order to motivate a wide range of people to participate in events</li> </ul>	
Safe and secure environment	Health	<ul style="list-style-type: none"> <li>Devising measures to protect visitors from the heat, such as the placement of hydration stations</li> <li>Holding a Venue Hygiene Council (formed by developmentally reorganising the Infectious Disease Countermeasure Council) with experts in infectious diseases and other fields to incorporate the results of deliberations into tangible and intangible measures</li> <li>Appropriately providing weather information, encouraging visitors to drink water, distributing sun protection goods, and properly placing medical aid facilities and ambulances</li> </ul>	
	Working environment	Mental care	<ul style="list-style-type: none"> <li>Visualising work progress by utilising the intranet and other means</li> <li>Establishing whistleblowing desks concerning the Code of Sustainable Procurement to build a system for accepting and responding to whistleblowing reports on working environment-related and other violations of the Procurement Code</li> <li>Distributing a map of accessible universal toilets to newly employed staff</li> <li>Disinfecting fixtures placed in the office building and having the staff sanitise their hands as necessary</li> </ul>
			Working styles
			<ul style="list-style-type: none"> <li>Thoroughly managing working hours (including excessive overtime and the percentage of paid leave days taken) and designating a no-overtime day per month for each staff member</li> <li>Encouraging staff to take leave at least one day a month</li> <li>Realising diverse working styles by allowing staggered working hours and remote work</li> </ul>

		Communication	<ul style="list-style-type: none"><li>• Establishing a system that helps detect and report any human rights or labour problems</li><li>• Holding opinion exchange meetings with officers on a regular basis</li><li>• Encouraging open-plan workplace initiatives at departments that can afford to implement such initiatives in order to activate communication within each section</li></ul>
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(Initiatives for **Peace**)

Safe and secure environment	Working environment	Gender	<ul style="list-style-type: none"> <li>• Paying due attention to the gender composition of the Pavilion Exhibitors Screening Committee and other bodies to realise an appropriate gender balance</li> <li>• [Consideration for the designs of uniforms of staff and other parties] Adopting unisex designs while positioning “diversity” as one of the pillars of staff uniform design</li> <li>• Recruiting staff and volunteers regardless of age, gender, nationality, disability, etc.</li> <li>• Issuing an open call for volunteers regardless of age, gender, nationality, disability, etc.</li> </ul>
		Reasonable accommodations concerning religion and culture	<ul style="list-style-type: none"> <li>• Establishing multipurpose spaces for use by visitors and staff to respond to diverse religious customs</li> <li>• Providing medical care, security services, etc. in due consideration of religion, gender, etc.</li> <li>• Providing food and beverages in due consideration of religion and culture</li> </ul>

