

[Policy Recommendation]

Institutional Design for Responding to Health Crises in the Era of Climate Change

— Proposal for the 2025 Basic Policy on Economic and Fiscal Management and Reform to Integrate Preparedness for Both Upstream and Downstream Impacts of “Disaster-Level Heat” —

Climate change and shifts in the natural environment are having severe impacts on public health and social stability. Between February and March 2025, a series of forest fires—including a major wildfire in Ōfunato City, Iwate Prefecture—posed serious threats to local communities and public safety. According to data from the Fire and Disaster Management Agency (FDMA) of the Ministry of Internal Affairs and Communications and vital statistics from the Ministry of Health, Labour and Welfare (MHLW), the heatwave of 2024 resulted in 97,578 emergency transports due to heatstroke—the highest number since records began—and 2,033 heat-related deaths. These figures underscore the direct threat that extreme weather poses to human life.

Moreover, recent studies suggest that actual heat-related deaths may be up to seven times higher than official statistics, indicating that the visible numbers are merely the tip of the iceberg. Many “hidden deaths” caused by the worsening of chronic conditions such as cardiovascular disease, respiratory illness, or diabetes under extreme heat go unrecognized as heat-related and are not captured in official data. The physiological burden of high temperatures—particularly on thermoregulation and circulatory function—is especially severe among older adults, who face rising health risks not always reflected in statistics. This, in turn, places sustained pressure on healthcare delivery systems.

These events can no longer be treated as exceptional occurrences; rather, they represent a “new normal” for which daily preparedness is essential. The health impacts of climate change are closely linked to disaster response, urban infrastructure, regional healthcare systems, and even fiscal sustainability. As such, they must be recognized not simply as environmental phenomena, but as a “national structural challenge” that threatens the very foundations of Japan’s economy and society.

The “Basic Policy on Economic and Fiscal Management and Reform (so-called ‘Honebuto no Hōshin’)” is a central policy document that outlines the Government’s top priorities and the direction for budget formulation for the following fiscal year. It is developed annually around June through the Council on Economic and Fiscal Policy, chaired by the Prime Minister. The 2024 edition set forth short-term goals of “a complete break from deflation and a transition to a new, growth-oriented economic stage,” while also outlining medium- to long-term objectives such as “overcoming the declining birthrate and aging population” and “building a sustainable economy and society in which people can feel genuine prosperity and happiness.”

Prime Minister Ishiba has also emphasized the importance of creating a society where each person can pursue their dreams and goals and live in safety and security, toward realizing a “joyful Japan.” Achieving such comprehensive goals requires a holistic policy integration of “health,” “environment,” and “economy.” The Basic Policy should serve as the adhesive that connects cross-sectoral policies, and incorporating the planetary health perspective will be key to enhancing policy coherence and ensuring long-term cost-effectiveness.

Japan’s healthcare and long-term care systems have long been highly regarded internationally. However, given the rapid progression of the aging population and the increasing burden of social security expenditures, a fundamental transformation premised on sustainability is essential. In particular, because healthcare and long-term care are deeply rooted in local communities, it is crucial to develop integrated approaches that align with Green Transformation (GX), regional environmental initiatives, and disaster preparedness measures.

The Government currently emphasizes the promotion of “disaster prevention, mitigation, and national resilience” to protect the lives, livelihoods, and properties of citizens against the increasing intensity and frequency of climate-related disasters. As these climate-induced disaster risks increasingly impact the healthcare and long-term care

sectors, these systems must function at the intersection of disaster risk reduction, energy policy, and health policy, serving as pillars of societal resilience.

For example, policy coordination beyond conventional boundaries is needed in areas such as the introduction of renewable energy, the utilization of blue and green infrastructure, linkages with the circular economy, enhancement of climate resilience, and integration with community-based integrated care. Furthermore, issues such as PFAS contamination—linking environmental pollution and health—are emerging as key policy challenges, underscoring the urgent need to strengthen preventive and responsive mechanisms within the health sector.

As Japan advances its GX strategy, it is vital to reacknowledge the strategic value of healthcare and long-term care as critical social infrastructure, and to formulate policies that consider their ripple effects from local communities to the national level.

