

“CITIZENS”

PRACTICING AND IMPLEMENTING INTEGRATED IMPROVEMENTS ON ENVIRONMENT, ECONOMY AND SOCIETY IN LOCAL COMMUNITIES AND LIFESTYLES

Our lifestyles are sustained by the natural blessings (ecosystem services) provided by forests, the countryside, rivers and the sea. To build a sustainable society nationwide, each local community must be sustainable. The Sixth Basic Environment Plan has positioned one of its key strategies as a way to practice and implement Integrated Improvements on Environment, Economy and Society by linking the creation of sustainable regions that utilize local resources to the resolution of local economic and social issues, with a view to focusing on regions, which are the foundation of local communities.

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Chapter 3 introduces actions that leverage the environment to connect local communities and the lives of their residents to affluence and well-being.

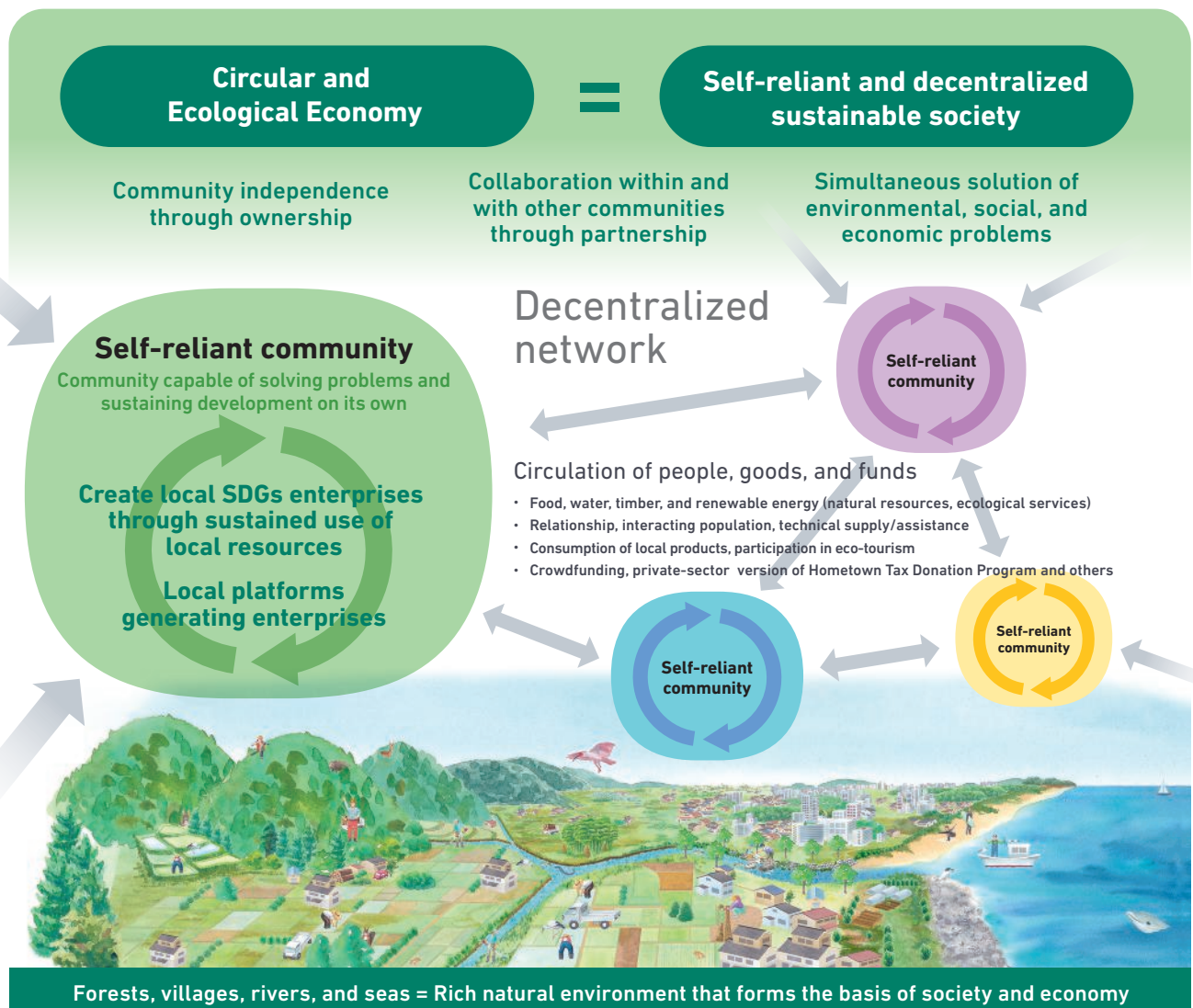
1 PRACTICE AND IMPLEMENTATION OF THE CIRCULAR AND ECOLOGICAL ECONOMY

Circular and Ecological Economy

The Circular and Ecological Economy is a concept of “self-reliant and decentralized society” where each local community resolves its own issues by continuously creating enterprises (local SDGs enterprises) that utilize local resources sustainably to improve the environment, economy, and society, while making best use of its unique characteristics to network with other communities and help each other. This concept aims to create sustainable local communities by promoting decarbonization, resource circulation, and nature-positive actions while simultaneously resolving local economic and social

issues through sustainable utilization of local resources. For example, the natural blessings of renewable energy and biomass from Satoyama landscapes solve social issues such as improving the region’s disaster prevention capabilities and strengthening the region’s economic cycle improve the local employment and income. As the Circular and Ecological Economy represents an approach to resolve local environmental, social, and economic issues in an integrated manner primarily based on the independence of the local communities and in partnership with others, it may also be called local SDGs.

Concept of Circular and Ecological Economy



Example
case**“Let’s Create Never-Ending Clothes.” Initiative to eco-friendly activities for a good life, moving forward together with customers (AOYAMA TRADING Co., Ltd.)**

In response to mass production and mass disposal, Aoyama Trading has evolved its initiatives to collect unwanted clothing and resource circulation, which began in 1998, and has now installed “WEAR SHiFT” recycling boxes in stores nationwide. The company is promoting eco-friendly activities together with its customers and is also challenging itself with clothing-to-clothing Closed-loop Recycling. Additionally, the company uses a portion of the collected clothing to produce recycled blankets for disaster relief, donating them to municipalities affected by large-scale disasters. It also takes action to the creation of “AOYAMA Forests” through donations to forest conservation activities proportional to the volume of clothing collected.



