## CENTER FOR BIOLOGICAL DIVERSITY

Climate Law Institute

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# Frequently Asked Questions: Setting a National Pollution Cap on Greenhouse Gases Under the Clean Air Act

#### What is the Clean Air Act?

Signed into law by Richard Nixon in 1970, the Clean Air Act is America's most important and successful air pollution control law. It requires the Environmental Protection Agency (EPA) to identify and regulate major sources of air pollution to ensure they are reduced to levels that do not endanger human health and welfare.

Due to the Clean Air Act, America's air quality is better today than in 1970, despite major growth in our economy and industrial production. As a result, thousands of lives are saved *each year*. Due to savings in medical care and pollution cleanup, the economic benefits of the Clean Air Act have exceeded its costs by 42 times.

#### How has the Act been used to combat global warming pollution thus far?

In response to a Clean Air Act petition and litigation, the U.S. Supreme Court ruled in 2007 that greenhouse gases are "air pollutants" under the Clean Air Act and must be regulated if the EPA determines through an "endangerment finding" that they "may reasonably be anticipated to endanger public health or welfare." The EPA has released a draft endangerment finding and is moving forward with greenhouse gas pollution reductions under several sections of the Clean Air Act — including sections that address mobile (e.g. automobiles, ships, and airplanes) and stationary (e.g. smokestacks) sources. The EPA and the states also conduct a review of proposed new major pollution sources like power plants to ensure that harmful emissions are minimized in what's called the new source review program.

The EPA, however, is not yet moving forward to establish a national pollution cap — called a National Ambient Air Quality Standard (NAAQS) under the Act — for carbon dioxide and other greenhouse gases.

#### What are National Ambient Air Quality Standards (NAAQS)?

For certain "criteria pollutants," the EPA is required to set caps on the total amount permissible in the air. These national pollution caps are known as National Ambient Air Quality Standards. The agency has thus far capped the level of allowable ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead.

The national pollution caps are established by federal scientists using the best available scientific information to determine the effects of different levels of pollution on human health and welfare. Once the safe level has been scientifically established, each of the 50 states develops strategies to attain the prescribed pollution caps.

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#### What does the petition from the Center for Biological Diversity and 350.org seek?

The Center for Biological Diversity and 350.org have formally petitioned the EPA to declare carbon dioxide  $(CO_2)$  a "criteria" pollutant under the Clean Air Act, and to set a national pollution cap for  $CO_2$  at no greater than 350 parts per million (ppm). Many independent scientists have concluded that atmospheric  $CO_2$  levels above 350 ppm will cause catastrophic global warming impacts to humans and other species.

The petition also requests criteria air pollutant designation and national pollution caps for six additional greenhouse gases: methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>).

#### How will the EPA process the petition?

The petition from the Center for Biological Diversity and 350.org was filed under sections 108-110 (42 U.S.C. §§ 7408-7410) of the Clean Air Act, which set forth the following decision-making process:

Step I: The EPA has a legal duty to respond to the petition within a "reasonable" time period. We have requested that the EPA respond quickly by designating  $CO_2$  and the other greenhouse gases as criteria air pollutants within six months of the petition, or by June 2, 2010.

Step 2: Within 12 months of adding a pollutant to the criteria list, the EPA must issue air quality criteria that accurately reflect the latest scientific information and that specify the known effects on public health and welfare from each such pollutant.

Step 3: The EPA must then set a national pollution limit – such as 350 ppm for  $CO_2$  – sufficient to protect the public health and welfare.

Step 4: Each state must then develop and execute a state implementation plan to meet the national pollution limit through enforceable emissions controls for pollution sources within that state.

#### Why do we need a national pollution cap?

A national greenhouse gas pollution cap established by federal scientists using the best available science standard will provide a critically needed scientific benchmark for Congressional legislation and administrative policy while assisting the Clean Air Act's other pollution-reduction programs.

In the absence of a scientifically determined national pollution limit, Congress has approved a cap-and-trade bill in the House and is considering a companion bill in the Senate, both of which fall far short of what science shows is needed to stop runaway global warming. Similarly, the President is on course to propose a substantially inadequate global greenhouse gas emission target this month in Copenhagen — without first having scientifically determined what the safe atmospheric level of greenhouse gas is. When the EPA establishes a science-based national pollution cap under the Clean Air Act, congressional and international deliberations would be grounded in scientific bottom lines rather than political horse-trading.

Many federal agencies are currently grappling with emission, sequestration, and land management policies to combat global warming. All of them will benefit from a centrally determined national pollution cap. Such a cap will help the EPA to administer other aspects of the Clean Air Act, the U.S. Fish and Wildlife Service to craft endangered-species recovery plans, and land management agencies such as the U.S. Forest Service to set carbon sequestration goals.

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A national pollution limit, combined with the state implementation planning process and the Clean Air Act's other successful pollution reduction programs such as new source review, new source pollution standards, and greenhouse gas reduction rules for automobiles and other mobile pollution sources, provides the essential blueprint for the United States' greenhouse gas reduction efforts.

#### Why should the cap for atmospheric CO<sub>2</sub> levels be set at 350 parts per million?

The scientific consensus is clear: We must reduce the level of atmospheric  $CO_2$  to 350 ppm or below to avoid global catastrophe. The United Nations' top climate scientist has endorsed a 350 ppm target, as has NASA's chief climate scientist James Hansen.