Against this backdrop, the Planetary Health Project of the Health and Global Policy Institute (HGPI) believes that the “planetary health” perspective—which views human health and the global environment as inseparable—is essential to building a sustainable and vibrant economic society for the future. Planetary health is not merely a health concept; it has the potential to serve as a core framework for policy design that integrates multiple policy areas and simultaneously addresses fiscal sustainability, population decline, resilience, and growth strategies.

This policy proposal outlines recommendations to reflect the concept of planetary health in the “Basic Policy on Economic and Fiscal Management and Reform 2025 (Honebuto Policy),” based on three key perspectives: (1) integration into overall policy planning, (2) strengthening local resilience, and (3) advancing international cooperation and healthcare system reform.

Perspective 1: Establishing a Policy Framework That Incorporates Planetary Health

- 1. Explicitly Incorporating the Planetary Health Perspective into Cross-Sectoral Policies:** Based on the recognition that human health is closely linked to the health of the environment, climate, and ecosystems, the planetary health perspective should be strategically and horizontally integrated into environmental, health, and economic policies.
- 2. Maximizing Policy Impact Through the Integration of Existing Initiatives:** Elements of planetary health that are already embedded in existing policy frameworks—such as the Sixth Basic Environment Plan, the SDGs Implementation Guiding Principles, the Fundamental Plan for Establishing a Sound Material-Cycle Society, and the Healthcare Policy—should be organically linked and coordinated to establish a system that generates synergistic effects through integrated policy implementation.
- 3. Clearly Positioning Planetary Health in the Basic Policy on Economic and Fiscal Management and Reform 2025:** As GX-related policy frameworks, including the “GX2040 Vision” and the “Growth-Oriented Carbon Pricing Concept,” continue to have a profound impact on Japan’s industrial structure, it is essential to ensure that the health and welfare sectors are not sidelined. The Basic Policy should place the planetary health concept at its foundation and present a comprehensive vision that integrates growth and social well-being.

[Background]

The Basic Policy on Economic and Fiscal Management and Reform (commonly known as the “Basic Policy”) has consistently emphasized efforts to build a sustainable economic and social system. The Basic Policy 2024 added a new perspective: the realization of a sustainable society where people can feel “prosperity and happiness.” Under these goals, raising public awareness of health has been highlighted as a critical component toward realizing a “high well-being society where everyone can thrive.” To achieve this, it is essential to proactively integrate the perspective of “Planetary Health”—the interconnectedness of human and planetary health—alongside international climate change frameworks and efforts to combat environmental pollution both in Japan and globally.

The Basic Policy 2024 specifically mentioned promoting countermeasures against pollen allergies, heatstroke, and zoonotic diseases, as well as enhancing scientific knowledge and necessary responses regarding PFAS. These are all deeply linked to the perspective of planetary health—the reciprocal relationship between the health of the planet

and human beings. Moving forward, the interrelationship between the environment, climate, ecosystems, and human health will become increasingly significant.

Indeed, the perspective of planetary health has already been reflected in major environmental policy documents, including the Ministry of the Environment’s “Sixth Basic Environment Plan” (2024), the revised “SDGs Implementation Guiding Principles” (December 2023), and the “Fifth Basic Plan for Establishing a Sound Material-Cycle Society.” Similarly, the “Third Phase of the Healthcare Policy,” formulated in 2025, incorporates this perspective. By organically linking these plans and policy frameworks, it is possible to create synergistic effects through integrated policy implementation.

On the other hand, the “GX Implementation Council,” which has gained attention as a national strategy for achieving both economic growth and decarbonization, has been formulating policies primarily in the areas of industry, energy, and finance. However, there are growing concerns that key sectors of social infrastructure—such as healthcare, long-term care, and public health—may be left behind. In order to realize carbon neutrality by 2050, the decarbonization and strengthening of resilience in healthcare and welfare infrastructure must also be recognized as critical issues.

