



# FIRST WHO GLOBAL CONFERENCE ON AIR POLLUTION AND HEALTH

**IMPROVING AIR QUALITY, COMBATTING CLIMATE CHANGE – SAVING LIVES**

Organized in collaboration with UN Environment, World Meteorological Organization (WMO), the Climate and Clean Air Coalition (CCAC), the secretariat of the UN Framework Convention on Climate Change (UNFCCC), United Nations Economic Commission for Europe (UNECE) and the World Bank

30 October – 1 November 2018

WHO headquarters, Geneva, Switzerland

**BREATHE  
LIFE**

## Programme



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FIRST GLOBAL CONFERENCE ON AIR POLLUTION AND HEALTH:  
*Improving Air Quality, Combatting Climate Change – Saving Lives*  
Programme

**Day 1 Tuesday 30 October**

**09.00–09.30 Opening plenary session (EB room)**

Welcome message by the moderator, **Fiona Godlee**, Editor in Chief, British Medical Journal

*Opening remarks by:*

**Tedros Adhanom Ghebreyesus**, Director-General, World Health Organization

**HE Hajia Samira Bawumia**, Second Lady of the Republic of Ghana

**Petteri Taalas**, Secretary-General, World Meteorological Organization

**Olga Algayerova**, Executive Secretary, UN Economic Commission for Europe

**Christiana Figueres**, Convenor, Mission 2020

*With the honourable presence of:*

**Prof. Dr HRH Princess Chulabhorn Mahidol of Thailand**

**09.30–11.00 Plenary session I – The scientific evidence on air pollution and health (EB room)**

Air pollution is one of the main avoidable risks threatening human health today. The session will present scientific evidence on ambient and household air pollution and health, as well as the connection to climate change.

*BreatheLife video: Air pollution and children*

*Introduction:*

Why a global conference on air pollution and health?

**Maria Neira**, World Health Organization

*Video message:*

**Veerabhadran Ramanathan**, University of California, USA and CCAC Scientific Advisory Panel

*Presentations:*

- Air pollution – one of the world's top killers: the scientific evidence  
**Annette Peters**, German Research Center for Environmental Health, Germany
- Dangerous smoke in and around the home  
**Kirk Smith**, University of California, USA
- The Air Quality Benefits of Climate Change Mitigation  
**Drew Shindell**, Duke University, USA, CCAC Scientific Advisory Panel
- Intervention from a policy perspective  
**Teresa Ribera**, Minister of Ecological Transition, Spain

Q&A, discussion

**11.00–11.30 Coffee break**

**11.30–13.00 Plenary session II – Air quality and health effects: WHO resources and support (EB room)**

This session provides an overview of WHO's work on air pollution, climate change and health, including evidence, data, tools, training and initiatives, and guidelines for air quality.

*With the honourable presence of Her Majesty Queen Letizia of Spain*

*Presentations:*

- Update on the Ambient Air Quality Guidelines
- Ambient air pollution – global exposure, burden of disease and health impact assessments
- Household air pollution – sources, health effects, guidelines for indoor air quality
- Urban air quality – The Urban Health Initiative
- Climate change and air pollution

**Maria Neira, Dorota Jarosinska, Sophie Gummy, Pierpaolo Mudu, Heather Adhair-Rohani, Thiago Hérick de Sá, Diarmid Campbell-Lendrum**, World Health Organization

**Day 1 Tuesday 30 October (continued)**

**13.00–14.30** Lunch

**13.30–14.30** **Side event – global launch of the *Science-based solutions report on air pollution in the Asia-Pacific* by the Climate and Clean Air Coalition and UN Environment Programme (EB room)**  
In this side event, the *Air Pollution in Asia and the Pacific: Science-based Solutions* report will be launched. It is the first comprehensive, solution-oriented interdisciplinary scientific assessment of the air pollution outlook and policy measures in Asia Pacific. Key messages and solutions for clean air will be presented. This will be followed by interventions from representatives from the Ministry of Environment of Japan, the World Health Organization's South-East Asia and Western Pacific regional offices, and civil society organizations.

**13.30–14.30** **Side event – Indoor air pollution beyond fuel combustion: intersectoral actions (Salle A)**  
This side event will present key approaches to effectively address important indoor air pollutants beyond air pollution due to household fuel combustion. Discussed interventions will range from national activities to tackle indoor air pollution in France to the Swiss national action plan on radon and the complex relationship between energy efficient building and indoor air from an EU perspective. The session sets out to highlight the multifaceted opportunities for policy-makers and health professionals to address indoor air pollutants such as radon, while emphasizing the need for intersectoral and multi-stakeholder collaboration.

