Perceptions, Knowledge, Actions, and Perspectives of Healthcare Organizations in Japan in Relation to Climate Change and Health: A Cross-Sectional Study

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Planetary Health Project

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Survey Summary

Background	Climate change is considered the greatest public health challenge of the 21st century. The increasing frequency and severity of extreme weather events pose serious threats to human health and society, placing a heavy burden on healthcare systems. In Japan, rising deaths from heatstroke and heat-related illnesses, as well as the spread of vector-borne diseases, have been reported as urgent and high-priority issues. These impacts are particularly severe among vulnerable populations such as children and the elderly. Healthcare organizations are seen as key agents of change, working in collaboration with health professionals to accurately assess the health impacts of climate change and to promote climate-related policies. However, according to our previous research, although both physicians and nursing professionals in Japan recognize the occurrence of climate change and its health impacts, they face barriers such as lack of knowledge, time, resources, and educational opportunities, which prevent them from taking effective climate action. Despite being important stakeholders in advancing climate and health policies, there has been little research investigating the perceptions, knowledge, actions, and perspectives of academic societies, professional associations, or industry groups in the healthcare field in Japan. Organizational-level engagement remains largely unexamined.
Objective	To clarify the perceptions, knowledge, actions, and perspectives related to climate change and health among academic societies (medical, dental, nursing, pharmaceutical), professional associations, and healthcare-related industry organizations in Japan.
Target Population	404 healthcare-related organizations (including academic societies, professional associations, and industry organizations)
Survey Period	October 3 to October 28, 2025
Results	Response rate: 169 (39.1%) (Academic societies: 118 (39.1%), Professional associations: 4 (50.0%), Industry organizations: 30 (32.0%))

Key Survey Findings

1. Awareness

1-1. Awareness of Climate Change and Health Impacts (5-point scale)

Nearly all academic societies, professional associations, and industry organizations responded affirmatively ("strongly agree" or "somewhat agree") to the statements that climate change is occurring and that it affects people's health. This indicates a broad consensus on the issue.

1-2. Awareness of Greenhouse Gas (GHG) Emissions from the Healthcare Sector (5-point scale)

Regarding the extent to which GHG emissions from the healthcare sector contribute to climate change, fewer than half of academic societies answered "contribute significantly" or "contribute somewhat," while two-thirds of industry organizations responded affirmatively. This suggests that academic societies may be underestimating the sector's contribution to climate change.

1-3. Perception of the Role of Healthcare Organizations (5-point scale)

When asked whether healthcare organizations have a role to play in supporting patients and local residents in the context of climate change, 73.3% of industry organizations and approximately 57.7% of academic societies agreed. Among academic societies, 25.0% answered "neither agree nor disagree," while 16.9% expressed disagreement. Of the four professional associations, three (75.0%) agreed, and one (25.0%) somewhat disagreed — indicating variation across organizational categories.

Key Survey Findings

2. Knowledge

2.1. Knowledge of Domestic and International Trends on Climate Change and Health (4-point scale)

With regard to literature in international medical journals, discussions at COP, and the Ministry of the Environment's climate change assessment reports, 56.7% of industry organizations responded that they were "very familiar" or "somewhat familiar." Among academic societies, only about 40% gave the same response. Over half of academic societies responded "not very familiar" or "not familiar," indicating a knowledge gap. Among professional associations, two were "not very familiar," one was "somewhat familiar," and one was "very familiar."

2.2. Knowledge of Specific Adaptation and Mitigation Measures (4-point scale)

For adaptation measures, approximately 60% of academic societies and industry organizations answered "not very familiar" or "not familiar," suggesting limited knowledge. Only around 32.2% of academic societies and 36.7% of industry organizations answered "somewhat familiar" or better, and very few answered "very familiar." In contrast, three of the four professional associations (75.0%) reported being "somewhat familiar." Knowledge of mitigation measures was even lower across all categories compared to adaptation measures.

Key Survey Findings

3. Actions

3.1. Provision of Lifelong Education and Public Awareness (3-point scale)

Regarding the provision of lifelong learning opportunities for members, the most common response across all categories was “not provided and not under consideration” (academic societies 90.7%, industry organizations 69.0%, professional associations 75.0%). Only around 3% of academic societies and industry organizations reported offering such education, and none of the professional associations did. The proportion of organizations “preparing or considering” such initiatives was highest among industry organizations (27.6%) and lowest among academic societies (5.9%).

3.2. Countermeasures for Environmental Issues and Climate Change (3-point scale)

More than 90% of academic societies reported that they had not formulated or prepared countermeasures for environmental issues or climate change. In contrast, about 60% of industry organizations had not taken such steps. Among industry organizations, 13.8% reported having “formulated and published” measures for environmental issues, and 13.3% for climate change — showing more progress than academic societies.

3.3. Measures Against Biodiversity Loss (3-point scale)

In all categories — academic societies, professional associations, and industry organizations — the most frequent response was “not formulated/published and not under consideration,” highlighting the lack of progress in this area. However, approximately one-quarter of professional associations (25.0%) and industry organizations (23.3%) reported being in the “preparation/consideration” stage. One industry organization (3.4%) had already “formulated and published” measures.

3.4. Implementation of Online Meetings (4-point scale)

Among academic societies, 60.2% had conducted online meetings (OMs) not specifically aimed at reducing carbon footprint (CF), while only 13.6% had done so for CF reduction. Additionally, 20.3% had not held OMs, and 5.9% responded “don’t know.” In industry organizations, 37.9% had held OMs not for CF purposes, 17.2% had held them for CF purposes, and 37.9% had not. One professional association each had held OMs for CF and non-CF purposes, while one (25.0%) had not held any.

Key Survey Findings

4. Policy Perspectives

4.1. Expanding Investment in Health for Climate Change (3-point scale)

Regarding the appropriateness of advocating for increased investment in the healthcare sector in response to climate change and health, 58.5% of academic societies answered “appropriate.” Meanwhile, 36.4% answered “don’t know,” indicating some hesitation. Only 5.1% considered it “inappropriate.” Among industry organizations, 60.0% considered it “appropriate,” and 40.0% “don’t know”; none responded negatively. All professional associations answered “appropriate.” Similar trends were observed regarding recommendations for strengthening climate action.

4.2. Policy Advocacy for Strengthening Climate Measures (3-point scale)

On the need for advocating government and stakeholder action to strengthen climate change countermeasures, a majority of each group agreed (academic societies 61.9%, professional associations 75.0%, industry organizations 70.0%). However, about one-third of academic societies (34.7%) and industry organizations (30.0%) responded “neither agree nor disagree,” indicating that while the importance of climate action is recognized, some organizations remain cautious about taking a formal stance or getting directly involved.

Key Survey Findings

5. Other Issues and Innovative Approaches

5.1. Other Issues and Efforts (Free-text Responses)

The following four issues were identified as challenges: Lack of awareness-raising and educational efforts, the need to understand and organize knowledge and evidence, Inadequate organizational structures and resources, and Insufficient support in terms of practical and policy measures. Reported creative approaches included: providing research grants related to CO_2 emission reduction; sharing knowledge among members and at academic conferences; developing practical tools such as guidelines and disaster response manuals; and promoting deeper discussions within academic societies, including soliciting ideas from members. Many comments stated that, while the importance of climate change was recognized, specific initiatives were still lacking. This indicates a clear gap between awareness and concrete action.

5.2. Support Requested from Government and Industry (Free-text Responses)

Requests to the government included: economic support for CO_2 emission reduction and capital investments; public information dissemination and training of specialized personnel; sharing of best practices; and promotion of research on climate change and health. Requests to the industry sector included: expansion of awareness and education efforts incorporated into corporate identity; innovation support such as developing and providing affordable alternatives to disposable products and low-carbon materials; greening the medical system through improved medical materials, packaging, and resource circulation; generation of evidence and international collaboration; and promotion of preventive measures.