Initiatives for **Partnership**

Participation	<ul style="list-style-type: none"> <li>• Realising an online virtual Expo so that even those who want to visit the Expo site in person but cannot do so will be able to experience the Expo</li> <li>• Holding briefings on participation in the Expo as an opportunity for the equal participation of all companies and organisations</li> <li>• Sharing information about how to participate in the Expo in all prefectures of Japan and assisting local governments and other parties in planning participation projects with the aim of establishing a system for inviting those parties to display exhibits and participate in the Expo</li> <li>• Holding regular liaison meetings with stakeholders (such as the Ministry of Economy, Trade and Industry [METI], the Osaka Prefectural Government, and the Osaka City Government), Setting up the necessary agenda items to promote ESMS as the secretariat of regular meetings with METI, and the Promotion Headquarters, the Osaka Prefectural Government, and the Osaka City Government</li> <li>• Revising the Universal Design Guidelines with the participation of people with disabilities</li> <li>• Holding collaborative exhibitions through co-creation activities with universities and companies</li> <li>• Building partnerships between producers and companies and between companies through joint projects</li> <li>• Coordinating the conclusion of comprehensive partnership agreements between the Organiser of the World Expo 2025 and other organisations</li> </ul>	
	Provision of opportunities	<ul style="list-style-type: none"> <li>• Enhancing collaboration with citizens, companies, and local governments by approaching corporate participants in the Co-creation Partner programme, holding EXPO PLL Talks, and adopting other measures</li> <li>• Encouraging participation in the TEAM EXPO 2025 programme through local governments and corporate participants in the programme</li> <li>• Encouraging participants in the TEAM EXPO 2025 programme to clarify and explain the relationship between their own activities and the SDGs</li> </ul>
Information sharing	<ul style="list-style-type: none"> <li>• Sharing information about sustainability by holding briefings intended for Sustainability Managers and Staff appointed at each department of the Organiser of the World Expo 2025</li> <li>• Collaborating, co-operating, and exchanging opinions concerning sustainability when promoting events organised by the Organiser of the Expo</li> <li>• Actively utilising the Expo’s logo and mascot for PR goods and licensed goods</li> <li>• Sharing information with “Osaka Kansai Expo 2025 Ambassadors” on a regular basis to encourage them to disseminate Expo-related information at various events and on social media</li> <li>• Sharing information with special supporters to encourage them to disseminate Expo-related information at various events and on social media</li> <li>• Conducting PR and awareness-raising activities to disseminate information related to the SDGs on social media</li> <li>• Sharing information with organizations related to nature conservation</li> </ul>	

(Initiatives for **Partnership**)

Information sharing	Enhancement of understanding	Outside the Organiser of the World Expo 2025	<ul style="list-style-type: none"> <li>• Requesting various organisations to participate in accessibility planning to enable people with disabilities or various needs to enjoy the Expo</li> <li>• Participating in events and seminars held in various prefectures and cities to conduct awareness-raising activities with the aim of enhancing a general understanding of the themes of the Expo</li> <li>• Introducing programmes aimed at raising public awareness of sustainability at commemorative and other events</li> <li>• Holding countdown and other events and sharing information</li> <li>• Offering education programmes to elementary and junior high school students to facilitate their understanding of the Expo and sustainability</li> </ul>
		Inside the Organiser of the World Expo 2025	<ul style="list-style-type: none"> <li>• Providing the staff and volunteers with the opportunity to learn about the concept of diversity and inclusion (D&amp;I), basic support approaches, and support methods during training (group training and e-learning) intended for all of them</li> <li>• Encouraging the staff and volunteers to take action toward the realisation of a sustainable Expo by educating them about the concept of the Expo's sustainability and moves toward sustainability that individual volunteers can make, during training (group training and e-learning) intended for all of them</li> <li>• Taking follow-up action (aligned with project management activities) to check the progress toward major milestones related to sustainability</li> <li>• Educating all staff about the importance of the Expo's sustainability</li> <li>• Supporting the Organiser of the World Expo 2025's efforts to obtain ISO 20121 certification for its ESMS and operate the system by identifying and regularly updating requirements</li> <li>• Formulating, revising, and improving the rules and regulations related to ISO 20121 certification and operation of the ESMS under the jurisdiction of the Organiser of the World Expo 2025</li> <li>• Facilitating the staff's understanding of the rules and regulations related to ISO 20121 certification and operation of the ESMS under the jurisdiction of the Organiser of the World Expo 2025, as well as related laws and ordinances</li> <li>• Building a compliance system</li> </ul>

## Appendix 2: Glossary

### **Business-as-usual (BAU)**

GHG BAU emissions denote GHG emissions that would result if no additional countermeasures were adopted.

### **Direct air capture (DAC)**

Technology for capturing CO<sub>2</sub> directly from gas with a low CO<sub>2</sub> content, such as air

### **Event sustainability management system (ESMS)**

An ESMS is a system for managing the sustainability of events. It is aimed at managing the environmental, economic, and social impacts of event operations to improve the sustainability of each event. ISO 20121, an international standard for ESMS, was established on the occasion of the London 2012 Olympic and Paralympic Games.

### **Electric vehicle (EV)**

An EV is driven by a motor using electric power.