“WEAR SHiFT” recycling boxes installation in stores

Source: AOYAMA TRADING Co., Ltd.

Improving local well-being through the conservation and utilization of a good environment

In order to build a sustainable society and pass it on to the next generation, it is important to aim for a good environment and to create concrete benefits for the region, such as improving local well-being and attractiveness, and realizing community revitalization through sustainable tourism, by having people interact with that good environment and use it in a sustainable way. To realize this, we are addressing to conserve, restore, and create the region’s unique natural and cultural assets, such as

its abundant waterfronts, starry skies, and soundscapes, while also promoting their sustainable use. We are also building a model for integrated conservation of the watershed that connects regions working to create a good environment, from the forests and rivers that serve as water sources to the sea, and creating Satoumi, which aims to create a virtuous cycle of promoting the conservation, restoration, and creation of seagrass meadows and tidal flats, and utilizing them as local resources.

Column

Activities to create a good environment

In parallel with regulatory measures, the Ministry of the Environment has been working to foster understanding of the maintenance and restoration of healthy water environments through projects such as the “Selected 100 Exquisite and Well-Conserved Waters,” “100 selections of famous clear water of Heisei,” and “100 Soundscapes of Japan to Keep,” as well as to conserve a “good environment” such as the nature and culture that can be experienced with all five senses, such as abundant waterfronts, starry skies, and soundscapes that are unique to each

region. A “good environment” also serves as a key element in regional revitalization, promoting indigenous industries such as buckwheat noodles, wasabi (Japanese horseradish), and Japanese sake making that utilize clean water, as well as tourism.

However, in recent years, there are also scattered instances of regions where a “good environment” is deteriorating, or where the continuation of conservation activities for a good environment is becoming difficult due to factors such as insufficient funding and a shortage of personnel.



In this context, it is expected that not only will the conservation of a "good environment" in the region be achieved, but also that its active regeneration and creation, along with its sustainable utilization, will contribute to resolving regional issues. This is anticipated to enhance people's well-being, increase the region's appeal, and realize community revitalization.