Survey Summary

Objective	To clarify the perceptions, knowledge, actions, and perspectives related to climate change and health among academic societies (medical, dental, nursing, pharmaceutical), professional associations, and industry organizations in Japan's healthcare sector.
Target Population	**404 healthcare-related organizations** **Medical Academic Societies (302 organizations)** *Medical*: Societies affiliated with the Japan Medical Association (141 organizations) *Dental*: Societies affiliated with the Japan Association for Dental Science (84 organizations) *Nursing*: Societies affiliated with the Japan Association of Nursing Academies (49 organizations) *Pharmaceutical*: Societies affiliated with the Federation of Japanese Pharmaceutical Societies (28 organizations) **Professional Associations (8 organizations)** Japan Medical Association, Japan Nursing Association, Japan Midwives Association, Japan Dental Association, and Hospital-related associations **Industry Organizations (94 organizations)** *Pharmaceutical*: Japan Pharmaceutical Manufacturers Association and affiliated organizations *Medical Devices*: Japan Federation of Medical Devices Associations and affiliated medical device organizations *Pharmaceutical Wholesalers*: Federation of Japan Pharmaceutical Wholesalers Associations and its member organizations

Survey Summary

Method	• Online survey using a self-administered questionnaire (via Google Forms) • Consent was assumed upon submission of the questionnaire • To track response progress, inputting the organization's name was mandatory • Invitation letters were mailed to each organization, with follow-up reminders sent via email and phone • In cases of duplicate responses from the same organization, only the response from the representative was included • Items left unanswered were treated as missing values
Survey Period	October 3 – October 28, 2025
Statistical Analysis	Descriptive statistics
Ethical Review	Approved by the Ethics Committee of the Institute for Health Economics and Policy

Survey Results

Responses were received from **169 organizations**, and **152 organizations** (118 academic organizations, 4 professional associations, and 30 industry groups) provided valid responses by agreeing to participate in the survey. The **overall response rate was 37.6%**. Among academic organizations, **47.5% were from medical associations** and **42.9% from nursing associations**.
As for the respondents' positions, **58.6% (89 individuals)** were **chairpersons**, followed by **board members (23.0%)**, **others (12.5%)**, and **environmental committee members (5.9%)**. Among academic organizations, a majority (61.0%) of responses came from chairpersons, while in industry groups, although **50.0% were chairpersons**, there was a higher proportion of responses from **environmental committee members (16.7%)** and **others (23.3%)**, indicating differences in the distribution of respondent positions depending on the organization type.

Table 1. Overview of Participating Organizations in the Survey

		Academic Societies					Professional Associations	Industry Organizations	Sum
			Medicine	Dental Sciences	Nursing	Pharmacy			
Number of valid responses n (%)		118	67	21	21	9	4	30	152
Response rate		37.6%	47.5%	25.0%	42.9%	32.1%	50.0%	32.0%	
Without consent									17
Respondent's Position n (%)	Presidents or chairperson	72 (61.0)	39	12	14	7	2 (50.0)	15 (50.0)	89
	board members or directors	31 (26.3)	18	4	7	2	1 (25.0)	3 (10.0)	35
	environmental committee representatives	3 (2.5)	3	0	0	0	1 (25.0)	5 (16.7)	9
	Others	12 (10.2)	7	5	0	0	0 (0)	7 (23.3)	19

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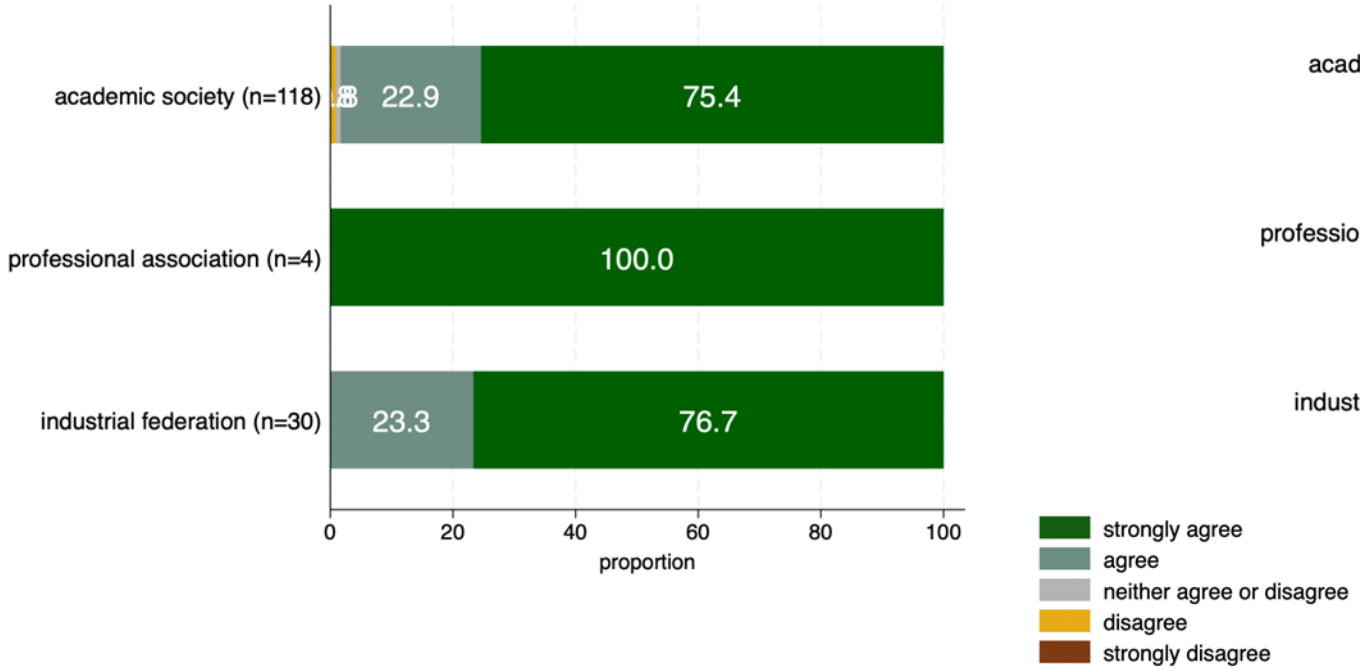
Occurrence of Climate Change and Its Direct and Indirect Impacts on the Health of Patients and Local Residents

Regarding the occurrence of climate change, the vast majority (97%) of both academic societies and industry organizations responded positive responses such as “strongly agree (75 %)” or “somewhat agree (22.9%).” Among industrial organizations, 76.7% responded “strongly agree,” and 23.3% responded “agree,” demonstrating the similar tendency with academic societies. Professional associations also responded positively and the negative responses were not observed. Similarly, positive feedbacks were reported regarding the health impacts of climate change on residents and patients, indicating that a certain level of consensus has been achieved.