**13.30–14.30** **Side event – Regional perspective: energy access for health in sub-Saharan Africa (Salle C)**  
This side event will give details on the critical need for improved energy access in sub-Saharan Africa to provide health benefits, particularly in the areas of households, community infrastructure, and health care facilities. The session will further explore key opportunities for achieving significant health gains through expanded energy access in the African context.

**14.30–16.00** **Parallel sessions I – Air quality, health effects and link between air pollution and climate change**  
**1. Ambient air quality monitoring, modelling and forecasting – the next stage (Salle A)**

A review of ambient air quality monitoring, modelling and forecasting – tools and methods, gaps and priorities, identified by the Global Platform on Air Quality and Health, and the way forward.

**Moderator: Lidia Morawska**, Queensland University of Technology, Australia

*Presentations:*

- Air quality monitoring on global/regional scale, transboundary air pollution, what do we know?  
**Laurence Rouil**, French National Institute for Industrial Environment and Risks (INERIS) and European Monitoring and Evaluation Programme (EMEP) Steering Body Chair
- Global assessment of air quality: variations in exposure to fine particulate matter ambient air pollution (PM<sub>2.5</sub>)  
**Gavin Shaddick**, University of Exeter, United Kingdom
- Low cost air quality monitors and sensors  
**Richard Peltier**, University of Massachusetts, USA
- Enhancing capacity for air quality monitoring and forecasting in low- and middle-income countries: satellite measurements and ground level data  
**Yewande Awe**, World Bank
- Air quality predictions and their role in protecting public health  
**Greg Carmichael**, University of Iowa, USA
- Air quality monitoring and health in Uganda: experience from the Easter Africa GEOHealth hub  
**Lynn Atuyambe**, Makerere University, Uganda
- Current and future contribution to disease burden from major sources of air pollution in India and China  
**Michael Brauer**, University of British Columbia, Canada, and CCAC Scientific Advisory Panel

Q&A, discussion, identification of key messages

**Day 1 Tuesday 30 October (continued)**

**2. What we know about health effects of air pollution (EB room)**

Acute and chronic effects of air pollution reviewed, with emphasis on population subgroups and occupationally exposed workers. How air pollution can influence the most common diseases: heart attack, stroke, lung cancer, lung disorders and childhood pneumonia. How can we fill information gaps and how do we move forward?

**Moderator: Katherine Walker**, Health Effects Institute, USA

**BreatheLife video:** What air pollution does to your body (WHO, CCAC, UN Environment)

*Presentations:*

- Evidence on health effects of acute air pollution exposure and the groups that are sensitive  
**Joel Schwartz**, Harvard University, USA
- Air pollution and Allergy  
**Claudia Traidl-Hoffmann**, Technical University Munich, Germany
- Risky jobs – occupational exposure to air pollution  
**Inoka Suraweera**, Ministry of Health, Sri Lanka
- The effects of air pollution on the body: the pathologist's perspective  
**Paulo Saldiva**, University of São Paulo, Brazil
- Health effects of desert dust and sand storms  
**Xavier Querol**, Institute of Environmental Assessment and Water Research, Spain
- Air cleaning and personal protection: is risk reduced?  
**Wei Huang**, Beijing University, China

Q&A, discussion, identification of key messages

**3. Climate change and air pollution (Salle C)**

Evidence of the link between climate change and air pollution, synergies and co-benefits to health of mitigation actions that prevent not only air pollution related diseases but injuries and other NCDs. How to support countries to adopt policies that deliver better climate, air quality and health.

**Moderator: Diarmid Campbell-Lendrum**, World Health Organization

*Presentations:*

- Chemistry-climate interactions and climate system  
**Fiona O'Connor**, Met Office Hadley Centre, United Kingdom
- Policies to limit climate change improve air quality and saves lives  
**Rita van Dingenen**, Joint Research Centre, European Commission
- Action to maximize benefits; delivering better climate and better health  
**Sir Andy Haines**, London School of Hygiene and Tropical Medicine and CCAC Scientific Advisory Panel
- Climate and pollution impacts of biomass burning  
**Pam Pearson**, International Cryosphere Climate initiative (ICCI)
- Country experience in reducing emissions of air and climate pollutants with health benefits.  
**Liu Qiyong**, Center for Disease Control and Prevention, China  
Other country representatives are invited to speak from the floor

Q&A, discussion, identification of key messages

**Day 1 Tuesday 30 October (continued)**

**16.00–16.30** Coffee break

**16.30–18.30** Plenary session III – Regional challenges and priorities (EB room)

This session will consider how air pollution affects health in the key regions of the world, highlight examples of regional progress and help identify opportunities for further action. There will be presentations from each of the WHO regions, followed by discussion and identification of recommendations and key messages to be presented on Day 3.

