



EPA's FY 2008 Performance and Accountability Report

Section II Performance Results

This document is one chapter from the *Fiscal Year 2008 Performance and Accountability Report*, U.S. Environmental Protection Agency (EPA-190-R-08-004), published on November 17, 2008. This document is available at: www.epa.gov/ocfo/par/2008par/index.htm. Printed copies of EPA's *FY 2008 Performance and Accountability Report* are available from EPA's National Service Center for Environmental Publications at 1-800-490-9198 or by e-mail at: ncepimal@one.net.

INTRODUCTION TO PERFORMANCE SECTION

This section provides performance information for each of EPA's five strategic goals: 1) Clean Air and Global Climate Change, 2) Clean and Safe Water, 3) Land Preservation and Restoration, 4) Healthy Communities and Ecosystems, and 5) Compliance and Environmental Stewardship. Each goal chapter is introduced with a "Goal at a Glance" section which provides a tabular goal overview outlining the performance measures met or not met by objective, and a program cost comparison by EPA strategic goal, providing a snapshot view of the overall Goal progress. Following the data, the goal purpose is discussed which reviews the goal and the public benefits it provides, and the progress that the Agency has made toward achieving each of the strategic objectives supporting that goal and the challenges we face. This general information is intended to provide an overview of EPA's FY 2008 performance and progress toward its longer-term goals and objectives.

In each goal overview section, information on data trends is provided to present progress EPA has achieved on selected performance measures over time. The quality of the data is discussed, including an explanation of what the data tell us, their source and limitations. Following the goal overview, each objective is discussed, outlining the performance measures achieved and the cost of the objective in comparison to the total goal costs. Detailed performance information is provided in each objective discussion, including tables outlining FY 2008 resources for the program projects supporting the objective. Each objective discussion includes additional information related to the objective, which includes a discussion of grants, weblinks and an EPA Program Assessment Rating Tool (PART) update.

At the end of each goal section, EPA provides a table of results. The table is organized by objective and includes the longer-range strategic targets that are a part of EPA's 2006-2011 *Strategic Plan*. Objective-by objective, the table provides detailed FY 2005 through FY 2008 results for each annual performance measure included in EPA's FY 2008 Annual Plan and Budget. For measures where EPA has missed or significantly exceeded its FY 2008 target or does not yet have complete FY 2008 performance data, the table provides explanations. Measures that are not currently used for Program Assessment Rating Tool assessments appear in italics.

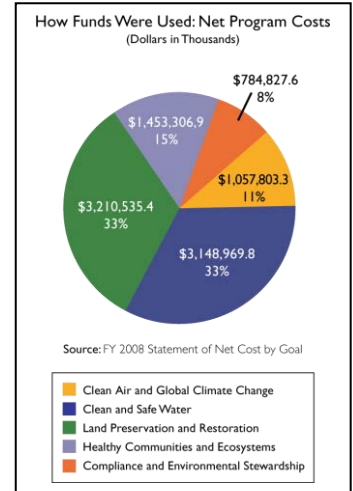
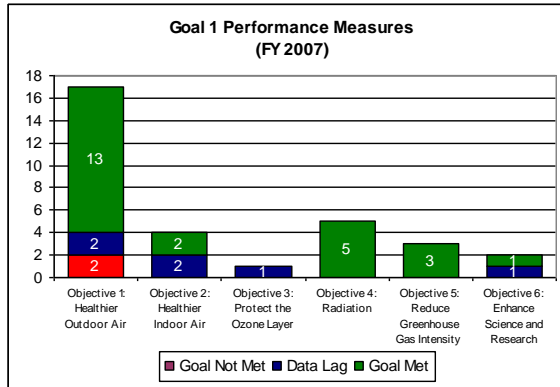
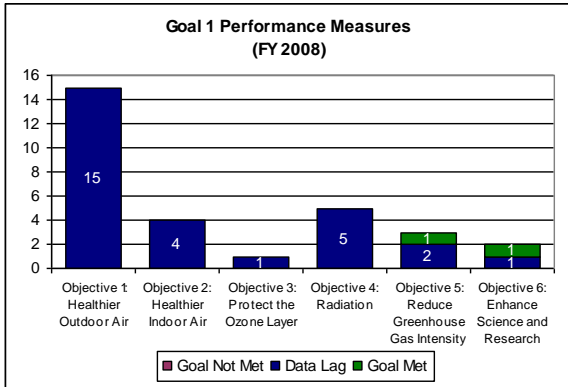
At the end of the Performance Section, readers will find a list of Program Assessment Rating Tool measures, by strategic goal and the date by which EPA expects to begin reporting data against them. Additional information on Program Assessment Rating Tool assessments and EPA's progress in making program improvements is available at www.expectmore.gov.