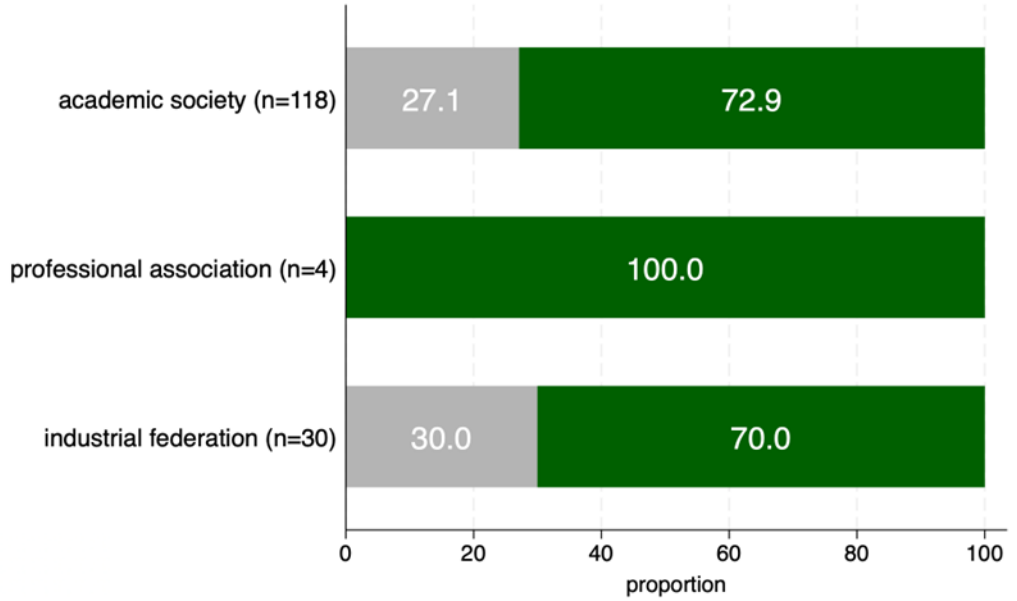
Occurrence of Climate Change

Climate change demonstrates the changes in climate pattern in the world. In the last 50 to 100 years, the world’s average temperature has been rising, and it is expected to rise more. Climate change has been already happening.



Direct and Indirect Impacts on the Heath of Patients and Local Residents

Climate change impacts on patients and local residents both directly and indirectly.



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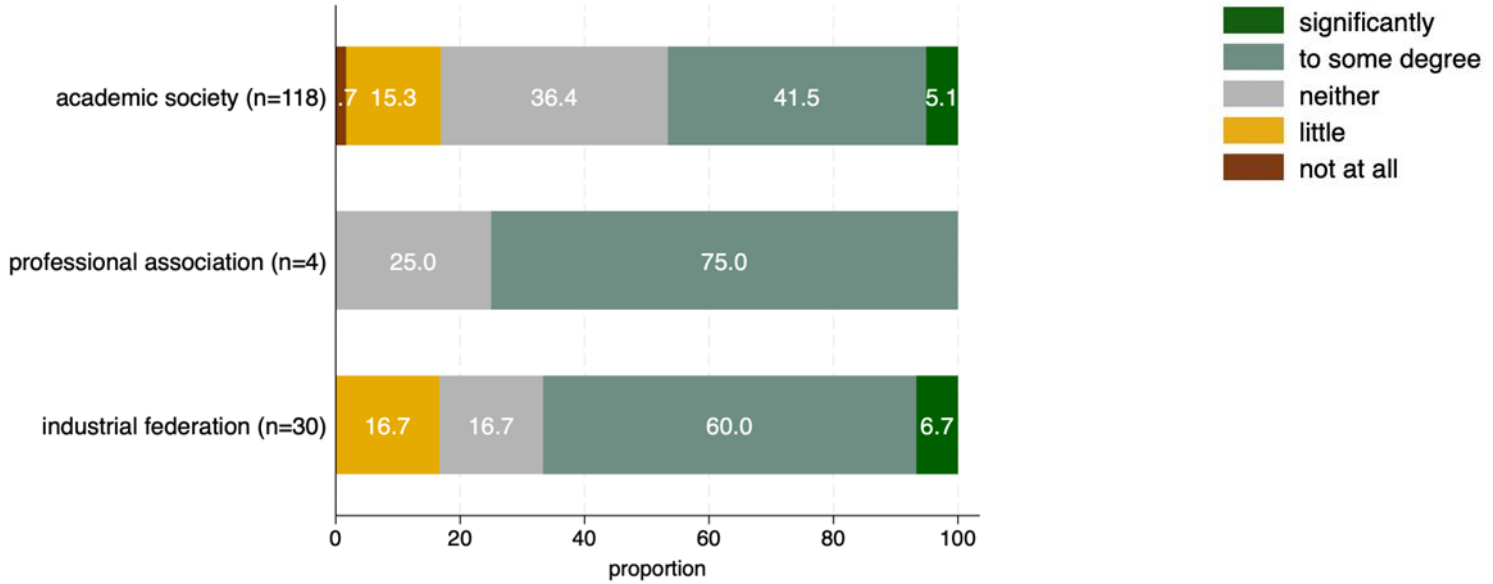
Greenhouse Gas (GHG) Emissions from the Health Sector

Regarding the extent to which greenhouse gas (GHG) emissions from the healthcare sector contribute to climate change, less than half (46.6 %) of academic societies responded “contribute significantly” or “contribute somewhat,” while two-thirds (66.7 %) of industry organizations provided similar response. Conversely, about one-sixth (16.7 %) responded “contribute very little (15.3%).” Among professional associations, the most common response was “contribute somewhat” (3 organizations, 75.0%), while one organization answered “neither agree nor disagree.” Compared to industry organizations, academic societies may be underestimating the impact of GHG emissions from the healthcare sector on climate change.

Greenhouse Gas Emissions from the Health Sector

What is your perception of the extent to which greenhouse gas emissions from the health sector impacts climate change?



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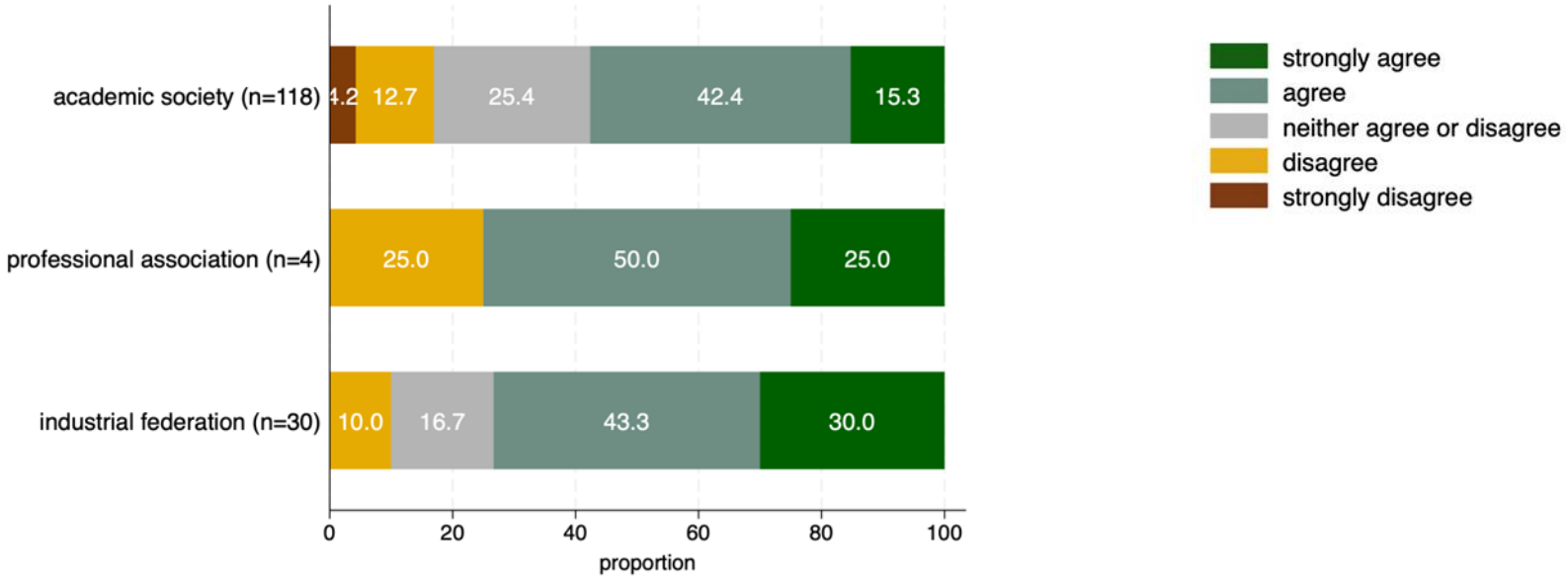
The Role of Healthcare Organizations in the Context of Climate Change

Regarding the perception that healthcare organizations have a role in supporting patients and local communities in the context of climate change, 30.0% of industry organizations responded “strongly agree” and 43.3% “somewhat agree,” with a total of 70% expressing a positive view. Among academic societies, approximately 57.7% responded positively (“strongly agree” 15.3%, “somewhat agree” 42.4%). However, 25.4% responded “neither agree nor disagree,” and around 16.9% gave negative responses. Among professional associations, three organizations (75.0%) expressed agreement, while one (25.0%) responded “somewhat disagree.” These results indicate differences in perceptions across organizational categories.