To address this, policy resources such as the carbon pricing system based on the GX Promotion Act and GX Economic Transition Bonds should be strategically allocated to these sectors. For these policies and initiatives to be effectively and cohesively advanced, it is essential to invigorate discussions on the healthcare, medical, and long-term care sectors within frameworks such as the “GX2040 Vision” and the “Growth-Oriented Carbon Pricing Concept.” Additionally, the perspective of “Planetary Health” must be explicitly positioned in the “Basic Policy on Economic and Fiscal Management and Reform 2025 (Basic Policy 2025)” to ensure strategic policy integration.

Perspective 2: Evolving “Disaster Preparedness to Protect Lives” into Regional Resilience Policies Addressing Health and Climate Change

1. **Redefining climate-related disasters such as heatstroke as core issues in disaster countermeasures:** Climate-related disasters with a slow onset, such as heatstroke—which is now often referred to as a “disaster-level” threat—should be formally recognized as part of the disaster risk spectrum. These events must be positioned as targets of disaster countermeasures, with strengthened efforts in prevention, early warning systems, and medical response frameworks.
2. **Prioritized support for vulnerable populations:** In light of Japan’s rapidly aging society and regional disparities, it is essential to enhance disaster and heatstroke countermeasures for high-risk groups. A policy framework must be established to support resilience-building at the local level with a focus on vulnerable communities.
3. **Integrating health and healthcare system resilience into disaster strategy:** To ensure both continuity of medical services during disasters and proactive health risk management during normal times, resilience improvements in medical and welfare infrastructure should be made a central pillar of disaster policy. In particular, with extreme heat becoming a daily threat in urban areas, cross-sectoral coordination within local governments must be institutionalized. Furthermore, initiatives such as improving evacuation shelter environments, establishing decentralized stockpiling systems, deploying trailer-type mobile medical units, and developing health and welfare response teams must be urgently strengthened from the perspective of Planetary Health. These efforts will form the foundation of climate-adapted evacuation and support systems to address future risks from heatwaves, floods, and infectious disease outbreaks.

[Background]

At the Third United Nations World Conference on Disaster Risk Reduction held in March 2015, the “Sendai Framework for Disaster Risk Reduction 2015–2030” was adopted, advancing international efforts to strengthen disaster preparedness systems. The framework, alongside the Paris Agreement’s adaptation to climate change and the Sustainable Development Goals (SDGs), shares the goal of building resilient and sustainable societies capable of responding to climate change. It emphasizes the importance of coordinated implementation among these international frameworks.

From the perspective of Planetary Health, it is essential to address not only acute disasters such as earthquakes,

typhoons, and heavy rains, but also chronic disasters caused by climate change—such as heat-related mortality—and to strengthen the resilience of healthcare systems and supply chains that may be compromised as a result. The Japanese government is currently promoting initiatives for “disaster prevention, mitigation, and national resilience,” in preparation for large-scale disasters such as the Nankai Trough and Tokyo inland earthquakes. In this context, ensuring the continuity of medical services, reinforcing the disaster resilience of medical supply chains, and developing diverse methods of medical service delivery—such as medical containers and mobile clinics—are being actively pursued. These efforts should be positioned as part of an integrated Planetary Health policy approach that addresses both climate change and its health impacts simultaneously.

Japan’s “Climate Change Adaptation Plan” also emphasizes the need for a “climate change × disaster risk reduction” perspective. This means all stakeholders must advance climate and disaster risk reduction measures comprehensively across various sectors. The Sendai Framework in particular highlights how communities and small- and medium-sized enterprises are increasingly exposed to repeated small-scale and slow-onset disasters, exacerbating economic, social, and health-related consequences.

In recent years in Japan, the risk of climate-related disasters—particularly heatstroke—has been markedly increasing. During the heatwave of 2024, there were 97,578 emergency hospitalizations and 2,033 deaths reported. The number of deaths from heatstroke far exceeded those caused by earthquakes, floods, and landslides in the same year, underscoring that climate-induced health risks have become a critically important issue within the field of disaster management. With the progression of population aging, such risks are expected to grow even more severe. By 2040, it is projected that people aged 65 and over will comprise 35.3% of the total population, and in Tokyo, the number of heatstroke cases is expected to rise by approximately 3.6 times. Addressing heatstroke—now referred to as a “disaster-level” threat—requires a dual approach: both as a public health measure and as part of disaster response.