**Moderator: Michal Krzyzanowski**, King's College London, United Kingdom

*Overview presentation:*

- **Dorota Jarosinska** (Regional Office for Europe), **Mazen Malkawi** (Regional Office for the Eastern Mediterranean), **Lesley Onyon** (Regional Office for South-East Asia), **Rok Ho Kim** (Regional Office for the Western Pacific), **Marcelo Korc** (Regional Office for the Americas), World Health Organization

**Presentations:**

- Capacity-building needs in South-East Asia  
**Kalpana Balakrishnan**, Sri Ramachandra University, India
- Transboundary air pollution  
**Yun-Chul Hong**, Seoul National University, the Republic of Korea
- Air pollution and its health effects in the Eastern Mediterranean region  
**Narges Khanjani**, Kerman Medical University, Iran
- Successful policies and measures in Europe  
**Nino Künzli**, Swiss Tropical and Public Health Institute, Switzerland
- Clean household energy strategies in Latin America  
**Kirk Smith**, University of California, USA
- How to ensure clean household energy in Africa  
**Pacifica F. Achieng Ogola**, Ministry of Environment and Natural Resources, Kenya (tbc)

**Roundtable** discussion on regional challenges and opportunities, and issues raised in the presentations, with governmental representatives.

*Participants:*

- **Aakash Shrivastava**, National Centre for Disease Control, India
- **Umo Mildren Ene-Obong**, Federal Ministry of Health, Nigeria
- **Abdullah Ahmad Al-Hmoud Al-Sabah**, Director General of the Environment Public Authority, Kuwait
- **Zbigniew Król**, Undersecretary of State in the Ministry of Health, Poland
- **Li Xiaocui**, National Health Commission, China

General discussion and framing of key messages for presentation in Day 3

**18.30–20.00** Reception (WHO Cafeteria)

**Day 2 Wednesday 31 October**

**09.00–10.00 Plenary session IV – Engaging the health sector as leader of change (EB room)**

This session will project a vision for how the health sector can assume leadership in policies and programmes to prevent air pollution-related diseases, along with promoting a broader agenda of healthier and more climate-friendly development strategies. The session will examine gaps and identify opportunities in health sector planning and response, focusing on areas and functions that need strengthening and scaling-up. The session will discuss the links between air pollution risks and the epidemic of NCDs. It will consider how primary health care plays a role in controlling air pollution-related diseases, while also advancing progress towards universal health coverage.

**Moderator: Agnès Soucat**, World Health Organization (tbc)

*Presentation:*

- Why universal health coverage (UHC) has not yet focused on air pollution  
**Toomas Palu**, World Bank

*Panel debate participants:*

- **Helga Fogstad**, The Partnership of Maternal, Newborn & Child Health
- **Isabel Saraiva**, Chair of the European Lung Foundation
- **Abdalla Osman**, Ministry of Health, Sudan
- **Sylvia Medina**, Public Health France
- **Sumi Mehta**, Vital Strategies

Q&A, discussion, identification of key messages

**10.00–11.00 Plenary session V – Communication, advocacy, partnerships (EB room)**

The purpose of the session is to highlight unique advocacy initiatives by the most compelling actors in the outreach arena, and discuss opportunities and barriers for promoting the CleanAir4Health/BreatheLife agenda in advocacy channels that resonate not only in the health sector and with the public as well as amongst politicians and climate/environment/development actors.

**Moderator: Molly Rauch**, Moms Clean Air Force

*Keynotes:*

- Doctors as active advocates for clean air  
**Arvind Kumar**, Lung Care Foundation, India
- Clean Air for Athletes – outreach through sports  
**Paula Radcliffe**, marathon runner legend, United Kingdom
- BreatheLife into the World’s Cities-Mobilizing Health Leadership from Top Down & Bottom Up  
**Elaine Fletcher**, Lead for the BreatheLife campaign, World Health Organization

*Panel dialogue:*

- Digital campaigns  
**Jessy Tolkan**, Purpose Climate Lab
- Health sector targeted campaigns  
**Génon Jensen**, Health and Environment Alliance (HEAL)
- Outreach in cities – Bike Mayors – Bike Angels  
**João Paulo Mello Amaral**, São Paulo, Brazil  
Outreach through culture  
**Michael Pinsky**, Environmental artist and author of the “Pollution Pods”
- Outreach through music  
**Ricky Kej**, Grammy award winner and UN humanitarian artist
- Outreach using data and evidence  
**Sonu Jain**, World Bank

Q&A, What are the key crosscutting messages that resonate the most?  
How to make health a part of the conversation? Identification of key messages

**Day 2 Wednesday 31 October (continued)**

**11.00–11.30** Coffee break

**11.30–13.00** Parallel sessions II – Engaging the health and other sectors

**1. Clean household energy access: igniting the transition for protecting public health livelihoods and environment (Salle A)**

The objective of the session is to highlight the important role that the access and adoption of clean household energy can play in reducing air pollution, improving public health and livelihoods. The lack of access to clean household energy is the leading source of household air pollution and a cause of some four million deaths a year. The aim of this session is to discuss the current energy access situation and how it impacts health, identifying some of the barriers to the sustained adoption of clean household energy and how the public health sector can work in cooperation with both public and private partners in the energy and other sector to promote access to clean energy for health, economics, social and environmental benefits.

