SENATE

REPORT 110–489

## BLACK CARBON RESEARCH BILL

SEPTEMBER 24 (legislative day, SEPTEMBER 17), 2008.—Ordered to be printed

Mrs. Boxer, from the Committee on Environment and Public Works, submitted the following

# REPORT

[To accompany S. 3489]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred the bill (S. 3489) to require the Administrator of the Environmental Protection Agency to conduct a study on black carbon emissions, reports favorably thereon, and recommends that the bill do pass.

### PURPOSES OF THE LEGISLATION

S. 3489 would require the Administrator of the Environmental Protection Agency to conduct a study of black carbon emissions.

### GENERAL STATEMENT AND BACKGROUND

Scientists have found that black carbon, a key component of soot, likely plays a much larger role in global warming than previously estimated. Because soot particles are generally small, they also contribute significantly to air pollution related illness and mortality.

Black carbon is produced from the incomplete combustion of wood, biomass such as crop residues, forest fires, and fossil fuels, particularly diesel. Black carbon absorbs solar radiation, warming the atmosphere. Because black carbon's atmospheric life span is short, only a matter of days or weeks, reducing black carbon emissions likely will have an immediate impact on global warming. Black carbon is of particular concern in the Arctic region because it settles on ice and snow, reducing its reflectivity and increasing the rate of melting. According to some estimates, black carbon may

be responsible for up to 30 percent of the warming that is occurring in the Arctic. While significant emissions of black carbon are emitted from the developed world, the majority of emissions are from

the developing world.

Reducing black carbon emissions in the United States would also have the benefit of reducing premature mortalities and other public health impacts, and result in reductions in global warming. Because of the potential benefits of reducing black carbon emissions, it is imperative that the Administrator of the Environmental Protection Agency conduct a study of the sources and quantities of black carbon emission, climate and health related impacts, potential control technologies, areas for additional research, and actions that the Federal Government should take to reduce black carbon emissions.

### SECTION-BY-SECTION ANALYSIS

Section 1. Study by administrator of black carbon emissions

Subsection (a)—Study

Subsection (a) requires the Administrator of the Environmental Protection Agency, working with representatives of industry and environmental groups, to study carbon black emissions, including: (1) an identification of the major United States and worldwide sources, an estimate of the quantity of current and projected future emissions and the net climate effect of those emissions; the most recent scientific information on black carbon emissions; the most effective and cost-effective control technologies, operations, and strategies; a determination of a carbon dioxide equivalency factor or other metrics to compare black carbon to other greenhouse gases; and the health benefits of additional black carbon reductions; and (2) recommendations regarding additional research; actions that the Federal Government could take to encourage or require reductions in black carbon emissions; and the development of a climate-beneficial tropospheric ozone reduction strategy.

Subsection (b)—Report

Subsection (b) requires the Administrator to submit the report to Congress no later than 180 days from enactment of this Act.

Subsection (c)—Authorization of appropriations

Subsection (c) authorizes the appropriation of such sums as are necessary to carry out this Act.

## LEGISLATIVE HISTORY

S. 3489 was introduced by Senators Clinton and Carper. The bill was read twice and referred to the Senate Committee on Environment and Public Works. The Committee met on September 17, 2008, when S. 3489 was ordered favorably without amendment reported by voice vote.

## HEARINGS

The Committee did not hold hearings on S. 3489 during the 110th Congress.

#### ROLLCALL VOTES

There were no rollcall votes. The Committee on Environment and Public Works met to consider S. 3489 on September 17, 2008. A quorum of the Committee being present, S. 3489 was reported favorably without amendment by a voice vote.

#### REGULATORY IMPACT STATEMENT

In compliance with section 11(b)(2) of rule XXVI of the Standing Rules of the Senate, the Committee states that there are not expected to be significant costs to private entities under this legislation.

### MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104–4), the Committee finds that S. 3489 would impose no Federal intergovernmental unfunded mandates on State, local or tribal governments.

#### CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

In compliance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

September 23, 2008.

Hon. BARBARA BOXER,

Chairman, Committee on Environment and Public Works, U.S. Senate, Washington, DC.

DEAR MADAM CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 3489, a bill to require the Administrator of the Environmental Protection Agency to conduct a study on black carbon emissions.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Susanne S. Mehlman.

Sincerely,

Peter R. Orszag.

Enclosure.

- S. 3489—A bill to require the Administrator of the Environmental Protection Agency to conduct a study on black carbon emissions
- S. 3489 would require the Environmental Protection Agency (EPA) to conduct a study that identifies the major sources of black carbon emissions in the United States, their contributions to global warming, and the most effective technologies for removing or reducing such emissions. EPA would be required to submit the results of the study to the Congress not later than 180 days from the bill's enactment. Based on information from EPA, CBO estimates that implementing this legislation would cost about \$2 million over the 2009–2010 period, assuming availability of appropriated funds. Enacting the bill would not affect direct spending or revenues.
- S. 3489 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would not affect the budgets of state, local, or tribal governments.

The CBO staff contact for this estimate is Susanne S. Mehlman. This estimate was approved by Theresa Gullo, Deputy Assistant Director for Budget Analysis.

# CHANGES IN EXISTING LAW

Section 12 of rule XXVI of the Standing Rules of the Senate requires the committee to publish changes in existing law made by the bill as reported. Passage of this bill will make no changes to existing law.

 $\bigcirc$