**FY 2024 model project for promoting activities to create a good environment
(Bandai Town, Fukushima Prefecture)**

Source: Bandai Town

2 LIFESTYLE SHIFT

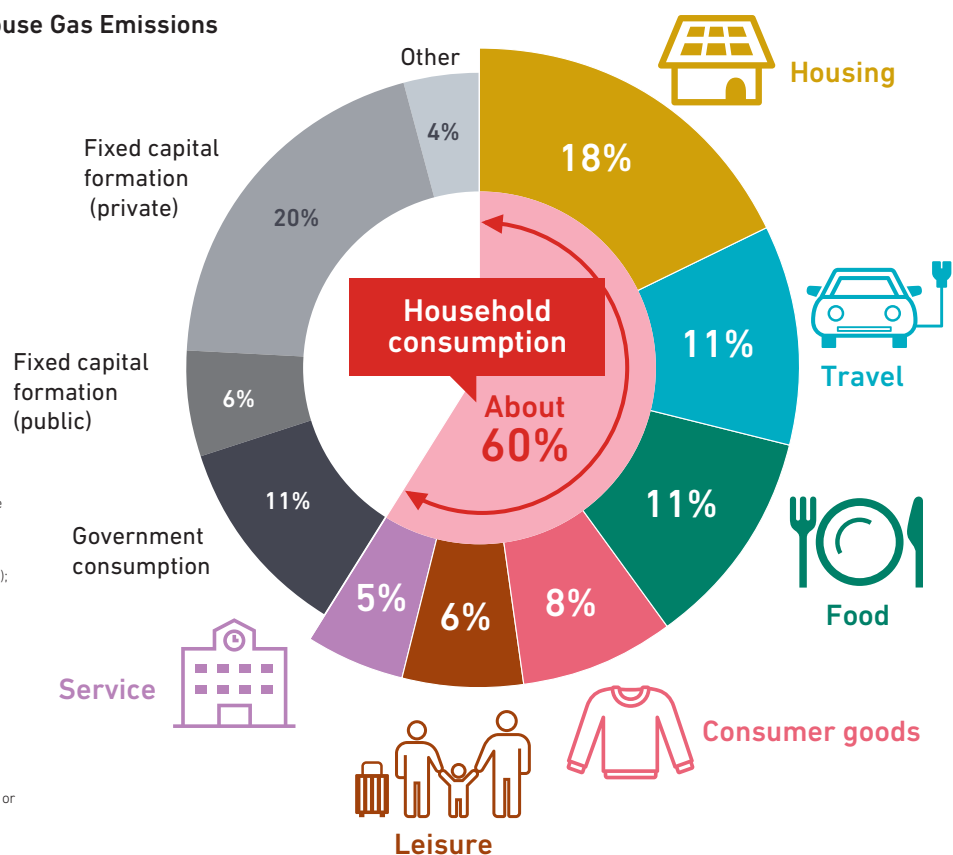
Japan has set a target of achieving net-zero greenhouse gas emissions by 2050, however, reports indicate that approximately 60% of Japan's greenhouse gas emissions, when measured on a consumption basis, originate from households. This underscores the necessity for each and every one of us to take action to reduce greenhouse gas emissions. To achieve this, we need to reduce greenhouse gas emissions and waste from the dimensions of "housing," "transportation," "food," and "fashion,"

and change our lifestyles to resource circulation through the 3R + Renewable and value natural resources. Furthermore, we must all aim to take action starting with our immediate surroundings as our personal challenge. Simultaneously, we need to realize the transition to a sustainable society by fostering interconnected societal and organizational transformation through the behavioral changes of each individual.

Japan's Life cycle Greenhouse Gas Emissions on a consumption basis

Source: Estimated by National Institute for Environmental Studies and Institute for Global Environmental Strategies (IGES) based on: Keisuke Nansai, "Embodied Energy and Emission Intensity Data for Japan Using Input-Output Tables (3EID)" (National Institute for Environmental Studies, 2019); Nansai et al. Resources, Conservation & Recycling 152 104525 (2020); and Ministry of Internal Affairs and Communications, "Input-output Table 2015"

Note: Each item represents the calculated total amount of greenhouse gas emissions (carbon footprint) throughout the life cycle (i.e., resource extraction, material processing, product manufacturing, distribution, retail, use, disposal) of each consumption/fixed capital formation product or service in Japan (numbers do not match direct emissions based on domestic production).