**Moderator: Felice Zaccheo**, Directorate-General for International Cooperation and Development, European Commission

*Overview presentation:* Household energy access and health linkages, highlighting findings of the SDG7 policy briefs

**Heather Adair-Rohani**, World Health Organization

Introduction video – energy access in Nepal from Breathe Life Campaign

*Panel debate:*

- **Kirk Smith**, University of California, USA
- **HE Hajia Samira Bawumia**, Second Lady of the Republic of Ghana
- **Dymphna van der Lans**, CEO Global Alliance for Clean Cookstoves
- **Shu Tao**, Beijing University, Chinese Academy of Science, China
- **Kimball Chen**, CEO Global LPG Partnership
- **Marcel Alers**, United Nations Development Programme (UNDP)
- **Alejandro Vera-Casso**, UN Industrial Development Organization (UNIDO)
- High-level representative from Ministry of Petroleum and Natural Gas, India (tbc)

Q&A, discussion, identification of key messages

**2. Reducing air pollution – improving children’s health (EB room)**

How ambient and household air pollution affects children, and how interventions to clean the air can support child health and development as well as sustainability agendas. What are the measures that foster clean air and safe spaces for children to grow at home and in the community? How can the health sector contribute, new initiatives, including integration air pollution risks into the prevention and management of childhood illnesses, and tracking results?

**Moderator: Emily Farnworth**, World Economic Forum

*Presentations:*

- Children at risk – diseases related to air pollution exposure  
**Yun-Chul Hong**, Seoul National University, South Korea
- A case for action: protecting children’s health from air pollution  
**Beate Ritz**, International Society for Environmental Epidemiology

*Panel debate:*

How to engage on action from different actors involved with children to ensure clean, active and safe home and public environments for children that reduce air pollution, prevent childhood pneumonia, asthma and other respiratory disorders, and enhance children’s development. How to incorporate air pollution reduction measures into health care prevention and treatment programmes.



**Day 2 Wednesday 31 October (continued)**

**Parallel sessions II – Engaging the health and other sectors (continued)**

Actions on air pollution and children: WHO perspective and introduction to the Panel  
**Marie Noël Bruné Drisse**, World Health Organization

*Participants:*

- **Amalia Laborde**, University of the Republic, Uruguay
- **Philip Landrigan**, Boston College, USA
- **Kirsten Sandberg**, member of the UN Committee on the Rights of the Child
- **David R. Boyd**, UN Special Rapporteur on human rights and the environment
- **Christopher Sola Olopade**, University of Chicago, USA
- **Bataa Chuluunbaatar**, UNICEF Mongolia
- **Helen Petach**, US Agency for International Development
- **Erion Veliaj**, Mayor of Tirana, Albania
- **Molly Rauch**, Moms Clean Air Force

A special comment from the audience from Bernadette Daelmans, World Health Organization  
Q&A, discussion, identification of key messages

**3. Global actions for equipping national health workforces to deal with air pollution (Salle C)**

The session will discuss the education and training of the health workforce with a view to addressing air pollution and Health in All Policies. The session considers the leadership role of health at the policy level and practical clinical functions on the ground. In so doing so it will hear from existing initiatives that are spear-heading change in education and training for public health, and in particular, the perspectives of the environmental health profession, public health educators and medical practitioners. The intention is to learn from, and to develop mutually supportive strategies with initiatives and networks involved in capacity development and transforming education through the life course. Key messages on global and country action for the way forward in education and training will be identified.

**Moderator:** **Nicole Valentine**, World Health Organization

**Keynote:** **David Dyjack**, National Environmental Health Association, USA

*Panel debate and presentations:*

- **Nanoot Mathurapote**, National Health Commission Office, Thailand
- **Keith Holmes**, United Nations Educational, Scientific and Cultural Organization (UNESCO)
- **Julian Fisher**, Hannover Medical School, Germany
- **Kaylee Myhre Errecaborde**, University of Minnesota, USA
- **Siobhan Fitzpatrick**, World Health Organization
- **Charlotte Marchandise**, President of WHO Health Cities Network
- **Lujain Alqodmani**, World Medical Association, Kuwait Medical Association, Kuwait
- **Tarek Ezzine**, International Federation of Medical Students Associations (IFMSA)

Q&A, discussion, identification of key messages

**13.00–14.30**

*Lunch*

**13.30–14.30**

**Side event: Roundtable with journal editors (Salle A)**

This side event will discuss the evolution and tendencies related to the scientific journals that publish articles on the effects of air pollution. Editors of leading scientific medical journals will share their views on the technical evidence regarding air pollution, publication policies, research gaps and communication strategies.