GOAL 1: CLEAN AIR AND GLOBAL CLIMATE CHANGE

Goal at a Glance

Protect and improve the air so it is healthy to breathe, and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

Goal 1 FY 2008 Performance Measures
 Met = 2 Not Met = 0 Data Available After November 17, 2008 = 28
 (Total Measures = 30)



Goal 1 FY 2008 Performance and Resources		
Strategic Objective	FY 2008 Obligations (in thousands)	% of Goal 1 Funds
Objective 1 – Healthier Outdoor Air Protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.	\$685,364.3	65%
Objective 2 – Healthier Indoor Air Healthier indoor air in homes, schools, and office buildings.	\$51,632.2	5%
Objective 3 – Protect the Ozone Layer Through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and the risk to human health from overexposure to ultraviolet (UV) radiation, particularly among susceptible subpopulations, such as children, will be reduced.	\$18,413.6	2%
Objective 4 – Radiation Working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.	\$47,698.3	5%
Objective 5 – Reduce Greenhouse Gas Intensity Through EPA's voluntary climate protection programs, contribute 45 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas intensity improvement goal by 2012.	\$152,864.9	14%
Objective 6 – Enhance Science and Research Provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.	\$101,830.0	10%
Goal 1 Total	\$1,057,803.3	100%

“This year, EPA established stringent new air quality standards for lead, strengthened air quality standards for ground-level ozone, and issued new emission standards that will cut pollution from locomotive and marine diesel engines by up to 90 percent.”

- Robert J. Meyers, Principal Deputy Assistant Administrator for Air and Radiation

Goal Purpose: Clean Air and Global Climate Change

Air pollution affects everyone. The average adult breathes more than 3,000 gallons of air every day, and children breathe even more air per pound of body weight. Air pollutants, such as those that form urban smog, can remain in the environment for long periods of time and can be carried by the wind hundreds of miles from their origin. Millions of people live in areas where urban smog, very small particles, and toxic pollutants pose serious health concerns. People exposed to certain air pollutants can experience burning in their eyes, an irritated throat, or breathing difficulties. Long-term exposure to certain air pollutants can cause cancer and damage the immune, neurological, reproductive, respiratory systems, and premature death.

EPA implements the Clean Air Act Amendments of 1990 and other environmental laws and uses innovative approaches, such as emissions trading, to reduce and prevent the harmful emissions from power plants and other large sources, motor vehicles, and fuels that contribute to outdoor air pollution. The Clean Air Act Amendments authorize EPA to set limits on how much of a pollutant can be in the air anywhere in the United States, ensuring that all Americans have the same basic health and environmental protection. Although the law allows individual states to establish stronger pollution controls, no state is allowed to have weaker pollution controls than those set for the country as a whole. States take the lead in carrying out the Clean Air Act because pollution control problems often require a particular understanding of factors such as local industries, geography, and transportation patterns. The U.S. government, through EPA, supports state clean air programs by providing scientific research, expert studies, engineering designs, and money. In its *2008 Report to Congress on the Benefits and Costs of Federal Regulations*, the government looks back at 10 years of major rules and finds that EPA air rules provide more benefits than costs.

