

The United States and Indo-Pacific Must Lead the Way on Creating Indoor Air Quality Regulations

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Air pollution is the greatest environmental threat to human health today. Recent studies have shown that [particulate matter air pollution is the leading contributor to the global disease burden](#) and [shortens the average person's lifespan by 1.8 years](#). It was also the [second leading cause of global mortality](#). Exposure to particulate matter less than 2.5 micrometers in aerodynamic diameter (PM_{2.5}) has been linked to a wide range of adverse health effects, including lung cancer, stroke, low birth weight, and reduced cognitive function. Sources of particulate matter pollution include energy generation, transportation, residential cooking, agricultural burning, and industrial operations. Many of these anthropogenic activities have dramatically increased in the past few decades, and air pollution levels remain dangerously high for much of the world's population. No country met the World Health Organization's Air Quality Standards in 2021. Air pollution disproportionately affects people of color, low-income communities, children, and the elderly. While many countries and global health organizations have outdoor air pollution standards and regulations, the Republic of Korea is a vanguard in this policy area. It is one of the few countries to legislatively manage air quality indoors, where people spend up to 90% of their time. Korea's proactive approach to the issue uniquely qualifies it to lead the way on global indoor air quality regulation.

Proposal

At the US-ROK-Japan Trilateral Global Leadership Youth Summit 2024 in Busan, delegates examining global health issues proposed establishing worldwide indoor air quality standards. These indoor air quality standards must be focused on protecting vulnerable populations such as children and the elderly in public spaces such as schools, hospitals, and elderly care facilities. As with outdoor air quality regulation, indoor air quality regulations should be supplemented with annual forums to discuss standards and share best practices. Membership in these forums could include local government officials, policymakers, scientific experts, global health body representatives, environmental groups, and youth advocates. Existing networks, such as C40 Cities, and learnings from previous initiatives, such as 100 Resilient Cities, can be leveraged to create this new forum.

Why The Trilateral Is Uniquely Positioned to Lead the Way

The United States, Japan, and the Republic of Korea are united by a shared commitment to safeguarding their most vulnerable populations and addressing the escalating challenges posed by climate change. Among these challenges, the impact of respiratory diseases, especially on elderly populations, is particularly pressing. The COVID-19 pandemic underscored this vulnerability, with [the elderly accounting for a significant proportion of 2020 US deaths](#), according to the National Center For Health Statistics. Currently, both Japan and the Republic of Korea are experiencing unprecedented levels of population aging, with 30 percent of the population in Japan aged 65 or older and 20 percent in the Republic of Korea. To combat the risks of super-aging societies, it is vital that the two countries

Delegates of the US-ROK-Japan Trilateral Global Leadership Youth Summit advocate for cooperation on international indoor air quality regulations.

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expeditiously implement policies to protect people with a higher risk of respiratory damage. In addition to the elderly population, children are at a higher risk from the impacts of indoor air pollution, with scientific literature demonstrating that children’s exposure to polluted air can alter their physiology and heighten their disease risk. Therefore, advocating for children’s right to live in a safe and clean environment has become a crucial issue in global agendas. Finally, efforts to improve indoor air quality, such as ventilation and air filtration, can also prevent the spread of respiratory pathogens, such as SARS-CoV-2 (the virus that causes COVID-19), influenza, and other infectious diseases, better preparing indoor spaces for future infectious disease outbreaks. For the United States to maintain its leadership role in international climate change adaptation efforts, addressing air pollution must be a central focus. Considering the global need for robust leadership in improving air quality, the United States, the Republic of Korea, and Japan are uniquely positioned to lead the way in air pollution adaptation and set a powerful example for the rest of the world.

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Implementation

We propose a multi-step implementation process to realize this initiative:

1. **Trilateral Planning Committee:** Convene working meetings within the trilateral partnership and Indo-Pacific region to establish an organizational charter, governance structure, and financing mechanism for the working group
2. **Engage Key Networks:** Foster awareness and regional buy-in for the initiative by engaging pre-existing regional networks, such as the Asia Pacific Clean Air Partnership, C40 Cities, and the Asia-Pacific Regional Action Programme on Air Pollution
3. **Invitations and Partnership Building:** Extend invitations to regional municipal leaders and air quality experts to participate in this group and partner with governments, news agencies, and civil society to build awareness of the initiative across the region
4. **Kick-Off and Roadmap:** Host inaugural working group meetings and develop an organizational roadmap to steer the development and implementation of indoor air quality standards

Conclusion

The trilateral relationship between the United States, the Republic of Korea, and Japan has long been a cornerstone of regional cooperation, significantly reinforced by the Camp David Summit in August 2023, where President Joseph R. Biden, President Yoon Suk-yeol, and Prime Minister Fumio Kishida reaffirmed their shared commitments to strengthening relations between the three nations. Among the pressing global challenges facing these nations is the issue of air pollution, particularly indoor air quality, which poses a significant threat not only to their populations but to the world at large.

Given the three countries’ collective resources, expertise, and shared values, the Trilateral partnership is uniquely positioned to lead global efforts in regulating indoor air quality by first galvanizing the initiative within the Indo-Pacific. It is imperative that these nations act swiftly to mitigate the harmful effects of indoor air pollution, especially for vulnerable groups such as children and the elderly, thereby setting a powerful example for the international community to follow.

During the [US-ROK-Japan Trilateral Global Leadership Youth Summit](#), young leaders from the United States, South Korea, and Japan, with representation from Southeast Asia and the Pacific Islands, candidly debated a Roadmap for the Trilateral Partnership via a Camp David simulation and worked in teams to pitch ideas and projects to strengthen the trilateral partnership. [Delegates](#) can be contacted via Abbigail Hull at hulla@eastwestcenter.org.

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