### **Fuel cell vehicle (FCV)**

An FCV is powered by fuel cells. Current commercial FCVs use hydrogen as fuel.

### **Greenhouse Gas Protocol (GHG Protocol)**

The GHG Protocol is a joint initiative of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), operated in cooperation with national governments, industrial organisations, NGOs, and companies. It started developing a GHG emissions calculation method for companies in the late 1990s. In 2001, it published the first edition of the Corporate Standard, which defines the methods of calculating Scope 1 and Scope 2 GHG emissions. Since then, the GHG Protocol has successively established various standards for the calculation and reporting of GHG emissions. These standards have been developed with the participation of government bodies from various countries, as well as global companies, thereby establishing their status as de facto standards.

### **ISO 20121**

An international standard for event sustainability management systems (ESMS), which supports the sustainability of each event by managing not only the environmental impact but also the economic and social impacts of event operations.

### **PDCA cycle**

The PDCA cycle is a method of improving and streamlining operations by following a repeated process of Plan, Do, Check, and Act. It aims at enabling continual development through the repetition of this process.

### **Society 5.0**

Society 5.0 is defined as a human-centred society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace (virtual space on the Internet) and physical (real) space. In Society 5.0, new value created through innovation will eliminate regional, age, gender, and language gaps and enable the provision of products and services finely tailored to diverse individual needs and latent needs. In this society, anyone will be able to enjoy a high quality of life full of vigour.

This vision of a future society that Japan aims to achieve is advocated in the 5th Science and Technology Basic Plan (decided by the Japanese Cabinet on January 22, 2016).

### **Science-based targets (SBTs) for nature**

Science-based targets (SBTs) are defined as measurable, actionable, and time-bound objectives, based on the best available science, that allow actors to align with Earth's limits and societal sustainability goals. SBTs for nature in particular concern the biophysical systems of Earth: biodiversity, water, land, ocean, and climate. The method of setting the SBTs is currently being developed.

### **Aichi Biodiversity Targets**

The Aichi Biodiversity Targets are global targets adopted at the 10th meeting of the Conference of Parties (COP 10) to the Convention on Biological Diversity held in

Nagoya City, Aichi Prefecture, Japan in October 2010.

The conference agreed to take urgent and effective action to stop biodiversity loss by 2020 with the aim of realising a world that coexists with nature by 2050. The Aichi Biodiversity Targets comprise 20 targets that each country is required to achieve.

### **Greenhouse gas (GHG)**

A gas that absorbs infrared rays and causes global warming, such as CO<sub>2</sub>

### **Environmental impact assessment**

An environmental impact assessment is conducted before a large-scale project is implemented. The project owner conducts this kind of assessment to examine, predict, and assess what environmental impact the project will have. The assessment results are publicly disclosed in order to adopt appropriate measures to preserve the surrounding natural environment and create a favourable environment while listening to the opinions of local residents and other people involved.

### **Task Force on Climate-Related Financial Disclosures (TCFD)**

The Financial Stability Board (FSB) established the TCFD at the request of G20 Finance Ministers and Central Bank Governors. In June 2017, the TCFD recommendations were formulated to encourage consistent, comparable, reliable, clear, and efficient financial disclosures with the aim of facilitating appropriate investment decisions on climate-related risks and opportunities.

### **Comprehensive Assessment System for Built Environment Efficiency (CASBEE)**

System for comprehensively assessing and rating the environmental functions of buildings, including measures to reduce their environmental impact, such as the use of energy-efficient and environmentally friendly materials and equipment, and their environmental quality, which encompasses indoor comfortability, biodiversity, and consideration for the surrounding landscape

### **Kunming-Montreal Global Biodiversity Framework (GBF)**

This framework was adopted at the 15th meeting of the Conference of Parties (COP 15) to the Convention on Biological Diversity held in December 2022 as a new set of global targets for 2021 and later (Post-2020 Global Biodiversity Framework), which would replace the Aichi Biodiversity Targets for 2020.