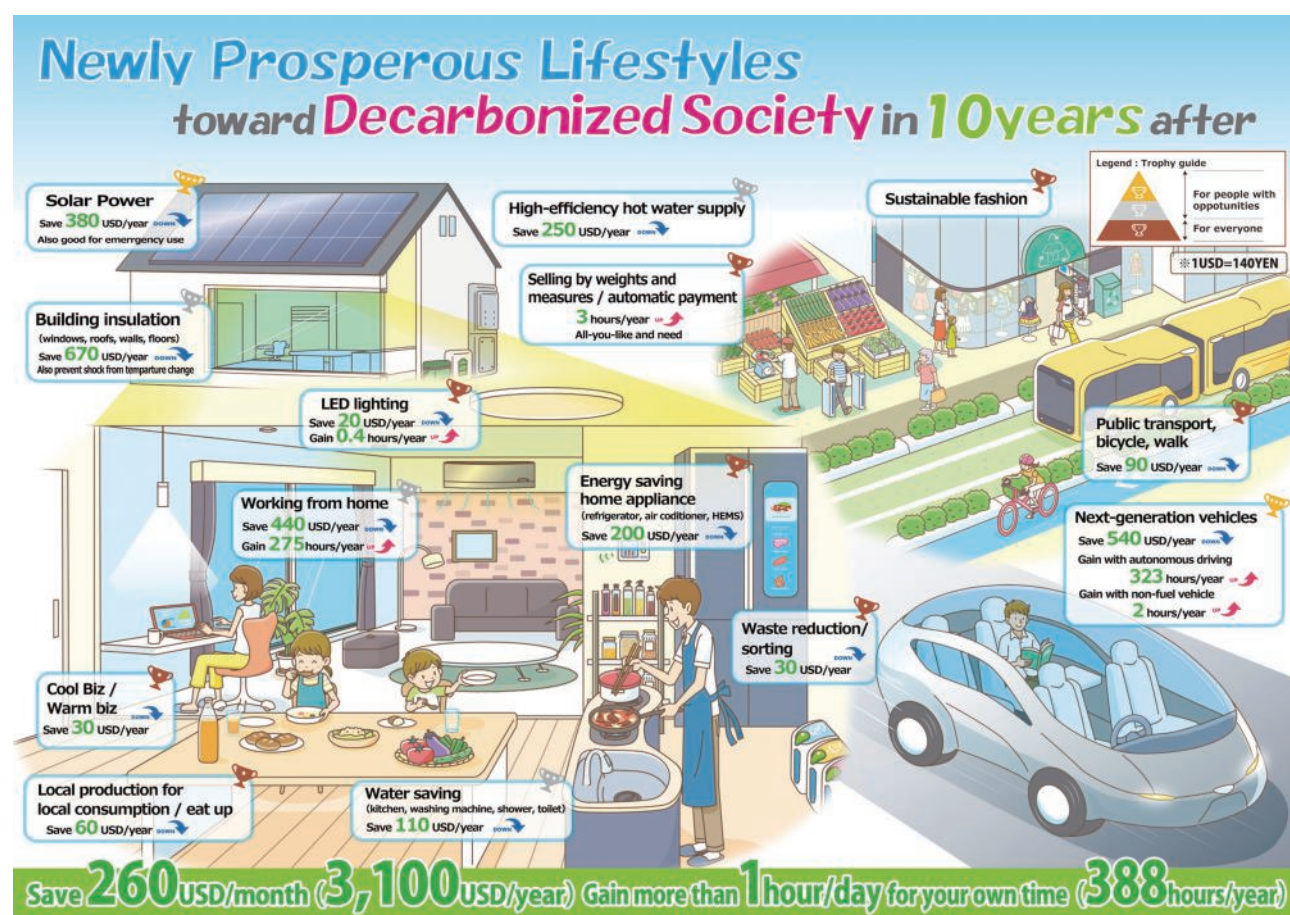


“DECOKATSU”

(National movement for Newly Prosperous Lifestyles toward Decarbonized Society)

To achieve net-zero greenhouse gas emissions by 2050, it is necessary to significantly reduce CO₂ emissions also in the field of lifestyle. Therefore, in order to encourage changes in the behavior of Japanese citizens and consumers and a lifestyle shift, the Ministry of the Environment launched a new national movement (National movement for Newly Prosperous Lifestyles toward Decarbonized Society) in October 2022 and decided on the nickname “DECOKATSU” in July 2023.