The Role of Healthcare Organizations

Healthcare organizations have a role where patients and local residents understand the health impacts by the climate change and support taking the effective measures.



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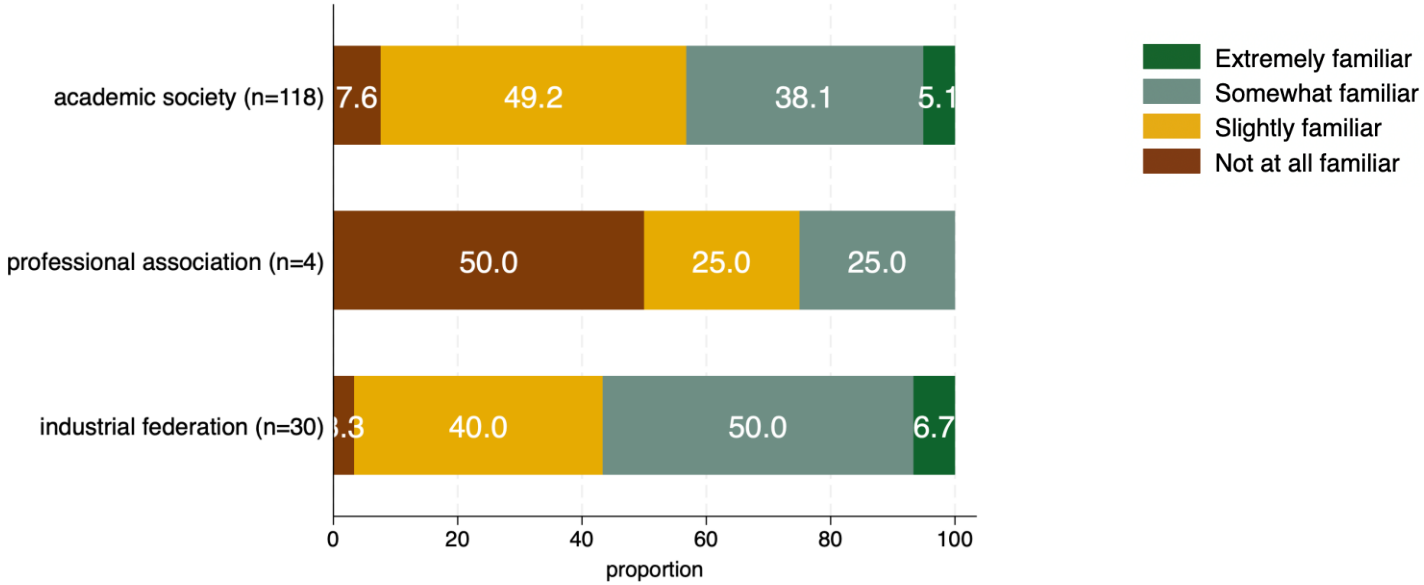
Domestic and International Trends on the Health Impacts of Climate Change

Recognition of the health impacts of climate change—as described in academic literature from international medical journals, discussions at the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), and climate impact assessment reports by Japan's Ministry of the Environment—was highest among industry organizations. Over half (56.7%) responded that they were "very familiar" (6.7%) or "somewhat familiar" (50.0%) with these trends. Among academic societies, only about 40% reported being "very familiar" (5.1%) or "somewhat familiar" (38.1%), while more than half responded "not very familiar" or "not familiar at all," indicating that a majority lacked awareness of domestic and international developments. Among professional associations, two organizations (50.0%) responded "not very familiar," while one responded "somewhat familiar" (25.0%) and another "very familiar" (25.0%).

Domestic and International Trends on the Health Impacts

How familiar are you with the impacts of climate change on health based on the discussions at the United Nations Climate Change Conferences (COP) and domestic developments such as climate change assessment reports?



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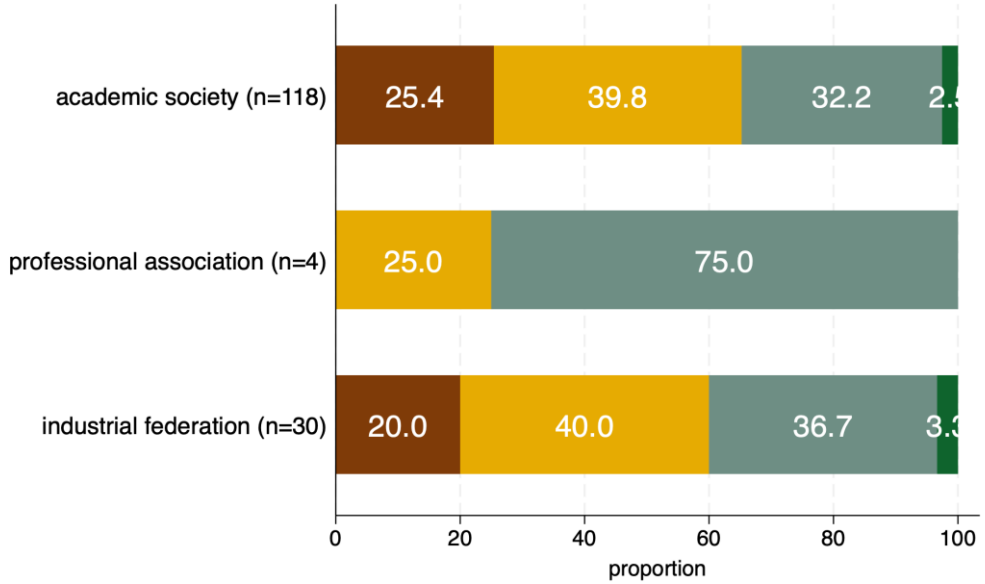
Knowledge of Adaptation and Mitigation Measures

Regarding knowledge of specific adaptation measures for climate change, 65.2% of academic societies and 60.0% of industry organizations answered “not very familiar” or “not familiar at all,” indicating insufficient knowledge in these groups. With respect to mitigation measures, nearly all academic societies (98.3%) responded either “hardly familiar” (30.5%) or “not very familiar” (67.8%). On the other hand, 75% of professional organization answered “somewhat familiar.” Regarding mitigation measures, the results demonstrated that knowledge levels are even lower in all categories compared to adaptation measures.

