

# Healthy Indoor Air: A Global Call to Action at the UN Headquarters on Tuesday 23 September 2025.

The event was sponsored by the Burnet Institute (with Dr. Bronwyn King), Brown University School of Public Health (Dr. Georgia Lagoudas), with the support of over 60 organizations; co-sponsors were the governments of Montenegro and France.

The event's objective: to bring indoor air quality (IAQ) to the centre of the global public health agenda and to launch and sign the Global Pledge for Healthy Indoor Air (the first declaration recognizing clean indoor air as a fundamental right).

The following is a summary of the event's sessions and presentations.

## **Co-sponsoring governments**

Government of Montenegro

- Ervin Ibrahimović (Deputy Prime Minister/MFA): launches the Global Pledge and reaffirms that a healthy environment is a constitutional value; schools are central.
- Angela Jakšić Stojanović (Minister of Education/Science/Innovation): presents the "Green Schools" initiative (pilot in Pljevlja, the most polluted area): audit of all school buildings, national database, roadmap with monitoring and filtration, infrastructure upgrades, integration of IAQ into education reform; goal of scaling up to all municipalities and "going beyond measurement" by actually improving air quality.

French Government – Claire Amprou (Global Health Ambassador)

- IAQ as a key determinant of health (COVID-19 lesson).
- National actions: mandatory monitoring in kindergartens and schools from 2023; an Indoor Environmental Quality Observatory established from 2024.
- Commitments: harmonize standards and monitoring requirements, international cooperation, signing the Pledge.

## **International agencies/organizations**

ILO – Caroline Frederickson

- From 2022, health and safety at work is a fundamental right; IAQ is an essential component.
- ILO regulatory frameworks (C155, C187, etc.) and the new 2025 Convention on Biological Hazards: a framework for identifying, assessing, and managing indoor risks.

WHO – José Luis Castro (Special Envoy for Chronic Respiratory Diseases)

- IAQ as an invisible crisis with impacts on asthma, COPD, CVD, and cancer; economic and pandemic burdens.

- Actions: implement WHO guidelines, set global indoor standards, disseminate accessible technologies (clean cooking, smart ventilation), integrate IAQ into climate/energy/urban planning policies, strengthen monitoring.

UNEP – Inger Andersen

- Indoor/outdoor pollution and climate nexus; priority for clean cooking (2 billion people without access).
- Call for funding (currently <1% of development finance goes to air), align investments towards clean solutions; environmental impacts of tobacco (deforestation, plastic waste).

### **Scientific and Healthcare Community**

Lydia Morawska (QUT)

- 70 years of progress on outdoor air quality, indoor regulatory vacuum.
- Proposal: monitoring → reporting → standards → legislation for all public buildings; avoid voluntary approaches only.

Joseph Allen (Harvard T.H. Chan)

- Three truths: buildings can make people sick or protect them; current standards are minimal; those who manage the building have more influence than doctors.
- Evidence on cognitive performance; examples from Uganda (low-cost interventions) to 270 Park Avenue (monitoring and flow rate above minimums).
- Imperatives: recognize IAQ as a health issue, ventilation/filtration above minimums, mandatory monitoring.

Bettina Borisch (World Federation of Public Health Associations)

- IAQ as a cross-cutting public health issue; we need measures, benchmarks, standards, and advocacy integrated with outdoor air quality and climate.
- Jagat Narula (World Heart Federation)
- Enormous cardiovascular burden linked to HAP (household air pollution); historical evidence (mummies) of indoor exposure.
- Recommendations: adopt WHO AQP, integrate IAQ into health agendas, transition to clean fuels, improve ventilation/standards; LPG as a transitional solution where necessary.

Kerry Kinney (ISIAQ)

- There is no "indoor/outdoor" distinction: clean or dirty air.
- Problems persist even in modern buildings (chemical buildup); scalable solutions exist; international coordination and community transfer are needed.

Alison Cox (NCD Alliance)

- Air pollution is the primary environmental risk for NCDs; the HLM NCD statement is positive but too timid on fossil fuels.

- Proposals: accelerate national NCD implementation by integrating IAQ, use upcoming global funding opportunities, strengthen monitoring and accountability, and encourage WHO to define "best buys" for pollution.

Omnia El Omrani (Global Climate & Health Alliance)

- IAQ as a matter of justice (intergenerational, social, global).
- Demands: reduce fossil fuel subsidies, direct resources to health and IAQ, apply the "polluter pays" principle, prioritize the most exposed communities.

## **Standards, Buildings, and Practice**

ASHRAE – Tracy Hanigan

- Promotes widespread IAQ monitoring and timely interventions; examples on radon and formaldehyde.
- Key standards: 62.1, 62.2, 170 (ventilation), and 241 (infectious aerosols, "equivalent clean airflow"), free-to-view; policy work in the US.

USGBC – Peter Templeton

- Integrates IAQ and green buildings; updates LEED with references to ASHRAE and alignment with WELL;
- Center for Green Schools: support for >250 districts (>9 million students); tools for building portfolios and performance tracking.

International WELL Building Institute – Rachel Hodgdon

- Announces the Global Commission on Healthy Indoor Air (~100 experts, ~35 countries) for a global framework for action and national blueprints, in synergy with the Pledge.
- Global Open Air Quality Standards (GoAQS) – Sotirios Papaziensis
- Open initiative with >150 experts to align fragmented standards into a single, actionable framework; IAQ beyond energy drivers alone, with renewables and smart monitoring for efficiency and health.

Boston Public Schools – Catherine Walsh

- Exemplary program: 4,400 IAQ sensors (every classroom/office/nursery) + 118 roof sensors, public dashboard, integrated DCV, targeted maintenance, investment prioritization; partnership with Boston University; >\$22.5M grant for upgrades (HVAC, enclosure, electrical, HEPA).

Safer Air Project – Plum Stone

- IAQ as an accessibility/inclusion issue (Long COVID, chronic conditions).
- Requirements: mandatory performance standards for pathogens/pollutants and real-time data visible to the public.

## **Academies/Advocacy and Youth Voice**

#### Australian Academy of Science – Anna-Maria Arabia

- Vision 2035: All new buildings monitor CO<sub>2</sub>/CO<sub>2</sub>/PM2.5, 14 L/s person ventilation, prioritized retrofits (hospitals, schools, etc.), IAQ displays, and automatic control; economic benefits (Australia example: \$20 billion/year).
- Call for multi-sector coalitions and gradual but concrete steps.

#### Youth Advocate – Violet Affleck

- Denounces the underestimation of airborne transmission and Long COVID among young people; historical parallel with the indoor smoking ban.
- Cultural goal: Make filtered air an intuitive right like drinking water; build ubiquitous clean air infrastructure.

#### Air Club – (presented by Georgia Lagoudas)

- Open global movement (yellow canary symbol) uniting "early believers" to push low-cost/high-impact IAQ solutions.

#### **Operational Outputs (Takeaways)**

- Global pledge initiated and signed: invitation to further signatories (governments/organizations).
- Proposed regulatory path: monitoring → transparency → performance standards → obligations.
- Schools as a priority: Montenegro (national scale) and Boston (widespread monitoring + DCV + grants) cases.
- Standards and certifications: market leverage (ASHRAE 241; updated LEED; WELL; GoAQS initiative).
- Equity/finance: redirect fossil fuel subsidies and development toward IAQ/clean cooking; include IAQ in the WHO NCD roadmap and climate resilience plans.