Under the “DECOKATSU,” the Ministry of the Environment has proposed “Newly Prosperous Lifestyles toward Decarbonized Society in 10 years after,” an overall vision of the citizen’s future lifestyles that encompasses general aspects of life, including how they dress, eat, live, work, move, and purchase and is implementing initiatives to create newly prosperous lifestyles toward decarbonized society for the citizens in cooperation with local governments, companies, associations, and other entities.



Proposed Features of Newly Prosperous Lifestyles

Source: Ministry of the Environment

Additionally, in cooperation with local governments, companies, associations, and other entities participating in the public-private partnership council (DECOKATSU Support Team) established at the same time as the launch of “DECOKATSU,” the Ministry of the Environment is promoting lifestyle shifts while encouraging new consumption and

behaviors and creating demand for products and services both domestically and internationally, thereby supporting the creation of a prosperous life for the citizens. In 2024, we established a subsidy program for collaborative social implementation projects that provide mechanisms to structurally resolve demand-side bottlenecks for the citizens.

As one of the specific actions of DECOKATSU, we are encouraging the creation of enriching lifestyles for the Japanese citizens by disseminating

information registered by local governments, companies, associations and other entities on the website under the following four approaches.

- 1 — Encouraging diverse and comfortable ways of working and lifestyles taking advantage of digital technology (e.g., telework, relocation to rural regions, and workation)
- 2 — Proposing and providing products and services that support New and Prosperous Lifestyles toward Decarbonization
- 3 — Encouraging behavior change through incentives and effective dissemination of information (awareness, nudge. Including dissemination from consumers)
- 4 — Proposing and supporting lifestyles particular to local communities (suited to the climate, culture and other features of each community)

(The number of information items published on the website as of March 2025: [1] information related to digitalization: 62 items; [2] information related to products/services: 266 items; [3] information related to incentives: 167 items; and [4] information related to local communities: 48 items; total: 543 items (some items are related to two or more categories))

Moreover, as initiatives to enrich and upgrade the citizen's lifestyles, the Ministry of the Environment has decided on a total of 13 actions, including [1] four actions "to take first" related to

DE-ECO-Katsu, [2] three actions to "unconsciously reduce CO₂," and [3] six actions to "implement by all of us," and is calling for each and every individual to practice DECOKATSU in everyday life.

3 PROTECTING HUMAN LIFE AND THE ENVIRONMENT

Countermeasures against PFAS and other chemical substances

Among organofluorine compounds, perfluoroalkyl substances and polyfluoroalkyl substances are collectively referred to as "PFAS," with over 10,000 types of substances identified. Among PFAS, PFOS (perfluorooctane sulfonic acid), PFOA (perfluorooctanoic acid), and PFHxS (perfluorohexane sulfonic acid) are subject to elimination under the Stockholm Convention on Persistent Organic Pollutants (POPs Convention). As a result, they have been designated as Class I Specified Chemical Substances under the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Act No. 117 of 1973), and their manufacture, import, etc. are prohibited in principle. Additionally, regarding Aqueous Film Forming Foam (AFFF) containing PFOS, etc., manufactured or imported in the past, we are advancing efforts toward replacement and disposal in cooperation with relevant ministries, agencies,

and organizations. We also conduct surveys every four years on the nationwide inventory of AFFF containing PFOS, etc. According to the survey results for FY2024, compared to the previous survey in FY2020, AFFF containing PFOS decreased by approximately 45%, and the PFOS content within AFFF decreased by approximately 36%.