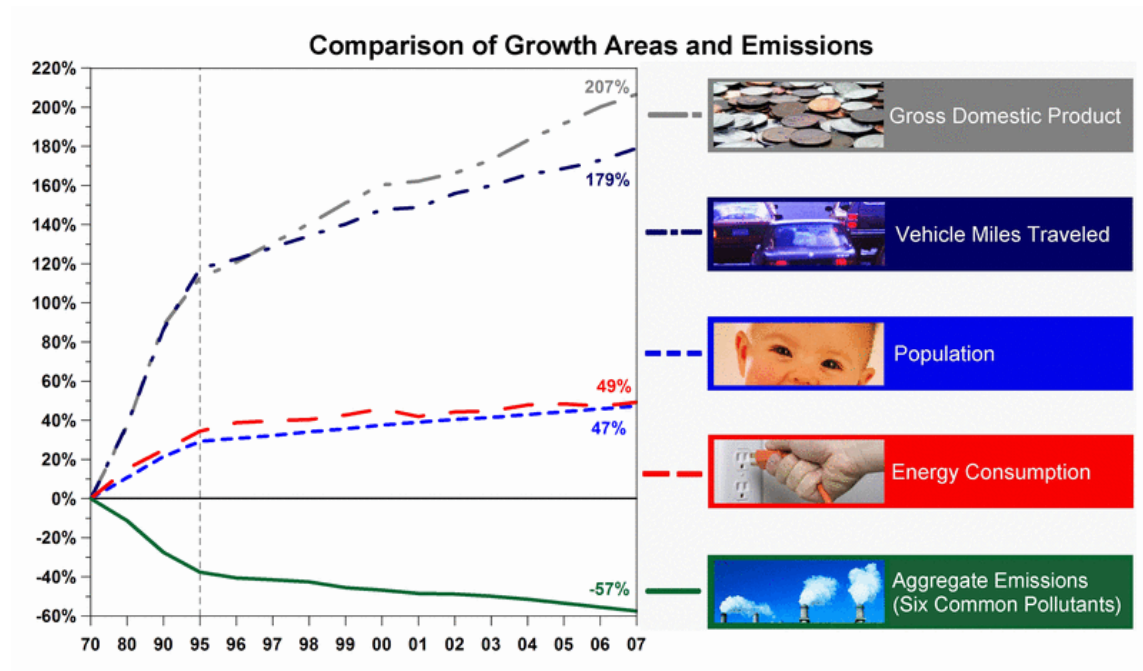
Because most people spend much of their lives indoors, the quality of indoor air is another major area of concern for EPA. Sources of indoor air pollution include oil; gas; kerosene; coal; wood; tobacco products; household cleaning products; and building materials and furnishings, such as asbestos-containing insulation, damp carpets, and lead-based paints. Often, the people who are exposed to indoor air pollutants for the longest periods of time are also those most susceptible to the ill effects of indoor air pollution: the young, the elderly, and the chronically ill, especially those suffering from respiratory or cardiovascular disease. EPA provides hotlines, publications, outreach, and other initiatives to improve the quality of air in homes, schools, and offices.

EPA also works to address global climate change. Since the beginning of the Industrial Revolution, emissions of several greenhouse gases (including carbon dioxide, methane, and nitrous oxides) have increased substantially, contributing to climate change. Important questions remain about how much warming will occur, how fast it will occur, and how the warming will affect the rest of the climate system. To help answer these questions, the President's climate change program is focused on furthering understanding of the science of climate change and developing new technologies to reduce emissions. EPA's voluntary and incentive-based programs to reduce emissions of greenhouse gases, such as ENERGY STAR[®], SmartWay, Climate Leaders, and the Landfill Methane Outreach Program, are a critical part of the President's plan to reduce greenhouse gas emissions.

In addition, under EPA's stratospheric ozone layer protection program, the Agency coordinates numerous regulatory programs designed to protect and restore the ozone layer. It also continues to participate actively in developing international stratospheric ozone protection policies.