The GBF includes the “30 by 30” target, that is, the target of effectively preserving healthy ecosystems in 30% of Earth’s land and ocean area by 2030 to achieve the goal of stopping and recovering biodiversity loss by 2030. The framework also includes the targets of restoring 30% of deteriorated natural areas and halving invasive species. The GBF also includes a target related to business and mainstreaming, which is to promote impact assessment and information disclosures in business (and encouraging major and multinational companies in particular to do so at the request of the relevant national governments). It has also set a target related to nature-based solutions (NbS): to utilise the coordinating power of nature for disaster management, disaster risk reduction, etc.

### **Renewable energy**

Energy that can be renewed in a relatively short period and will not be exhausted even once used, such as solar power from sunlight and solar heat, hydraulic power, wind power, biomass energy, and thermal energy.

### **Taskforce on Nature-related Financial Disclosures (TNFD)**

This framework for reporting and addressing nature-related risks was established based on an idea submitted at World Economic Forum 2019 (Davos 2019). It is aimed at switching the global flow of funds from negative impacts on nature to a favourable direction for nature.

### **Sustainable Development Goals (SDGs)**

As a successor to the Millennium Development Goals (MDGs) set in 2001, the SDGs were included as part of the 2030 Agenda for Sustainable Development, which was adopted unanimously by the United Nations General Assembly in September

2015. They are global goals aimed at realising a better, more sustainable world by 2030.

The 17 goals and 169 specific targets have been established under the pledge to leave no one behind. The SDGs are universal goals that not only developing countries but also developed countries must work to achieve. Japan has also made an active commitment to achieving them.

### **Stakeholders**

This plan defines stakeholders as individuals or organisations that are influenced by the Organiser of the World Expo 2025 or impacted by the operations of Expo Osaka, Kansai, Japan, or that influence the Organiser of the World Expo 2025 or have an impact on the operations of the Expo.

### **Stakeholder engagement**

Stakeholder engagement denotes an organisational attempt made by a business to fully understand its stakeholders and engage them and their interests in its business activities and decision-making process. This concept encompasses a wide variety of actions, including those taken by the business solely or in cooperation with its stakeholders.

### **Biodiversity**

All organisms, including humans, live in mutual relationships with each other. The concept of biodiversity denotes strong connections between organisms, each of which has its own individuality. It is generally thought that there are three levels of biodiversity: ecosystem diversity, species diversity, and genetic diversity.

### **Convention on Biological Diversity**

This convention is aimed at achieving three goals: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources.

It was adopted at the United Nations Conference on Environment and Development (Earth Summit) held in Rio de Janeiro in 1992.

### **Diversity & inclusion (D&I)**

The concept of D&I denotes accepting diversity among people in terms of race, gender, age, nationality, etc. and creating an inclusive place for them to fully demonstrate their capabilities. This concept requires not only such measures as empowering women and people with disabilities, who have not been given such opportunities in the past, and actively employing people from abroad, but also social and organisational system reforms, including promoting diverse working styles.

### **Decent work**

Rewarding and productive work that deserves to be done by human beings, with human rights, an adequate level of income, and appropriate social protection guaranteed.

### **Nudge**

Approach toward information sharing and mechanisms for driving people into more desirable actions without prohibiting choice or significantly changing economic incentives.

### **Bureau International des Expositions (BIE)**

The BIE is an international organisation established on the signing of the Convention Relating to International Exhibitions in 1928 to supervise the operation of international exhibitions in compliance with the convention. Headquartered in Paris, the BIT had 170 member states as of September 2017.

### **Paris Agreement**

The Paris Agreement is an international agreement on measures to address global warming for the period from 2020, adopted at the 21st yearly session of the Conference of Parties (COP 21) to the United Nations Framework Convention on Climate Change held in Paris in December 2015.

Under this agreement, all parties, including developing countries, promise to work to reduce GHG emissions, which cause global warming. The agreement sets the targets of holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, as well as

achieving net-zero GHG emissions by the late 21st century.