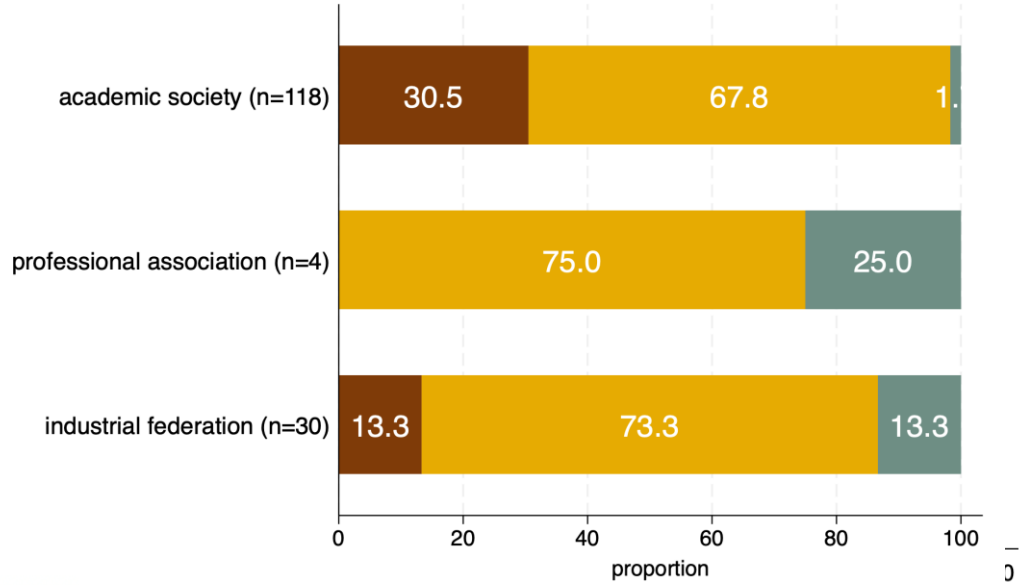
Knowledge on adaptation measures

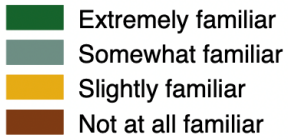
How much do you know about the specific adaptation measures that should be implemented as part of climate change



Knowledge on mitigation measures

How much do you know about the specific mitigation measures that should be implemented as part of climate change measures?





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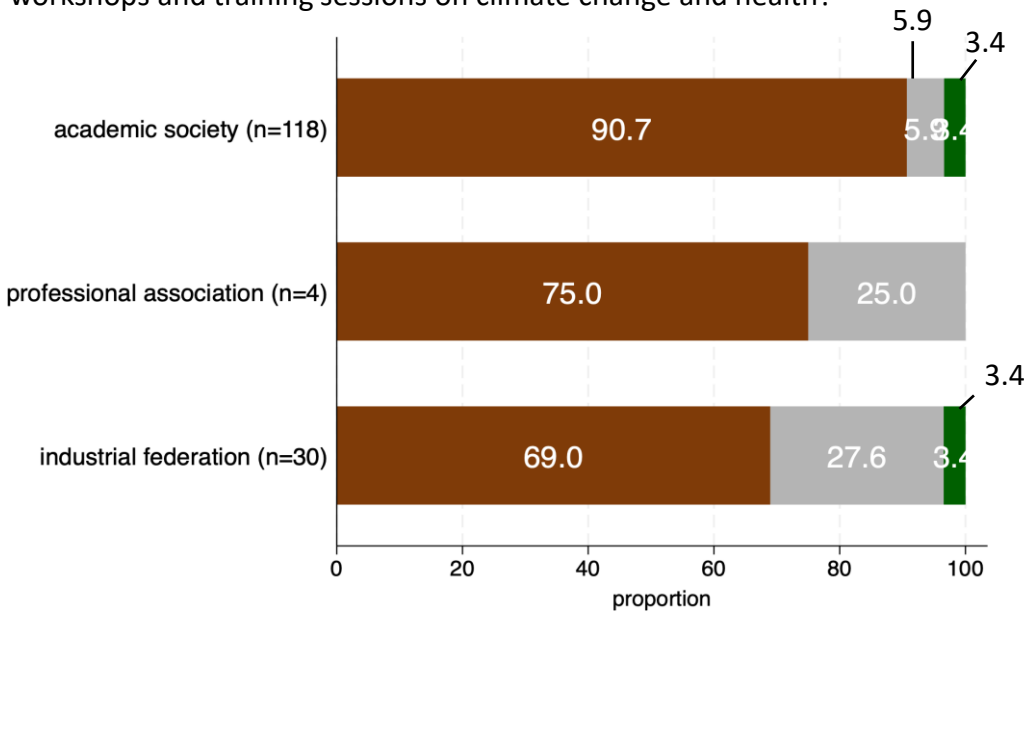
Provision of Continuing Education for Members and Public Awareness Initiatives

Regarding the question of whether organizations provide opportunities for continuing education to their members, the most common response across all categories was “not provided and not under consideration” (90.7% of academic societies, 69.0% of industry organizations, and 75.0% of professional associations). Only 3.4% of both academic societies and industry organizations responded that they “provide” such opportunities, while none of the professional associations did. The response “not currently provided but under consideration” was most common among industry organizations (27.6%) and lower among academic societies (5.9%), indicating differences in levels of preparation and planning.

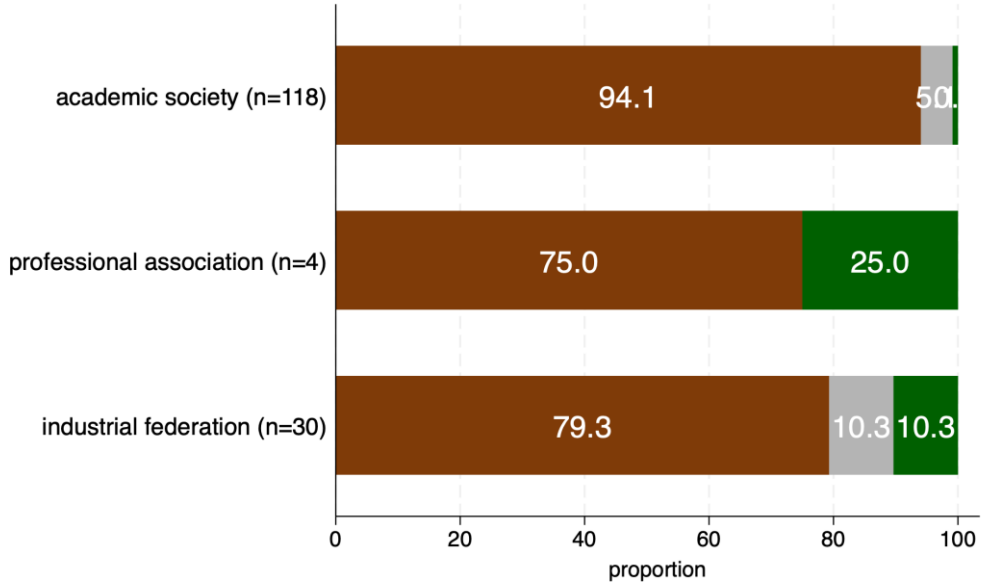
Opportunities for continuing education to their members

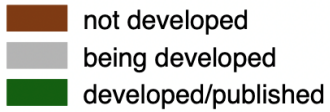
Do you provide life-long learning opportunities for members, such as workshops and training sessions on climate change and health?



Public awareness campaigns

Are you conducting awareness activities on climate change and health (such as public lectures, informational materials, and website dissemination)?