**Moderator:** **Daniel Greenbaum**, President, Health Effects Institute, USA

*Panelists (journal editors):*

- **Bert Brunekreef**, Environmental Epidemiology
- **Michael Brauer**, Environmental Health Perspectives
- **Laragh Gollogly**, WHO Bulletin
- **Fiona Godlee**, British Medical Journal

**Day 2 Wednesday 31 October (continued)**

**Side event: Roundtable with journal editors (continued)**

- **Francesco Forastiere**, Associate editor, Environmental Health
- **Nino Künzli**, International Journal of Public Health

*Discussants:*

- **Xiaoming Shi**, National Institute of Environmental Health, CDC China
- **Pierpaolo Mudu**, World Health Organization Regional Office for Europe

13.30–14.30

**Side event: Transboundary air pollution and health – the value of international cooperation (WHO, UNECE) (Salle C)**

This side event will present the regional mechanisms for cooperation to address transboundary air pollution and its impacts on human health, such as the UNECE Convention on Long-Range Transboundary Air Pollution, the Joint Task Force on the Health Aspects of Air Pollution, and the Asia-Pacific Regional Forum on Health and Environment. It will highlight opportunities and needs for international cooperation to tackle transboundary air pollution, improve air quality & save lives

13.30–14.30

**Side event: Connecting the dots – integrating air quality, climate and health policies (World Bank, WHO) (EB room)**

The side event will discuss the scale and relative severity of the health and economic impacts of local air pollution and examine synergies and tradeoffs between local air pollution reduction and mitigation of emissions that cause climate change. The presentation will deliver key policy messages about the need to integrate efforts to address air pollution, climate change and threats to health for ministries of health, ministries of finance and economy, ministries of environment and local authorities.

14.30–16.00

**Plenary session VI – Act on air pollution to achieve health and climate goals (SDGs, Paris Agreement) – solutions across sectors (EB room)**

This session will focus on policies, measures and innovative cooperation to prevent air and climate pollutants from different sources and sectors, ensuring multiple benefits on health and wellbeing, climate, food security etc. Challenges and opportunities related to governance, urban policies and increased access to clean energy will be discussed, and enhancements/scaling up of strategic initiatives will be proposed.

**Moderator: Helena Molin-Valdes**, Head of the Secretariat, Climate and Clean Air Coalition (CCAC)

*Keynote presentations:*

- Main sources of air pollution and sectors for action on air pollution and climate change  
**Markus Amann**, International Institute for Applied Systems Analysis (IIASA) and CCAC Scientific Advisory Panel
- Health co-benefits gained through reduction of air pollution, e.g. implementation of NDCs  
**Diarmid Campbell-Lendrum**, World Health Organization
- Governance for health and governance for climate change: where is the space for air pollution?  
**Gina McCarthy**, Harvard University, USA

Panel debate to raise different perspectives and present experiences of different stakeholders' contribution to tackling air pollution and related health impacts with health and climate benefits, and policies (regulations, economic incentives, partnerships, research).

*Participants:*

- **Ugo Taddei**, Clean Air Project, Client Earth
- **Thomas Henrichs**, Environment Directorate-General, European Commission
- **Marcelo Mena**, World Bank
- **Ahmed Rafay Alam**, AirQualityAsia
- **Bahijjahu Hadiza Abubakar**, Ministry of Environment, Nigeria
- **Christian Egeler**, Federal Office for Spatial Development, Switzerland

Q&A, discussion, identification of key messages

**Day 2 Wednesday 31 October (continued)**

**16.00–16.30** Coffee break

**16.30–18.00** Parallel sessions III – Action with health focus

**1. Tackling air pollution in cities – improving health and climate (EB room)**

Over half of the world's population now live in cities and this will increase to more than 70% by 2050. At the same time, over 80% of people living in urban areas today are exposed to polluted air. The aim of this session is to highlight and discuss how urban leaders can tackle air pollution through health-focused urban policies while making cities a bedrock for healthy living – as well as climate-friendly and resilient. The session will also address the challenges and opportunities for cross-sectoral cooperation and action against air pollution at the local level and the ways through which the health sector can contribute to catalyse action and influence sectorial choices to clean the air and create healthier cities.

