

## Institute for Governance & Sustainable Development

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## Black carbon ranked number two climate pollutant by US EPA

## Reductions can provide fast climate and health benefits

Washington, DC, March 30, 2012 – The US Environmental Protection Agency concluded in a report to Congress released today that targeted strategies to reduce black carbon "can be expected to provide climate benefits within the next several decades," based on black carbon's strong warming potential and its short atmospheric lifetime of days to weeks. EPA concluded that black carbon was likely to be causing more warming than any climate pollutant other than CO<sub>2</sub>, although there was remaining uncertainty about the effects of black carbon on clouds, which still need to be resolved.

The EPA report found that "currently available scientific and technical information provides a strong foundation for making mitigation decisions to achieve lasting benefits for public health, the environment, and climate." It highlights that cutting "BC emissions can halt the effects of BC on temperature, snow and ice, and precipitation almost immediately." Reducing BC will also provide significant public health and environmental benefits that "often exceed the costs of control."

"Cutting black carbon is a triple win," said Durwood Zaelke, President of the Institute for Governance and Sustainable Development in Washington, DC. "Cutting black carbon reduces climate change, cleans the air, and saves lives." "And we can make cuts to black carbon quickly, using existing technologies, and existing laws at the national and regional level in most cases."

BC emissions may be responsible for half or more of the warming in the Arctic, and in the Himalayas as well. In the Arctic, the average springtime forcing from BC is 1.73 watts per square meter. This compares with global warming from  $CO_2$  of 1.66 watts per square meter. The report notes instantaneous warming of up to 20 watts per square meter in some places in the Himalayas in springtime. In the U.S., BC is reducing snow cover and overall snowpack and contributing to earlier spring melting. This reduces melt-water later in the year when it is most needed.

In the U.S. and other developed countries, most BC is from diesel use in the transport sector. For these sources, BC emissions can be reduced with ultra-low sulfur diesel, along with new engine standards and retrofits of existing engines. In developing countries, BC emissions are from residential cookstoves, as three billion people worldwide still cook with biomass or coal in rudimentary stoves or open fires. This source of BC pollution not only causes significant regional warming, it also causes more than two million deaths a year, mostly women and children.

Black carbon is one of three short-lived climate pollutants targeted by the new Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants. The others are hydrofluorocarbons, methane, and ground-level ozone. The Coalition was set up by six countries, including the US, and the United Nations Environment Programme, which will host the Secretariat.

"The SLCP coalition opens up a second front in the fight against global warming," stated Zaelke. "This may be the only way to reduce climate impacts in the near term, and is a critical complement to the primary battle to reduce emissions of CO2."

See the report summary here: <a href="http://www.epa.gov/airquality/blackcarbon/2012report/ExecSummary.pdf">http://www.epa.gov/airquality/blackcarbon/2012report/ExecSummary.pdf</a>
See the full report here: <a href="http://www.epa.gov/airquality/blackcarbon/2012report/fullreport.pdf">http://www.epa.gov/airquality/blackcarbon/2012report/fullreport.pdf</a>

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