Data Trends

For almost four decades, EPA has successfully reduced air emissions of harmful pollutants without impeding economic growth. This chart shows that even though economic growth indicators such as Gross Domestic Product, Vehicle Miles Traveled, Energy Consumption, and Population have been increasing, pollutant emissions have been steadily decreasing. Environmental protection and economic growth can simultaneously take place.

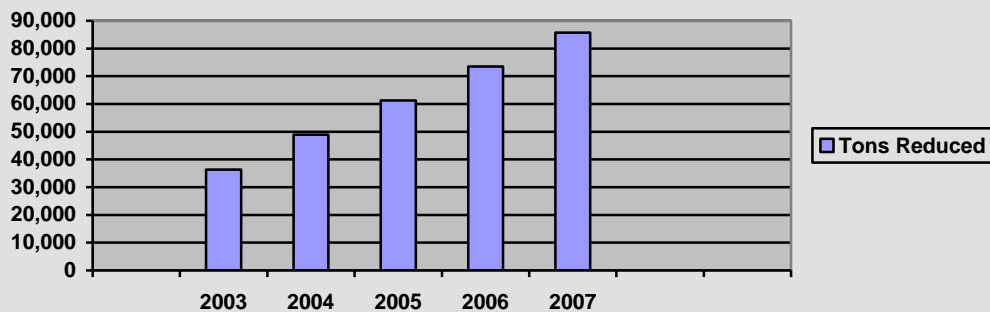


Data Quality

EPA uses data from its performance measurements to manage and to ensure that the data are complete and reliable; information is subject to the Agency's Quality System policies and procedures. Every performance measure in this report has corresponding in-depth information to explain the data's source, limitations, and other factors. This report includes examples in each goal to better inform EPA's stakeholders. For a complete list of this information, visit www.epa.gov/ocfo/budget/2008/verify_validation.pdf. This is particularly helpful for Goal 1 performance measures, since due to reporting cycles, much of the 2008 data will not be available until 2009.

Performance Measure

Tons of particulate matter 2.5 (PM_{2.5}) reduced since 2000 from mobile sources



What This Shows: Mobile sources are emitting increasingly greater amounts of particulate matter 2.5 (fine particles). Therefore, there is a positive effect on human health and the environment since exposure to fine particles is linked to a variety of health problems, such as aggravated asthma, chronic bronchitis, reduced lung function, irregular heartbeat, heart attack, and premature death in people with heart or lung disease.

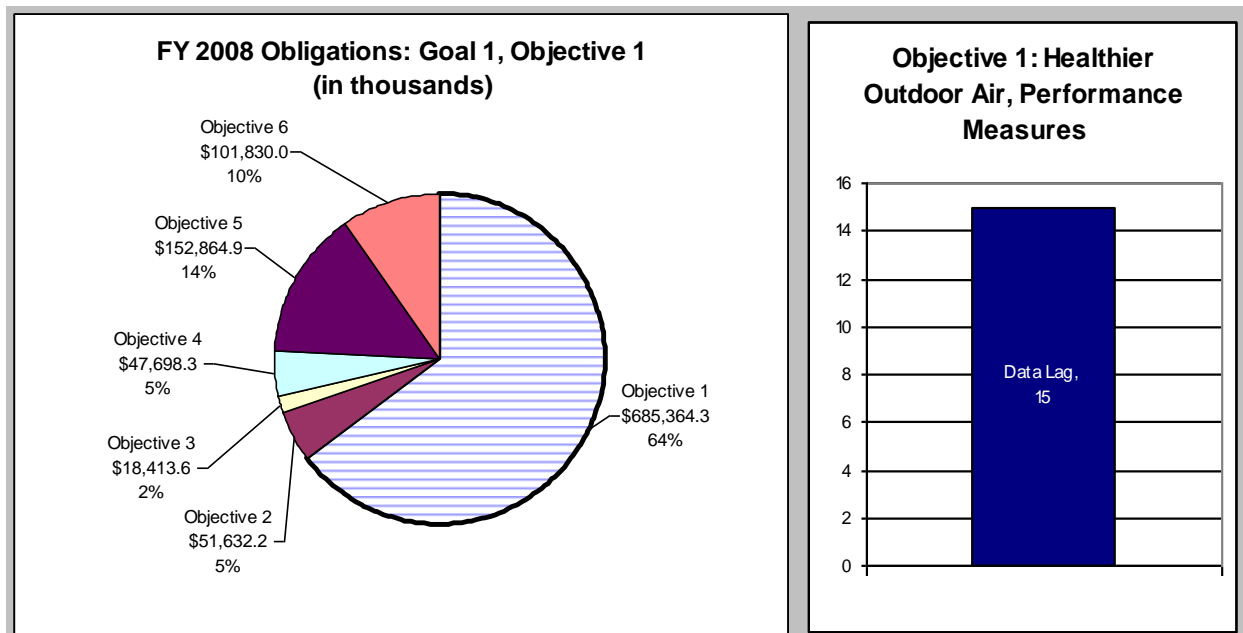
Source: National Emissions Inventory Database. See: www.epa.gov/ttn/chief/trends/. Mobile source emissions inventories and Regulatory Impact Analyses Estimates for on-road, off-road mobile source emissions are built from inventories fed into the relevant models, which in turn provide input to the National Emissions Inventory Database.