**Moderator: Howard Frumkin**, Wellcome Trust

*Presentations:*

- Main sources of urban air and climate pollutants and possibilities for action  
**Mark Nieuwenhuijsen**, Barcelona Institute for Global Health (IS Global), Spain
- Urban leaders and the cross-sectoral cooperation for healthy urban living, clean air and climate resilience  
**Desmond Appiah**, Chief Sustainability Advisor, C40 City Advisor, Accra, Ghana

*Presentation and panel introduction:* The role of the health sector to catalyse local action and influence sectorial choices against air pollution

**Thiago Hérick de Sá**, World Health Organization

*Panel debate:* Cities experience with tackling air and climate pollutants, and how to ensure clean and healthy cities

*Participants:*

- **Tolullah Oni**, University of Cambridge, UK and University of Cape Town, South Africa
- **Felice Zaccheo**, DG DEVCO, European Commission
- **Erias Lukwago**, Lord Mayor of Kampala, Uganda
- **Benoit Blarel**, World Bank
- **Yuka Greiler**, Swiss Agency for Development and Cooperation, Switzerland
- **Bhushan Tuladhar**, UN-Habitat South Asia, Nepal

Q&A, discussion, identification of key messages

**2. Reducing health sector emissions – modern energy access for Universal Health Coverage (Salle A)**

Hospitals in developed countries are among the most energy-intensive institutional buildings. At the same time, up to one quarter of health care clinics in major countries of sub-Saharan Africa have no power at all, and many of those with power suffer frequent interruptions due to grid failures, high costs of fuel, or generator malfunctions. Both in developed and developing regions, more energy efficient building design when combined with cleaner energy systems can improve energy reliability for power-starved facilities, support better health service delivery, contributing to universal health coverage, and put health facilities on a sustainable clean energy trajectory.

**Moderator: Elizabeth Press**, International Renewable Energy Agency (IRENA)

*Overview Presentation:* Energy as an enabler for health care delivery

**Heather Adair-Rohani**, World Health Organization

*Keynote presentations:*

- Building reliable, sustainable health care facilities in energy-poor settings  
**Dziwe Ntaba**, Village Health Works, Burundi

**Day 2 Wednesday 31 October (continued)**

**Parallel sessions III – Action with health focus (continued)**

- Reducing healthcare emissions for improved health  
**Sonia Roschnik**, National Health Service, United Kingdom

*Panel presentations and debate*

- Can cleaner energy systems also improve health services in developing countries?  
**Jem Porcaro**, UN Foundation
- Climate-smart healthcare. Low-carbon and resilient strategies for the health sector  
**Tamer Rabie**, World Bank
- The growing global movement for 100% renewable electricity in health care facilities  
**Josh Karliner**, Health Care Without Harm (HCWH)
- **Rachita Misra**, SELCO Foundation, India
- **Waltaji Terfa Kutane**, World Health Organizations, Ethiopia
- **Samson Tsegaye**, Solar Energy Foundation, Ethiopia

Q&A, discussion, identification of key messages

**3. How reducing air pollution can prevent the leading NCDs (Salle C)**

Air pollution causes one-quarter to on-third of deaths from the leading NCDs (heart attack, stroke, lung cancer and respiratory disease). This session will focus on how air pollution actions can prevent NCDs while also promoting environmental sustainability and climate change agendas, explore opportunities to linked action, and a way forward.

**Moderator: Jessica Leighton**, Bloomberg Philanthropies

*Introduction:* Setting the stage for action on air pollution to prevent NCDs

**Soumya Swaminathan**, Deputy Director General, World Health Organization

*Presentations:*

- Global burden of disease overview: the impact of air pollution versus other risk factors  
**Annette Prüss-Ustün**, World Health Organization
- Evidence of the impacts of air pollution on NCDs even at low-level concentrations  
**Barbara Hoffmann**, University of Düsseldorf, Germany and European Respiratory Society Environment and Health Committee
- Air pollution as major risk factor for cancers  
**Elisabete Weiderpass**, the Cancer Registry of Norway (until 31 December 2018) and IARC Director-elect (as from 1 January 2019)
- Accelerating the reduction of Household Air Pollution through multisectoral action plans on NCDs in South-East Asia  
**Lesley Onyon**, Regional Office for South-East Asia, World Health Organization,

*Roundtable:* Advancing NCD prevention through action on household and ambient air pollution, including consideration of costs of inaction

*Participants:*

- **Fiona Bull**, World Health Organization
- **Carlos Dora**, Columbia University, USA
- **Jean-Luc Eiselé**, World Heart Federation
- **Nina Renshaw**, NCD Alliance
- **Inoka Suraweera**, Ministry of Health, Sri Lanka

Q&A, discussion, identification of key messages

**18.30–19.30**

*Pollution Pods exhibition, Place des Nations*

**19.30–20.30**

*Reception, Palais des Nations, Salle des pas perdus*

**20.30–22.00**

*Multimedia and musical awareness-raising event: “BreatheLife for a Healthy People – Healthy Planet”, Salles des Assemblées, Palais des Nations, Geneva*

**Day 3 Thursday 1 November**

**09.00–10.00**

**Opening of the high-level action day (EB room)**

Welcome message and housekeeping information by the moderators:

**Maria Neira**, World Health Organization and **Gina McCarthy**, Harvard University, USA

*Opening remarks:*

- **Tedros Adhanom Ghebreyesus**, Director-General, World Health Organization
- **Prof. Dr HRH Princess Chulabhorn Mahidol** of Thailand
- **Upendra Yadav**, Deputy Prime Minister and Minister for Health and Population, Nepal
- **Didier Garmedinger**, Minister of Health, Monaco
- **Erik Solheim**, Executive Director, United Nations Environment Programme
- **Petteri Taalas**, Secretary-General, World Meteorological Organization
- **Helena Molin-Valdés**, Head of the Secretariat, Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC)
- **Ovais Sarmad**, Deputy Executive Secretary, United Nations Framework Convention on Climate Change (UNFCCC) Secretariat
- **Benoit Blarel**, Practice Manager, World Bank

**10.00–12.15**

**Plenary session VII – From evidence to action (EB room)**

The session will take stock from the state of the evidence about air pollution and health, trends on human exposure to air pollution and the costs to society and reflect on the mandate for action from the “Road Map for an Enhanced Global Response to the Health Impacts of Air pollution” (WHA69.18).

*BreatheLife video: Air pollution and children*

*Keynote presentations:*

- The global air pollution crisis – latest data from WHO and their implications  
**Maria Neira**, World Health Organization
- Doctors as advocates for clean air  
**Arvind Kumar**, Lung Care Foundation, India
- Household energy and how to move household air pollution to the top of the global energy agenda?  
**Kalpana Balakrishnan**, Sri Ramachandra University, India
- Maximizing health and climate benefits from action across sectors  
**Drew Shindell**, Duke University, USA and CCAC Scientific Advisory Panel

**11.00–11.30**

*Coffee break*

**Plenary session VII – From evidence to action (continued)**

Roundtable with representatives of different countries/city/region present on their experiences in cleaning the air, e.g. successful policies, measure and initiatives.

Participants:

- **Upendra Yadav**, Deputy Prime Minister and Minister for Health and Population, Nepal
- **Veronica Manfredi**, Environment Directorate-General, European Commission
- **Wu Xianfeng**, Ministry of Ecology and Environment, China
- **Jane Nishida**, US Environmental Protection Agency
- **Sergio Sanchez**, Clean Air Institute
- **Anne Souyris**, Deputy-Mayor in charge of Health issues, City of Paris, France
- **Desmond Appiah**, Chief Sustainability Advisor, C40 City Advisor, Accra, Ghana

Remarks by **Monsignor Marcelo Sánchez Sorondo**, Chancellor of the Pontifical Academy of Sciences and the Pontifical Academy of Social Sciences

**Day 3 Thursday 1 November (continued)**

**12.15–13.00**

**Plenary session VIII – Stock-taking with presentation of key messages from Day 1 and 2 (EB room)**

Recommendations and key messages on the way ahead on the global air pollution crisis, the health effects and the solutions, regional priorities in the fight against air pollution, how the health sector can be leaders in preventing disease and death from air pollution, the need for education and training of the health workforce, how to ensure both health and climate benefits from policies and measures across sectors and how to ensure better results through awareness raising, communication and partnerships.

Major gaps and opportunities for tackling the massive burden of disease caused by air pollution, while obtaining co-benefits for health, quality of life and for climate will be presented.

*Moderator: Paula Daza*, Under-Secretary of Health, Chile

*Presentations:*

Day 1: **Francesco Forastiere**, WHO Consultant

Day 2: **Carlos Dora**, Columbia University, USA

Regional session: **Michal Krzyzanowski**, King's College London, United Kingdom

Q&A, discussion. Key messages and recommendations from Day 1 and Day 2 to be included in the final document: Geneva Action Agenda – Clean Air for Health

**13.00–14.30**

*Special BreatheLife Lunch (by invitation only)*

**14.30–16.00**

**Plenary session IX: Cleaning the world's air – governance, economic incentives and health sector leadership (EB room)**

This session will focus on the health costs and innovative economic incentives and finance mechanisms for action to improve air quality to fulfil a specific global goal of reduced air pollution related deaths, including legal aspects, also related to air pollution moving across national borders and the need for a global (or regional) legal instrument, lessons learned from the Convention on Long-Range Transboundary Air Pollution.