### **Microplastics**

Microplastics denote pieces of waste plastic with a length of 5 mm or less. There is concern that chemicals included or absorbed in them are incorporated into food chains, thereby having an adverse impact on ecosystems.

### **Requirements**

Needs or expectations that are explicitly required, implicitly required as general rules, or obligatory in respect to ESMS.

### **Work-life balance**

This means the balance between work and private life. In Japan, since the enactment of the Act on the Promotion of Women's Active Engagement in Professional Life (Act No. 64 of 2015), the national government and other parties have implemented related initiatives, including evaluating the commitment of companies to promoting a good work-life balance.

## References

### 1. History of meetings of the Sustainability Expert Committee

Meeting (date)	Major agenda items
1st meeting of the Sustainability Expert Committee (December 17, 2021)	<ul style="list-style-type: none"> <li>• Sustainability Policy (draft)</li> <li>• Code of Sustainable Procurement (draft)</li> </ul>
2nd meeting of the Sustainability Expert Committee (January 21, 2022)	<ul style="list-style-type: none"> <li>• Revision of the EXPO 2025 Green Vision (draft) and carbon footprint initiatives (proposal)</li> </ul>
3rd meeting of the Sustainability Expert Committee (February 28, 2022)	<ul style="list-style-type: none"> <li>• Revision of the EXPO 2025 Green Vision (draft)</li> <li>• Code of Sustainable Procurement (draft)</li> <li>• Sustainability Policy</li> </ul>
1st meeting of the Sustainable Procurement Working Group (March 7, 2022)	<ul style="list-style-type: none"> <li>• Code of Sustainable Procurement (draft)</li> <li>• Common standards</li> <li>• Specific standards (for wood and paper)</li> <li>• Interviews regarding specific standards</li> </ul>
2nd meeting of the Sustainable Procurement Working Group (April 11, 2022)	<ul style="list-style-type: none"> <li>• Code of Sustainable Procurement (draft)</li> <li>• Common standards</li> <li>• Specific standards (for wood and paper)</li> </ul>
3rd meeting of the Sustainable Procurement Working Group (May 23, 2022)	<ul style="list-style-type: none"> <li>• Code of Sustainable Procurement (draft)</li> <li>• Results of public commenting</li> </ul>
4th meeting of the Sustainability Expert Committee (June 2, 2022)	<ul style="list-style-type: none"> <li>• Code of Sustainable Procurement (draft) and how to proceed regarding subsequent discussions</li> <li>• Establishment of a decarbonisation working group and a resource circulation study group</li> <li>• Sustainability Plan (tentative name; preliminary draft) and how to proceed regarding subsequent discussions</li> </ul>
4th meeting of the Sustainable Procurement Working Group (July 19, 2022)	<ul style="list-style-type: none"> <li>• In preparation for discussions on a food (agricultural products, livestock products, marine products, and palm oil) procurement code</li> <li>• Interviews regarding specific standards (for livestock products)</li> <li>• Interviews regarding specific standards (for marine products)</li> <li>• Interviews regarding specific standards (for palm oil)</li> </ul>
1st meeting of the Decarbonisation Working Group (July 28, 2022)	<ul style="list-style-type: none"> <li>• Positioning, objectives, and schedule of the Decarbonisation Working Group</li> <li>• Measures adopted by the Japanese government (Expo 2025 Osaka, Kansai, Japan, Action Plan ver. 2)</li> <li>• Use of electricity and gas during the Expo (power supply portfolio)</li> </ul>

