Institute for Governance & Sustainable Development

Contacts: Durwood Zaelke zaelke@inece.org, (202) 498-2457; Katie Fletcher, (202) 338-1300, kfletcher@igsd.org

World Health Organization Confirms Air Pollution Is World's Single Largest Preventable Health Risk

7 million deaths annually are linked to indoor and outdoor air pollution

Addressing air pollutants could save millions of lives & cut warming in half by 2030

Washington, DC, 25 March 2014 – One in eight deaths in 2012 is attributed to exposure to indoor and outdoor air pollution, according to new estimates released today by the World Health Organization (WHO). According to the new WHO data, indoor particulate matter air pollution from the burning of solid fuels for heating and cooking caused 4.3 million deaths in 2012, and outdoor particulate matter air pollution caused an additional 3.7 million deaths globally. Regionally, low- and middle-income countries in South-East Asia and the Western Pacific saw the highest number of air pollution deaths, with a total of 3.3 and 2.6 million deaths caused by indoor and outdoor particulate matter air pollution respectively.

Exposure to particulate matter air pollution, which includes major climate forcers such as black carbon soot, is linked to such diseases as ischaemic heart disease, strokes, chronic obstructive pulmonary disease, respiratory infections, and lung cancer.

"Reducing air pollution, including black carbon soot pollution, can save millions of lives a year, reduce crop losses significantly, and cut the rate of global warming in half and the rate of warming in the Arctic by two-thirds over the next few decades," said Durwood Zaelke, President of the Institute for Governance & Sustainable Development. "With this combination of benefits—healthier citizens, higher crop yields, and half the rate of climate change—reducing air pollutants should be a top priority for sustainable development and climate protection."

Black carbon soot, one of four climate pollutants known collectively as short-lived climate pollutants (SLCPs) due to their relatively short atmospheric lifetimes, is the second leading cause of global warming behind CO_2. The other three SLCPs are methane, tropospheric ozone, and hydrofluorocarbons, or HFCs. Fast action to reduce SLCPs has the potential to cut the rate of climate change in half, slowing global temperature rise by up to ~0.6°C by 2050 and 1.3°C by 2100, while preventing 2.4 million air pollution-related deaths per year, and avoiding around 30 million tonnes of crop losses annually.

Due to the heightened effects of black carbon and tropospheric ozone near their emissions sources, these benefits, including much of the climate mitigation benefits, are enjoyed largely by the regions making the cuts. For example, eliminating emissions of black carbon from traditional solid biomass stoves with improved cook stoves would have a major impact in reducing black carbon direct climate effects over South Asia (by about 60%).

"Reducing emissions of these short-lived climate forcers is critical for protecting the world's vulnerable peoples and vulnerable ecosystems," said Zaelke. "When we talk about sustainable development," Zaelke added, "this is precisely what we mean. These measures reduce climate change, save lives, provide access to clean energy, and improve food security all at once."

The WHO Report is here

IGSD's Primer on Short-Lived Climate Pollutants is here