Regarding PFOS and PFOA in the environment, results from continuous monitoring conducted since 2009 as part of the Environmental Survey and Monitoring of Chemicals indicate statistically significant decreasing trends in water quality (public water bodies such as rivers), sediment, and the atmosphere. Rivers, groundwater, etc. were designated as items requiring monitoring in 2020, and local governments are working to expand the number of measurement points by conducting monitoring according to local conditions. At measurement points exceeding the guideline

values (provisional) set in 2020, local governments have implemented measures to prevent drinking water intake based on the “Guidance on How to Respond to PFOS and PFOA.” In November 2024, this guidance was revised to incorporate new content, such as conducting surveys considering the presence of water sources for public water supply and drinking wells. In addition, the Ministry of the Environment will also begin demonstrating countermeasure technologies that effectively and efficiently reduce the concentrations of PFOS and PFOA in the environment.

Furthermore, since reducing health risks to the public is paramount, preventing intake through drinking water is the top priority. Based on documents such as the “Risk Assessment Report Per- and Poly-fluoroalkyl Substances (PFAS) (Chemicals and Contaminants)” compiled by the Food Safety Commission of Japan of the Cabinet Office in June

2024, the Ministry of the Environment is advancing discussions on the handling of water quality target values and related matters. In addition, from May to September 2024, the Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of the Environment jointly conducted “Nationwide survey on PFOS and PFOA in water supply,” to grasp the detection status in water supply systems across the country, and published the compiled results in November and December. Utilizing this survey result, the Ministry of the Environment will proceed with measures, including raising Water Quality Standards based on the Water Supply Act (Act No. 177 of 1957). Additionally, the Ministry of Land, Infrastructure, Transport and Tourism compiled and published in November the primary measures implemented by water suppliers and other entities when tap water exceeded provisional target values.

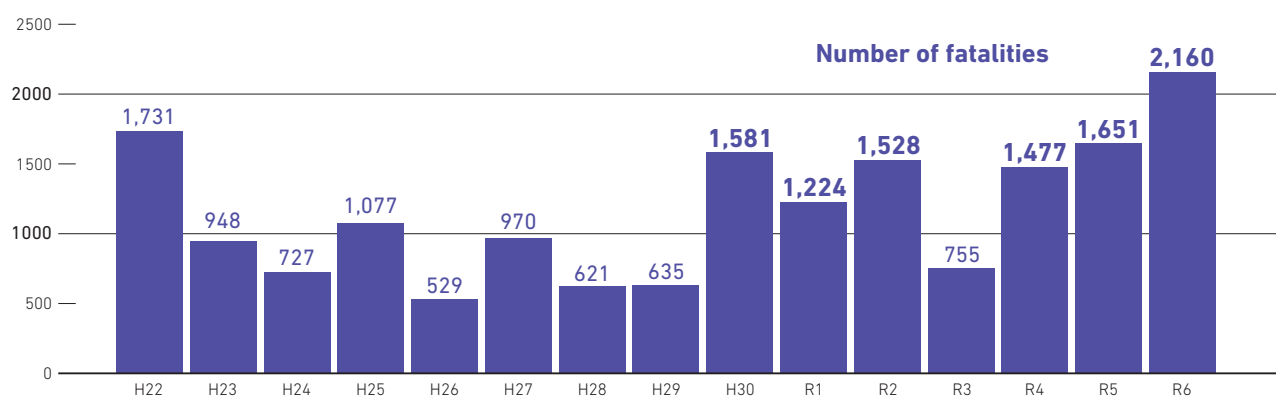
Countermeasures against heat illness

Recent years have seen a succession of “hot summers.” The summer of 2024 featured many days with high temperatures nationwide. Specifically, the average temperatures from June to August were the highest on record for Western Japan and Okinawa/Amami, and tied for the highest on record for Eastern Japan, matching the summer of 2023. Amidst these

conditions, the number of fatalities due to heat illness and emergency transports has also increased.

Furthermore, in the future, the risk of extreme heat events is expected to increase due to the impacts of climate change, making countermeasures against heat illness an urgent issue in Japan.

Annual trends in fatalities due to heat illness



Source: Ministry of Health, Labour and Welfare Vital Statistics (<https://www.mhlw.go.jp/toukei/list/81-1.html>) Published on September 16, 2025

The Ministry of the Environment implements the Special Heat Stroke Alert and Heat Stroke Alert systems, provides heat index information, supports the expansion of designated heatwave evacuation

facilities (Cooling Shelters) designated by municipalities, and conducts various outreach and awareness campaigns on heat illness prevention.