Meeting (date)	Major agenda items
5th meeting of the Sustainable Procurement Working Group (August 1, 2022)	<ul style="list-style-type: none"> <li>• Interviews regarding specific standards (for palm oil)</li> <li>• Interviews regarding specific standards (for agricultural products)</li> <li>• Interviews regarding the overall Food Procurement Code</li> <li>• Opinion exchange in preparation for discussions on the Food Procurement Code</li> </ul>
1st meeting of the Resource Circulation Study Group (August 9, 2022)	<ul style="list-style-type: none"> <li>• Direction of resource circulation in the operations of Expo 2025 Osaka, Kansai, Japan (proposal)</li> <li>• Interviews with businesses regarding the proposed direction</li> </ul>
5th meeting of the Sustainability Expert Committee (August 26, 2022)	<ul style="list-style-type: none"> <li>• Specific targets and general indicators for the Action Plan toward Ensuring the Sustainability of Expo 2025 Osaka, Kansai, Japan</li> <li>• Progress of discussions by the relevant groups and subsequent schedules for meetings of the Sustainability Expert Committee</li> </ul>
2nd meeting of the Resource Circulation Study Group (September 27, 2022)	<ul style="list-style-type: none"> <li>• Case studies of resource circulation initiatives</li> </ul>
2nd meeting of the Decarbonisation Working Group (October 4, 2022)	<ul style="list-style-type: none"> <li>• Initiatives to stimulate behavioural changes both inside and outside the venue in order to reduce GHG emissions</li> <li>• Energy management during the Expo period</li> </ul>
6th meeting of the Sustainable Procurement Working Group (October 5, 2022)	<ul style="list-style-type: none"> <li>• Food (agricultural products, livestock products, marine products, and palm oil) Procurement Code</li> <li>• Establishment of a whistleblowing desk (grievance mechanism)</li> </ul>
6th meeting of the Sustainability Expert Committee (November 29, 2022)	<ul style="list-style-type: none"> <li>• Progress of discussions by the relevant groups and subsequent schedules for meetings of the Sustainability Expert Committee</li> <li>• Action Plan for a Sustainable Expo 2025 Osaka, Kansai, Japan (ver. 1) (draft)</li> </ul>
7th meeting of the Sustainable Procurement Working Group (December 2, 2022)	<ul style="list-style-type: none"> <li>• Draft revision of the Code of Sustainable Procurement (with specific standards for agricultural products, livestock products, marine products, and palm oil added)</li> <li>• Response to whistleblowing (grievance mechanism)</li> <li>• Direction of resource circulation measures in the operations of Expo 2025 Osaka, Kansai, Japan (proposal)</li> </ul>
3rd meeting of the Decarbonisation Working Group (December 6, 2022)	<ul style="list-style-type: none"> <li>• Approaches toward GHG emission calculation (boundaries, calculation conditions, etc.)</li> </ul>
4th meeting of the Decarbonisation Working Group (February 1, 2023)	<ul style="list-style-type: none"> <li>• Carbon neutral LPG and flight carbon offset</li> <li>• Case studies of GHG emission boundaries and calculation at the FIFA World Cup</li> <li>• Revision of the EXPO 2025 Green Vision (draft)</li> </ul>

Meeting (date)	Major agenda items
8th meeting of the Sustainable Procurement Working Group (February 10, 2023)	<ul style="list-style-type: none"> <li>• Draft revision of the Code of Sustainable Procurement (with specific standards for agricultural products, livestock products, marine products, and palm oil added)</li> <li>• Response to whistleblowing (grievance mechanism)</li> <li>• Other (establishment of a resource circulation working group)</li> </ul>
1st meeting of the Resource Circulation Working Group (February 20, 2023)	<ul style="list-style-type: none"> <li>• Establishment of the Resource Circulation Working Group</li> <li>• Expo 2025 Osaka, Kansai, Japan, and resource circulation</li> <li>• EXPO 2025 Green Vision</li> <li>• Standards for resource circulation in the operations of Expo 2025 Osaka, Kansai, Japan</li> <li>• Food loss reduction initiatives expected at Expo 2025 Osaka, Kansai, Japan</li> </ul>
7th meeting of the Sustainability Expert Committee (March 3, 2023)	<ul style="list-style-type: none"> <li>• Revision of the EXPO 2025 Green Vision (2023 version) (draft)</li> <li>• Revision of the Code of Sustainable Procurement</li> <li>• Action Plan for a Sustainable Expo 2025 Osaka, Kansai, Japan (ver. 1) (draft)</li> </ul>