*Moderator: Gina McCarthy*, Harvard University, USA

*Introductions:*

- **Michelle Bachelet**, United Nations High Commissioner for Human Rights
- Country legislation and *WHO's Air Quality Guidelines*  
**Nino Künzli**, Swiss Tropical and Public Health Institute, Switzerland
- 40 years of success: The story of the Convention on Long-Range Transboundary Air Pollution  
**Olga Algayerova**, Executive Secretary, United Nations Economic Commission for Europe
- Air pollution action – saving lives and money – benefits from global air pollution action  
**Benoit Blarel**, World Bank

Roundtable debate on costs and benefits and economic incentives for action, and presentation of a global goal for lives saved from air pollution

*Participants:*

- **HE Hajia Samira Bawumia**, Second Lady of the Republic of Ghana
- **Jens Frølich Holte**, State Secretary for International Development, Norway
- **Kandeh Yumkella**, MP Sierra Leone
- **Sunita Narain**, Centre for Science and Environment, India
- **Howard Frumkin**, Wellcome Trust

*Final remarks: Tedros Adhanom Ghebreyesus*, Director-General, World Health Organization

**16.00–16.30**

*Coffee break*

**Day 3 Thursday 1 November (continued)**

**16.30–17.30**

**Plenary session X – Cleaning the world's air: time to act and commit! (EB room)**

Ministers, mayors, heads of IGOs, NGOs and other multilateral organizations will announce their voluntary commitments in the fight against air pollution with health and climate change benefits.

*Introduction* by the moderator

Roundtable with the launch of new initiatives/pledges/partnerships and commitments by countries, cities and organizations

*Participants:*

- **Upendra Yadav**, Deputy Prime Minister and Minister for Health and Population, Nepal
- **Didier Garmedinger**, Minister of Health, Monaco
- **Jens Frølich Holte**, State Secretary for International Development, Norway
- **Lamjav Byambasuren**, Vice Minister of Health, Mongolia
- **Ambassador Walter Steven**, Head of the EU Delegation to the United Nations
- **Ambassador A.L.A Azeez**, Sri Lanka
- **Ambassador François Rivasseau**, France
- **Ambassador Carlos Mario Foradori**, Argentina
- **Takashi Ohmura**, Ministry of the Environment, Japan
- **Thais Cavendish**, Ministry of Health, Brazil
- **Jane Nishida**, Environmental Protection Agency, USA
- **Panpimol Wipulakorn**, Ministry of Public Health, Thailand
- **Roald Lapperre**, Ministry of Infrastructure and Water Management, Netherlands
- **Erion Veliaj**, Mayor of Tirana, Albania
- **Erias Lukwago**, Mayor of Kampala
- **Tedros Adhanom Ghebreyesus**, Director-General, World Health Organization
- **Elena Manaenkova**, World Meteorological Organization, WMO
- **Olga Algayerova**, Executive Secretary, UNECE
- **Tiffany Hodgson**, UNFCCC
- **Rohit Khanna**, World Bank
- **Abdulaziz Almuzaini**, UNESCO
- **Helena Molin-Valdes**, Climate and Clean Air Coalition, CCAC
- **Roland Ries**, Mayor of Strasbourg and Co-President of UCLG
- **Pere Calvet**, President of UITP
- **Arnico Panday**, International Centre for Integrated Mountain Development - ICIMOD
- **James Thornton**, CEO Client Earth
- **Shazia Rafi**, Air Quality Asia
- **Pippa Powell**, Medical Societies and patient organizations
- **Alan Abelsohn**, WONCA
- **Tarek Ezzine**, IFMSA
- **Genon Jensen**, Health & Environment Alliance
- **Charlotte Marchandise**, City of Rennes, France
- **Alan Bigelow**, Solar Cookers International
- **Ravina Raj Kohli**, #MyRightToBreathe
- **JP Amaral**, Brazil's Civil Society Organizations for clean air and health
- **Josh Karliner**, Health Care Without Harm
- **Kimball Chen**, Global LPG Partnership
- **Prisco Piscitelli**, Apulia region
- **Jack Broadbent**, Bay Area Air Quality, San Francisco
- **Zoltan Massay-Kosubek**, European Public Health Alliance (EPEH)
- **Marcelo Korc**, Pan American Health Organization, PAHO

**Day 3 Thursday 1 November (continued)**

**16.30–17.30 Plenary session X – Cleaning the world’s air: time to act and commit! (EB room)**

- Jean Luc Eisele, World heart Federation
- Jackson MacHuhi, WISE
- Sustainable Energy for All (SE4ALL)
- ATMO France
- Luxembourg
- Egypt
- Maldives
- Japan
- United Arab Emirates
- Mozambique
- Afghanistan
- Andorra
- Azerbaijan
- Belarus
- Costa Rica
- Médecins du Monde

**Forum of International Respiratory Societies (FIRS)**

**17.30–18.00 Conclusion and next steps (EB room)**

Presentation of the draft conference report, with key messages and recommendations from days 1, 2 and 3, commitments and initiatives announced to be annexed.

Conference chair: **Maria Neira**, World Health Organization

Q&A, discussion of the elements of the report, preliminary agreement

Closing remarks by WHO Assistant Director-General, Climate and other Determinants of Health,  
**Joy St John**