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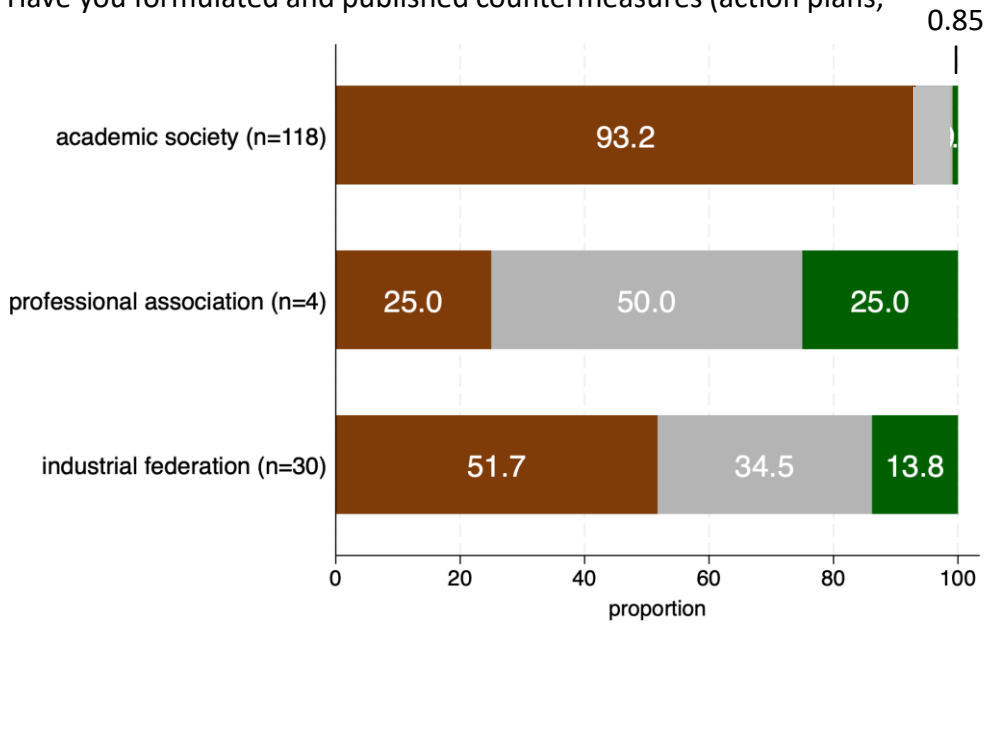
Response Measures for Environmental Issues and Climate Change

Regarding measures addressing environmental issues, environmental pollution, and climate change, a large majority of academic societies responded “no measures developed, published, or under consideration”—93.2% for environmental issues and 95.8% for climate change—indicating extremely limited engagement. In contrast, among industry organizations, the percentage responding “no measures developed, published, or under consideration” was lower: 51.7% for environmental issues and 60.0% for climate change. The proportion of organizations that responded “measures have been developed and published” was 13.8% for environmental issues and 13.3% for climate change, suggesting more progress compared to academic societies. Among professional associations, 25.0% (1 organization) reported having “developed and published” measures, while 50.0% (2 organizations) reported being “in the process of preparation or consideration,” showing a relatively active level of engagement.

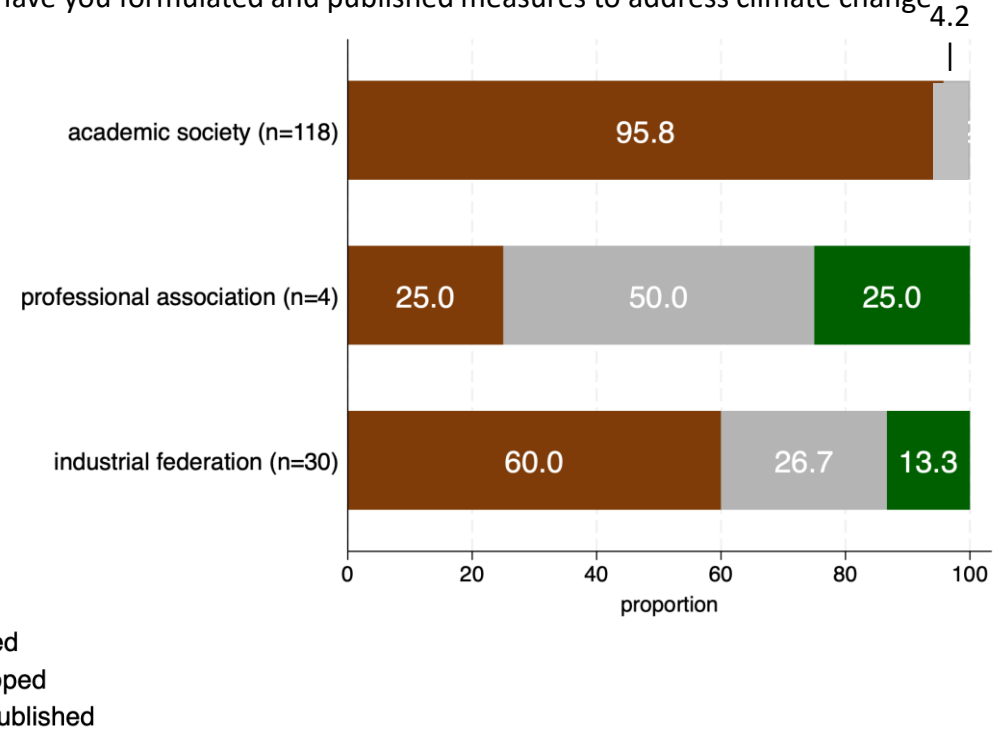
Measures for Addressing Environmental Issues

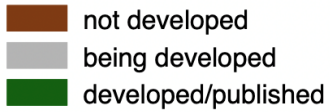
Have you formulated and published countermeasures (action plans,



Climate Change Mitigation Measures

Have you formulated and published measures to address climate change





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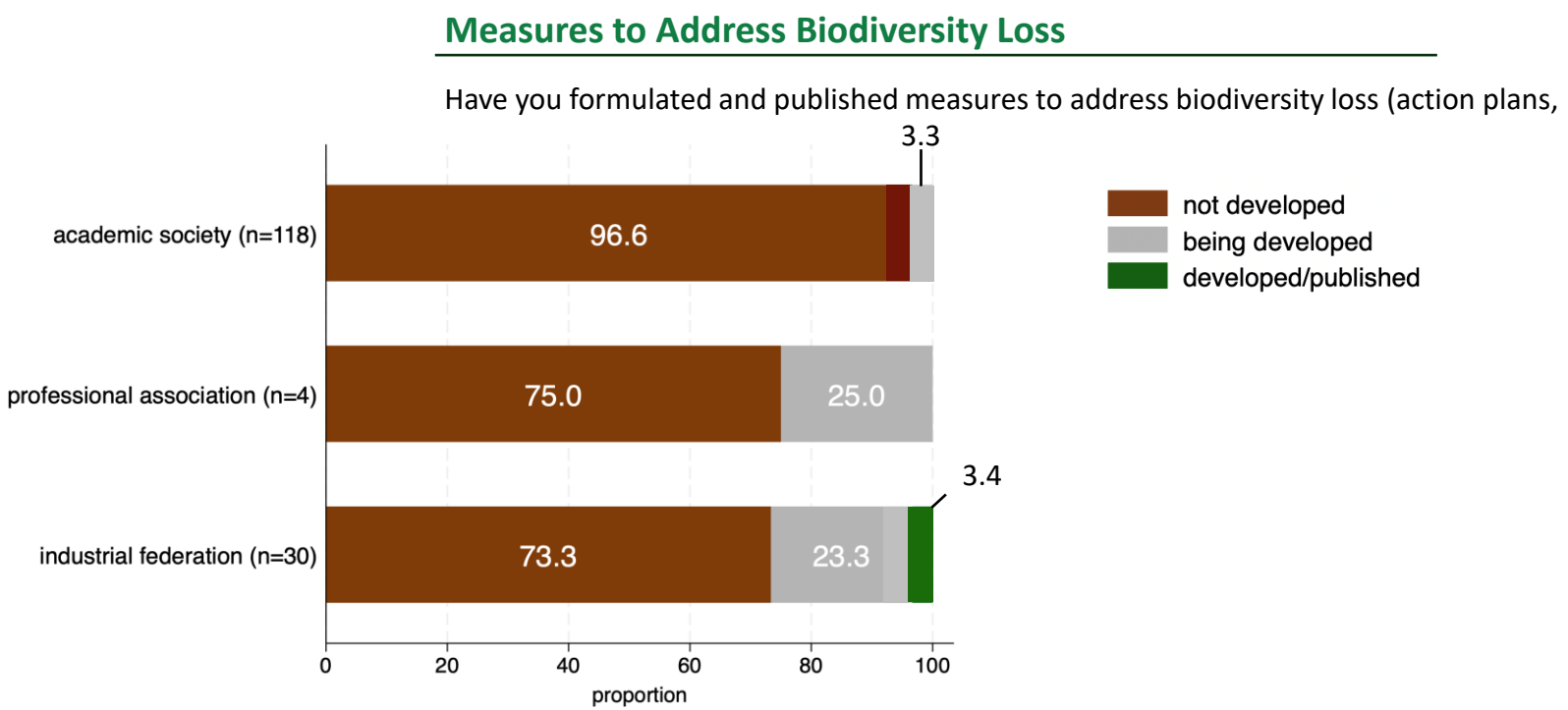
Measures to Address Biodiversity Loss