Atmospheric  $CO_2$  is approaching 390 ppm and is already causing unacceptable levels of environmental degradation, including severe droughts and heat waves, other extreme weather events, and climate disruptions leaving more than 300,000 people dead each year. Arctic sea ice loss has reached unprecedented levels, corals are declining worldwide due to bleaching, and species extinctions are mounting. There can be no reasonable dispute that safe levels of  $CO_2$  in the atmosphere have already been exceeded. The global and national goal must be to scale back atmospheric  $CO_2$  from 390 ppm to 350 ppm or less.

#### Will EPA regulation through the Clean Air Act be unworkably burdensome?

Large corporate polluters argue that regulating mobile and stationary greenhouse emissions, as the Obama administration is moving toward, will create an unworkable, burdensome regulatory environment. They also argue that establishing national pollution caps for greenhouse gases is unworkable.

These same interests opposed the creation of the Clean Air Act itself on the same grounds in the late 1960s. Forty years of successful implementation have proven them wrong.<sup>1</sup> Just as the administration has decided to move forward with rules to reduce pollution from cars, power plants, and other sources, it should move forward with establishing a scientific baseline for those reductions through a national pollution cap.

Some argue that other systems — such as cap-and-trade or a carbon tax — would be better than using the Clean Air Act. This is a false choice. The Clean Air Act is entirely compatible with other tools that Congress may add. For example, when Congress instituted a cap-and-trade system for sulphur dioxide and oxides of nitrogen to address acid rain in 1990, all Clean Air Act programs were retained, including a national pollution cap, which remains a critical safety net to protect the public from these pollutants. There is no need to ignore or override any of the Clean Air Act's provisions for greenhouse pollution when adding new tools to address the problem.

Finally, some argue that since greenhouse gasses are a global problem and the air is already over-polluted with carbon dioxide, the EPA will be put in the impossible position of having to levy fines against states even though global warming cannot be stopped by U.S. action alone. But the Clean Air Act was expressly designed to deal with these kinds of international pollution problems. Section 179B requires that state pollution control plans be approved by the EPA if they "would be adequate to attain and maintain the relevant national ambient air quality standards... but for emissions emanating from outside of the United States." So individual states will not be held liable for international pollution, only for implementation of their own federally approved plans. The law is well suited, and the EPA is amply capable of handling the complex task of capping U.S. greenhouse gas emissions at a safe national and state level within a global context. Similar arguments were made in opposition to integrating greenhouse gases into the new source program, yet the EPA resolved any potential problems through its "tailoring rule" specifying the procedures it will use when it begins implementing this program for greenhouse gases in the near future.

<sup>&</sup>lt;sup>I</sup> Similar arguments were made and proven wrong about the unworkability of seat belt requirements, restaurant smoking bans, and many other public health and safety measures.

#### What about pending legislative proposals?

The Clean Air Act's national pollution cap program is our only current mechanism to establish a science-based national standard for the safe level of greenhouse gases in the atmosphere. The critical role of such a program cannot be replaced by new legislation, but instead will complement new pollution reduction tools passed by Congress. The national pollution cap and other Clean Air Act programs will remain a vital safety net for addressing the climate crisis even with new legislation, and must be retained in any climate bill. Unfortunately, the American Clean Energy and Security Act (ACES), H.R. 2454, passed by the House of Representatives in June 2009 exempts greenhouse gases from many important sections of the Clean Air Act, moving us in the wrong direction. ACES strips the EPA's authority to reduce carbon pollution from new and existing coalfired power plants, thus facilitating the construction of these plants for years to come. ACES also bars the EPA from setting a national pollution cap for  $CO_2$  and other greenhouse gases. The Kerry-Boxer bill in the Senate is very similar to ACES, and also bars the EPA from setting an overall cap on greenhouse pollution under the Clean Air Act. We need every tool in the toolbox to fight global warming, especially one of our most successful environmental laws: the Clean Air Act.

#### What about the rest of the world and the Copenhagen climate talks?

In 1997 the United States signed the Kyoto Protocol, the first agreement under the United Nations Framework Convention on Climate Change for the reduction of greenhouse gases, in which the U.S. agreed to a 7-percent greenhouse gas emission reduction below 1990 levels by 2012. Subsequently, however, the United States refused to ratify the Kyoto Protocol, and has not honored its commitment.

Having campaigned on a promise to rejoin international negotiations and lead the world in addressing the climate crisis, the Obama administration has thus far refused to agree to legally binding reduction targets, and instead recently proposed a "politically binding" agreement in which the U.S. would reduce emissions 17 percent below 2005 levels (or 3 percent below 1990 levels), the level specified in the House climate bill. The Obama administration has also asserted that it cannot agree to legally binding targets until Congress passes a climate bill.

The Obama administration need not and must not wait for Congress to act before beginning deep and rapid greenhouse gas reductions. Science calls for reductions by the United States and other industrialized nations of 45 percent or more below 1990 levels by 2020 in order reduce atmospheric  $CO_2$  to below 350 ppm. By setting a national pollution cap of 350 ppm for  $CO_2$ , the Obama administration would have a science-based foundation for its climate policy in addition to all the tools required to guarantee achievement of the pollution reductions. The administration should agree to ambitious, science-based greenhouse gas reductions at Copenhagen and commence full Clean Air Act implementation of those reductions, including the establishment of a national pollution cap.

#### What about the costs of regulation?

Pollution reduction and protection of public health through the Clean Air Act is extraordinarily cost-effective. In its first two

decades alone, the Clean Air Act brought us benefits valued at \$22.2 trillion – 42 times greater than the estimated costs of its regulations. Similar benefits can be expected from greenhouse pollution reductions under the Clean Air Act. A robust economics literature demonstrates that the worst possible thing for the economy is the continued growth of greenhouse gas emissions.



#### For more information contact:

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