Data Limitations: The limitations of the inventory estimates for mobile sources come from limitations in the modeled emission factors (based on emission factor testing and models predicting overall fleet emission factors in grams/mile) and also in the estimated vehicle miles traveled for each vehicle class (derived from Department of Transportation data). See: www.epa.gov/otaq/m6.htm.

Contributing Programs

Acid Rain Program, AirNow, Air Toxics, Clean Air Allowance Trading Programs, Clean Air Research, National Ambient Air Quality Standards Development and Implementation, Mobile Sources, New Source Review, Regional Haze, Indoor Air Quality, Stratospheric Ozone Layer Protection Program, Radiation Programs, Voluntary Climate Programs.

Objective 1.1: Healthier Outdoor Air



The Clean Air Act directs EPA to identify and set national ambient air quality standards for commonly found air pollutants that adversely affect public health and the environment. EPA has set national air quality standards for six common air pollutants—ground-level ozone (smog), carbon monoxide, lead, nitrogen dioxide, sulfur dioxide, and particulate matter (measured as particulate matter 2.5 and particulate matter 10). For each of these six pollutants, EPA has set health-based, or "primary," standards to protect public health as well as environment-based, or "secondary," standards to protect the public welfare (e.g., crops, vegetation, wildlife, buildings and monuments, visibility). The Clean Air Act requires EPA to review the health- and environment-based standards at least once every five years and revise them as necessary to continue to protect public health and the environment.

In FY 2008, EPA promulgated the most stringent 8-hour standard ever for ozone, revising the standards for the first time in more than a decade. The Agency based the changes on the most recent scientific evidence about the effects of ozone, the primary component of smog. The United States has made significant progress in reducing ground-level ozone across the country. Since 1980, ozone levels have dropped 21 percent as EPA, states, and local governments have worked together to improve the quality of the nation's air. EPA estimates that the final standards will yield health benefits valued between \$2 billion and \$19 billion. Those benefits include preventing cases of bronchitis, aggravated asthma, nonfatal heart attacks, and premature death, as well as hospital

In September, 2008, EPA announced the award of \$492,200 to the Connecticut Department of Environmental Protection for clean diesel projects across the state. This funding was part of \$14.8 million that was made available this year for State Clean Diesel programs nationally. Diesel engines contribute significantly to air pollution, especially in urban areas. The fine particles in diesel exhaust pose serious health risks, including aggravated asthma and other respiratory symptoms. Children are especially vulnerable to these effects.

and emergency room visits. EPA's regulatory impact analysis shows that the value of the benefits are likely greater than the cost of implementing the standards. Cost estimates range from \$7.6 billion to \$8.5 billion.