Across all categories—academic societies, professional associations, and industry organizations—the most common response regarding measures to address biodiversity loss was “no measures developed, published, or under consideration,” indicating that progress on this issue remains limited. On the other hand, for the response “not yet developed or published, but under preparation or consideration,” 25.0% (1 organization) of professional associations and 23.3% (7 organizations) of industry organizations reported being in the planning stage.



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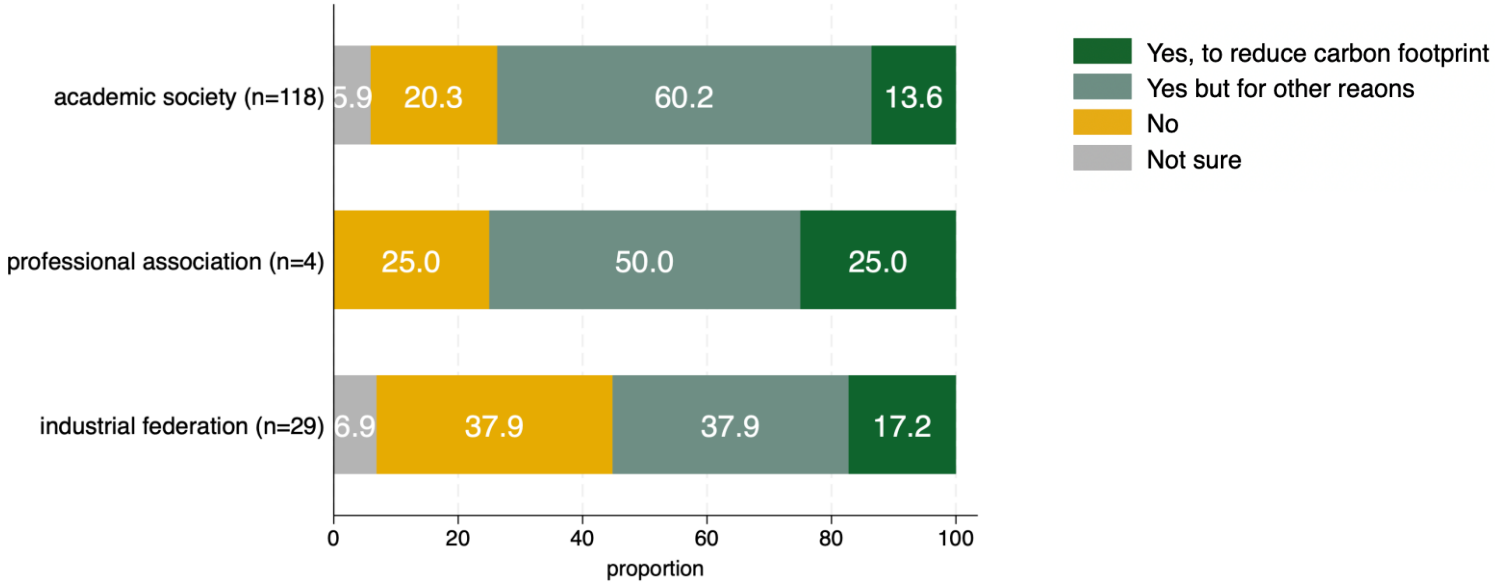
Implementation of Online Meetings

Among academic societies, 60.2% reported conducting OMs for purposes other than reducing carbon footprint (CF), the highest proportion among the categories. In contrast, only 13.6% conducted OMs specifically for CF reduction. Additionally, 20.3% reported not conducting OMs at all, and 5.9% responded “don’t know.” Among industry organizations, 37.9% conducted OMs for purposes other than CF reduction, while 17.2% did so for CF reduction. Similar to academic societies, 37.9% reported not conducting OMs, and 6.9% responded “don’t know.” Among professional associations, one organization each reported conducting OMs for CF and non-CF purposes, while 25.0% reported not conducting Oms.

Implementation of Online Meetings

Are you implementing initiatives to reduce carbon footprints (CO2 emissions) caused by member travel and other factors by holding meetings online (or hybrid) starting in 2024?



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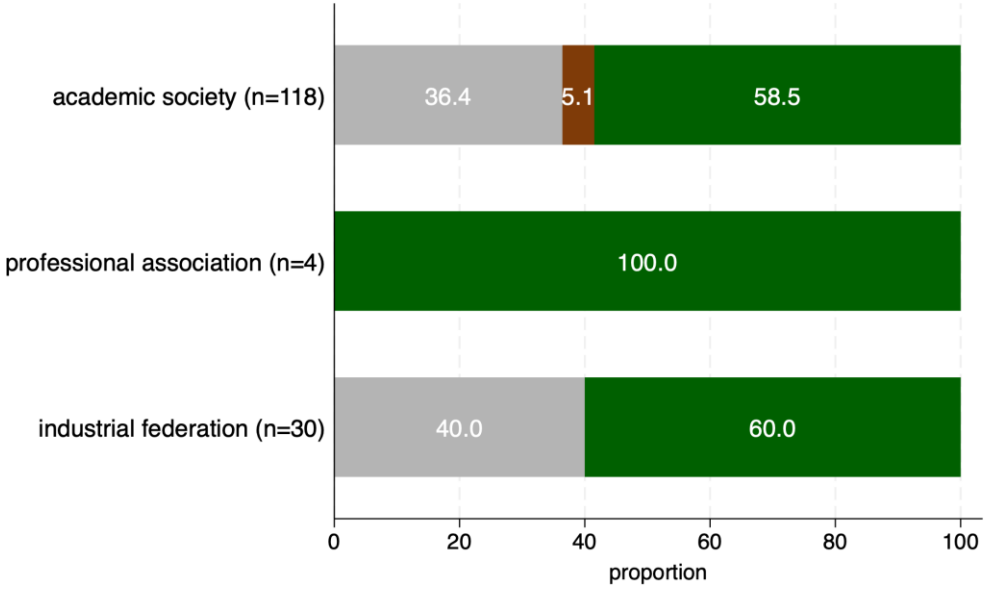
Policy Recommendations Regarding Climate Change and Health

Regarding the appropriateness of recommending increased investment in the healthcare sector in relation to climate change and health, a majority (58.5%) of academic societies responded “appropriate.” However, 36.4% responded “unsure,” indicating that a significant number of organizations were undecided. Only a small portion (5.1%) responded “inappropriate.” Among industry organizations, 60.0% responded “appropriate,” and 40.0% responded “unsure.” No organization responded “inappropriate.” All four professional associations (100%) responded “appropriate.” Similar trends were also observed in questions regarding policy proposals for strengthening climate change countermeasures.