Against this backdrop, Japan launched the full-scale operation of the “Heatstroke Alert” system in 2021 and formulated the “National Action Plan for Heatstroke Countermeasures” in 2023, indicating gradual progress in addressing climate-related disasters. However, current discussions regarding the establishment of a national disaster management agency have made only limited reference to disaster risks stemming from climate change—especially health impacts such as heatstroke. Meanwhile, the foundational principles of disaster management emphasize the importance of preventive and mitigative measures and proactive preparedness, often referred to as “pre-disaster prevention.”

From this perspective, health risks such as heatstroke, which are expected to rise with climate change, should be addressed as part of a broader focus on climate-related deaths. It is anticipated that such risks will increasingly be treated as central concerns in pre-disaster strategies moving forward. To that end, Japan must explicitly integrate the perspective of climate change and health into overall disaster policy and actively promote inclusive disaster risk reduction and adaptation policies—particularly those targeting vulnerable populations.

In practice, major metropolitan areas have begun incorporating perspectives that account for the health impacts of climate change into their long-term urban strategies. For example, in one city’s long-term plan, citizen voices have called for the realization of a “healthy city based on planetary health” and for action to address urban heat issues and associated health risks. These priorities have led to discussions on enhancing heatwave countermeasures and decarbonizing medical facilities. In this context, several cities in Europe and North America have introduced specialized roles such as “Chief Heat Officer (CHO)” to coordinate responses to extreme heat. These roles enable effective cross-departmental responses within municipalities.

Similarly, in Japan, to ensure the continuity of medical service provision during disasters while managing health risks during normal times, there is a need to strengthen systems that integrate the resilience of healthcare, medical, long-term care, and welfare infrastructures into disaster policy.

Perspective 3: Decarbonizing and Strengthening Healthcare Systems through International Cooperation and GX

1. **Accelerate domestic measures:** Building on our participation in ATACH, Japan should promptly develop and implement domestic policies that formally commit to net-zero emissions and concretely reduce emissions in the health sector—laying the foundation for a resilient, low-carbon, and sustainable healthcare system.
2. **Strengthen international collaboration:** As a member of ATACH, Japan should actively share expertise and provide technical cooperation on climate and health issues, positioning itself as a leader in initiatives across the Asia-Pacific region and beyond.
3. **Promote GX-funded innovation in healthcare infrastructure:** Faced with the challenge that 70% of hospitals are operating at a deficit and nearing rebuild, we must intensify efforts to modernize medical and long-term care facilities—upgrading structures, equipment, and energy systems. This includes leveraging existing programs such as Resilience-Enhanced ZEB (Zero-Energy Building) pilot projects, Subsidies for Emissions Reduction Measures, and expanding strategic use of GX budgets to reduce environmental impact while enhancing service efficiency.

[Background]

On 28 May 2024, at the 77th World Health Assembly (WHA), the Government of Japan formally announced its participation in the Alliance for Transformative Action on Climate and Health (ATACH), declaring its commitment to building both a climate-resilient health system and a sustainable low-carbon healthcare system. Moreover, the Basic Policy on Economic and Fiscal Management and Reform 2024 explicitly references “promoting ATACH initiatives aimed at building a climate-resilient and low-carbon sustainable health system,” thereby embedding this agenda in government policy. However, nearly a year after Japan’s ATACH adoption, concrete domestic measures and international collaborative efforts aimed at achieving these goals have not been sufficiently advanced.

As the circular economy and decarbonization unfold across various industries, facility retrofits to reduce environmental impact are accelerating. The healthcare, medical, and long-term care sectors must adapt accordingly, establishing efficient and resilient service delivery systems suited to the times. In particular, responding to increasing health impacts from climate change and environmental pollution requires strengthening decarbonization and resilience in community care and medical infrastructure—coordinated closely with urban infrastructure and public spaces.