New Diesel Standards Deliver Clean Air: EPA promulgated emission standards in FY 2008 that will slash pollution from locomotive and marine diesel engines by up to 90 percent, helping Americans to breathe cleaner air. When fully implemented, these new standards will reduce soot or particulate matter by 90 percent, or 27,000 tons, and reduce nitrogen oxides (NOx) emissions by 80 percent, or nearly 800,000 tons. Nationwide, this regulation will help prevent 1,400 premature deaths and 120,000 lost workdays annually by 2030. The estimated annual health benefits are valued between \$8.4 billion and \$12 billion. When older locomotive and marine engines reach the end of their useful lives, and new engines enter into the nation's diesel fleet, the benefits of today's action will increase. The rule cuts emissions from all types of diesel locomotives, including line-haul, switch, and passenger rail, as well as from a wide range of marine sources, including ferries, tugboats, Great Lakes freighters, and all types of marine auxiliary engines.

For the first time ever, this rule requires remanufacturing standards for marine engines, reductions in engine idling, and the use of after-treatment technology that will further reduce diesel emissions. After-treatment technology aims to remove emissions from the air that the engine itself cannot take out, by cleaning pollutants out of the exhaust emission immediately before exhaust is emitted from the vehicle. Phasing in tighter long-term standards for particulate matter and nitrous oxides emissions will begin in 2014 for marine diesel engines and in 2015 for locomotive engines. Advanced after-treatment technology will apply to both types of engines. The effective dates for nitrous oxides emissions will be two years earlier than last year's proposal, bringing cleaner air sooner.

State and Local Governments Gain Flexibility on Transportation Conformity: State and local governments gained more flexibility to meet transportation conformity requirements without reducing important health and air quality benefits under a new EPA final rule. Transportation conformity is a Clean Air Act requirement that ensures that federally supported highway and transit project activities are consistent with (conform to) the purpose of a state air quality implementation plan. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, enacted August 2005, provides state and local governments more time to meet conformity requirements, more flexibility before the consequences of not meeting conformity requirements apply, and the option of shortening the timeframe of conformity determinations. EPA revised the transportation conformity rule in June 2008 to make it consistent with the 1990 Clean Air Act amendments. Also, this final rule streamlines conformity requirements for transportation projects in carbon monoxide nonattainment and maintenance areas.

Clean Fuels Programs Dramatically Reduce Air Pollution: EPA's clean fuels programs have exceeded expectations in reducing ozone-forming pollutants and air toxics. In FY 2008, EPA published *The Fuel Trends Report: Gasoline 1995–2005* (available at: www.epa.gov/otaq/regs/fuels/rfg/properf/rfgperf.htm) based on data collected from 1995 through 2005, which found that emission reductions were often significantly greater than regulatory requirements. The data, which provide a view of recent gasoline property trends, are mainly from EPA's reformulated gasoline and anti-dumping programs. Highlights of the report include:

- **Gasoline sulfur decreases.** Average annual sulfur content in all gasoline dropped from about 300 parts per million in 1997 to about 90 parts per million in 2005.

- **Reformulated gasoline nitrogen oxides reductions exceed requirements.** Reformulated gasoline exceeded applicable nitrogen oxides performance standards during both Phase I (1998 to 1999) and Phase II (2000 and beyond).
- **Reformulated gasoline toxics reductions exceed requirements.** On average, Phase I reformulated gasoline complied with Phase II standards, and toxic performance still improved with the transition to Phase II standards.
- **Conventional gasoline nitrogen oxides and toxics emissions decreased.** Between 1998 and 2005, the summer nitrogen oxides emissions of conventional gasoline dropped 5.7 percent, while summer exhaust toxics dropped 4.7 percent.
- **Ethanol use in reformulated gasoline increased, and methyl tertiary butyl ether (MTBE) use decreased.** In the summer of 1996, about 11 percent of the reformulated gasoline sold contained ethanol, while virtually all of the remaining reformulated gasoline contained methyl tertiary butyl ether. By the summer of 2005, the ethanol share increased to about 53 percent, with corresponding decreases in methyl tertiary butyl ether.