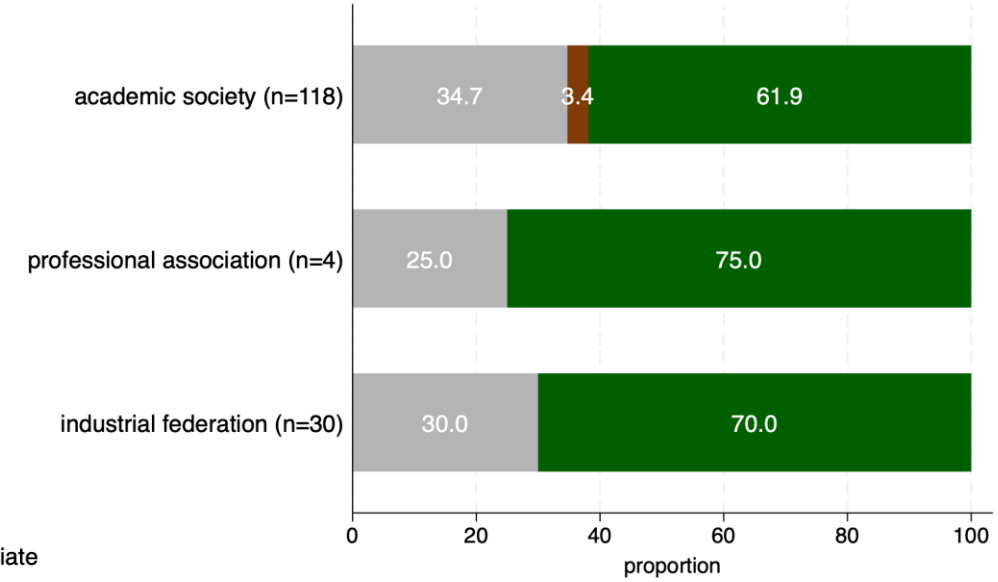
Expanding investment in Climate Change and Health

Do you consider it appropriate to recommend to government and policymakers that they expand investment in the healthcare sector regarding climate change and health?



Policy recommendations for Strengthening Climate Change Measures

Do you believe that government and relevant parties should actively urge their countries to strengthen their efforts to achieve the Paris Agreement (2025) goal of “limiting global warming to below 2C and pursuing efforts to limit it to 1.5C?



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Additional Challenges and Innovative Approaches

The identified challenges were broadly categorized into 1. Lack of awareness-raising and public engagement, 2. Need to better understand and organize knowledge and evidence, 3. Inadequate organizational structures and resources, 4. Insufficient support for practical and policy-level actions. The strategies currently being implemented included: providing research grants for CO_2 emission reduction, sharing knowledge among members and at academic conferences, developing practical tools such as guidelines and emergency manuals, and promoting internal discussions within academic societies, including soliciting ideas from members. Many respondents expressed that although these issues are recognized as important, concrete actions are still limited. This highlighted a clear gap between awareness and actual implementation.

Issues

1. Lack of awareness and education
- Have never thought about it from that perspective
- Lack of concrete information provided to the general public
- Need for Education for Members, Healthcare Professionals, and the General Public
- Insufficient understanding of the impact of climate change on specialized fields

2. Evidence Gathering and Organization
- Lack of systematic understanding of specific health impacts
- Necessities to clarify the relevance of climate change to each specialised field
- Unclear preventative measures

3. Inadequate organizational structure and resources
- Differences in the levels of individual organizations and members make it difficult to implement unified measures
- Budget shortfall (Global activities require funding)
- Sustainable academic activities require financial support
- Difficulties of addressing issues outside one's area of expertise

4. Lack of practical and policy support
- Lack of action on climate change itself
- The challenge of addressing environmental countermeasure costs
- The Need for Government Support and Incentives

Efforts

1. **Promotion of Research**
   - Research Grants Related to CO2
   - Application of Traditional Medicine and Research on the Efficacy of herbal medicine

2. **Knowledge Sharing**
   - Information exchange on initiatives within member organizations
   - Continuous collection of domestic and international environmental regulatory information and dissemination and awareness-raising among association members
   - Symposium at an Academic Conference

3. **Practice and Application**
   - Development of Heatstroke/Prevention and Response Guidelines
   - Development of a Blood Glucose Management Manual for Disaster Situations

4. **Stimulating discussion**
   - Deepening the Discussion as an Academic Organization
   - Seeking ideas from members

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Desired Measures from Government and Industry (Open-ended question)

As “desired measures from the government,” respondents cited the need for economic support such as incentives for CO_2 emission reduction and funding for facility investments; the provision of information to citizens; the development of specialized human resources; the sharing of best practices; and the promotion of research grants related to climate change and health. On the other hand, as for “desired measures from industry,” suggestions included expanding awareness and education initiatives integrated into corporate identity; supporting innovation such as developing and providing affordable alternatives to disposable products and low-carbon materials; greening the healthcare system through improvements in medical materials, packaging, and resource circulation; generating evidence and promoting international collaboration; and advancing preventive measures.

Policies demanding for the government

1. **Financial support**
   Subsidies for climate change response measures and allocation of medical fees incentives
   Incentives and subsidies for healthcare institutions working to reduce CO2
   Promotion of Electric Vehicles,Subsidies for EV Charging Station
   Financial support for rising cost

2. **Information provision/Educational support**
   Support for providing specific information and raising awareness among citizens
   Clear communication of information, including specific measures
   The importance of Prevention: Well-being and subclinical conditions

3. **Human Resource Development/Lifelong Learning**
   Environmental Education in Schools and Universities (Sustainable Development Goals and Planetary Health)
   Promoting Education for Healthcare Professionals
   Green Industry Human Resource Development Program

4. **Sharing of the Best Practice**
   Examples of Specific Mitigation and Adaptation Measures

5. **Research Support**
   Promoting Research Grants on Climate Change and Health
   Research grant support alongside direct assistance to residents and communities

Policies demanding for the industrial sector, including the healthcare field

1. **Promotion and Education**
   Expanding the integration of climate change into corporate identity (CI)
   Raising public awareness and interest (utilizing mass media, etc.)

2. **Technology Development and Innovation Support**
   Support in Technological Development: Alternative Devices for Disposable Products
   Affordable provision of environmentally conscious materials (low-carbon, low-CO2)
   Energy Efficiency
   Financial assistance for equipment upgrades to environmentally friendly devices

3. **Greening the Healthcare System**
   Innovations in Medical Materials and Packaging
   Waste Reduction and Resource Recycling Promotion
   Infrastructure Development (Electric Vehicles)

4. **Evidence Generation and International Collaboration**
   Evidence Sharing and Information Dissemination
   Responding to international trends (such as the International Society for Biological and Environmental Repositories (ISBER)’s Green Biobanking initiative to minimize the environmental impact of biobank activities such as the collection, processing, storage, and management of biological samples)

Limitations of This Study

1. **Possibility of self-selection bias**
   First, there is the possibility of self-selection bias. Because participation was voluntary, organizations that elected to take part may have had a higher interest in the topic of climate change and health or may have already been undertaking some form of action, compared with those that did not participate. Therefore, this survey may overestimate the awareness, knowledge, actions and perspectives of the healthcare sector as a whole, and the results cannot be generalized across the entire sector.

2. **Possibility of information bias due to proxy measurement**
   The unit of analysis in this survey was the organization, yet we collected responses from designated individuals (key informants) who reported on behalf of their organization. Proxy reporting can introduce bias27. Moreover, the individual representing the organization may mix their personal viewpoint with the organization's collective stance, which may also act as a latent bias.

3. **Social desirability bias**
   Respondents may tend to provide answers that are viewed favourably by others. In this survey, the invitation was sent to the presidents of healthcare-sector organizations, and 60 % of valid responses came from presidents or board members. Given that such senior respondents may feel an additional pressure to respond in a socially acceptable manner, the possibility that social desirability bias is present cannot be ruled out.

Despite these limitations, no comparable survey was found either domestically or internationally, and this study nevertheless offers valuable insights into the perceptions, knowledge, actions, and perspectives on climate change and health among healthcare organizations that constitute the health system of a high-income country.