However, due to inflationary pressures, the financial viability of healthcare, long-term care, and welfare facilities is being severely undermined: approximately 60 % of hospitals are operating at a loss in ordinary profits, and around 70 % are in the red in medical practice profits. In such circumstances, it is very difficult for hospitals to voluntarily invest in measures to reduce their environmental footprint, highlighting the urgent need for public support. Some forward-thinking municipalities and institutions have begun leveraging GX-related programs—such as the “Resilience-Enhanced ZEB Demonstration Project” and “Subsidies for Emission Reduction Measures”—to retrofit their facilities.

To accelerate facility upgrades, equipment renewal, and energy transition in the health, medical, and long-term care sectors—while achieving both reduced environmental burden and service efficiency—policy support should be strengthened, including expanded use of GX budget. Furthermore, alongside broader systemic implementation, clinics, hospitals, and care facilities should integrate Nature-based Solutions (NbS) and quantitative design guidelines—such as the “3-30-300 Rule” for greenery visibility, canopy cover, and park access—into their urban planning. These measures are expected to help establish “climate-adaptive healthcare hubs” capable of maintaining their operational functions during heatwaves, heavy rains, and other disasters.

In addition, Japan’s healthcare facilities are facing widespread aging: around one-quarter of general hospitals nationwide have exceeded their statutory useful life (approximately 30–50 years). Facilities built during the 1960s–1980s often exhibit issues such as leaks, cracks, and inadequate seismic resilience—raising concerns over the safety and continuity of health service provision. Even in Tokyo, roughly half of hospitals are running deficits and struggling to fund reconstruction, while rural private hospitals are nearly unable to rebuild independently. Public hospitals also face closures due to fiscal constraints, and recent surges in construction materials and labor costs have further exacerbated these challenges.

In addition, urban planning must adopt the principle of “Health in All Policies,” as advocated in the 2010 Adelaide Statement, and further develop it into the concept of “Planetary Health in All Policies,” which considers both human health and the health of the Earth’s environment in all policy domains. Under this expanded framework, healthcare, long-term care, and welfare facilities must be strategically positioned as essential components of regional health infrastructure. To realize this, it is critical to ensure the continuous involvement of healthcare professionals and individuals with public health expertise in urban regeneration decision-making processes, thereby redefining the reconstruction of such facilities not merely as physical renewal but as a central function in regional revitalization.

Against this backdrop, it is necessary to utilize policy instruments such as the “Resilience-Enhanced ZEB Demonstration Project,” “Grants for Healthcare Facility Development,” “Subsidies for Carbon Dioxide Emission Reduction Measures,” as well as support for seismic retrofitting and modernization, and the “DBJ Visionary Hospital Concept.” These resources should be mobilized to reconstruct aging medical and care facilities in ways that simultaneously advance decarbonization, strengthen resilience, and integrate local natural and cultural resources.

Moving forward, it is expected that the Japanese government will proactively leverage international frameworks such as ATACH to exercise global leadership on both climate and health, through an integrated approach encompassing urban planning, environmental protection, and public health from a Planetary Health perspective.

In future Basic Policies (Kotsuho), community- and city-level initiatives such as “town development GX” and “nature-positive regional implementation” should be explicitly included. These are not merely greening or decarbonization efforts, but important practical expressions of planetary health at the intersection of biodiversity, climate change, and human well-being. For example, introducing green infrastructure and designing nature-symbiotic urban environments can support mental health, prevent heat illness, and act as buffers during disasters. Support—tied to GX-related investment—should be provided for initiatives that align urban and area planning with the co-evolution of health and natural environments.

Moreover, in healthcare and long-term care, integrating waste streams into a circular economy and enhancing environmental considerations in facility design are important from the perspectives of decarbonization and resource circulation. Since these facilities are expected to serve long-term use, they should be designed for reduced life-cycle environmental impact while balancing sustainability and resilience.

Additionally, environmental contamination during disasters and continuity of healthcare provision are complex challenges that go beyond simply decarbonizing and seismically reinforcing facilities. They also involve medical-waste management and infectious-disease risk control. For instance, as climate change shifts the emergence and spread of infectious diseases, promoting a One Health approach and coordinating with international frameworks (e.g., ATACH or infectious disease research systems) should proceed in parallel with GX policies.

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