Renewable Fuels Standards: EPA raised the 2008 renewable fuels standard—the amount of renewable fuel that must be used in transportation fuel to power private vehicles—to 7.76 percent. This move is in response to the Energy Independence and Security Act, which President Bush signed in December 2007.

In November 2007, EPA announced a renewable fuel standard of 4.66 percent, based on a previous law mandating that at least 5.4 billion gallons of renewable fuels be blended into the nation's transportation fuels in 2008. The new increase of 7.76 percent complies with a new minimum of 9 billion gallons of renewable fuel that the Energy Independence and Security Act requires.

The Energy Independence and Security Act increases the overall volume of renewable fuels that must be blended each year, reaching 36 billion gallons by 2022. To achieve these volumes, EPA annually calculates the percentage-based standard, which applies to refiners, importers, and non-oxygenate blenders of gasoline.

FY 2008 Resources for Program Projects Supporting This Objective**

Program Projects are EPA's fundamental unit for budget execution and cost accounting and they serve as the foundations for the Agency's budget. Frequently, Program Projects support multiple performance measures and objectives. This table lists the Program Projects and associated resources that support this objective.

***Resources associated with Program Projects might not match the goal and objective obligations exactly because of rounding.*

Goal 1: Objective 1 - Healthier Outdoor Air			
Program Project	FY 2006 Obligations	FY 2007 Obligations	FY 2008 Obligations
Categorical Grant: State and Local Air Quality Management	\$236,021.6	\$205,599.0	\$232,504.1
Categorical Grant: Tribal Air Quality Management	\$11,638.1	\$11,175.5	\$11,724.9
Clean Air Allowance Trading Programs	\$21,837.4	\$27,339.6	\$28,838.0
Congressionally Mandated Projects	\$9,516.2	\$619.6	\$2,357.7

Federal Stationary Source Regulations	\$23,553.1	\$22,837.7	\$27,327.4
Federal Support for Air Quality Management	\$102,861.6	\$105,383.1	\$108,377.9
Federal Support for Air Toxics Program	\$26,192.2	\$26,981.5	\$28,121.5
Federal Vehicle and Fuels Standards and Certification	\$63,366.2	\$59,807.3	\$71,043.4
Homeland Security: Communication and Information	\$604.2	\$945.5	\$760.8
Homeland Security: Critical Infrastructure Protection	\$6,779.9	\$2,817.4	\$3,107.8
Homeland Security: Protection of EPA Personnel and Infrastructure	\$3,093.8	\$2,585.1	\$2,311.2
International Capacity Building	\$2,364.1	\$2,367.7	\$1,735.8
Administrative Law	\$432.0	\$504.6	\$585.9
Alternative Dispute Resolution	\$121.9	\$123.0	\$142.2
Central Planning, Budgeting, and Finance	\$6,974.8	\$7,196.3	\$8,797.5
Children and other Sensitive Populations	(\$0.6)	\$0.0	\$0.0
Civil Rights / Title VI Compliance	\$976.9	\$978.3	\$963.1
Congressional, Intergovernmental, External Relations	\$4,138.5	\$4,210.7	\$4,196.7
Exchange Network	\$3,194.1	\$3,507.6	\$2,464.3
Facilities Infrastructure and Operations	\$46,681.6	\$49,738.4	\$51,260.6
Acquisition Management	\$2,941.2	\$3,223.1	\$3,967.3
Human Resources Management	\$5,506.0	\$5,122.0	\$5,418.4
Information Security	\$576.5	\$619.0	\$935.0
IT / Data Management	\$34,694.5	\$36,583.9	\$34,173.7
Legal Advice: Environmental Program	\$4,331.2	\$4,759.2	\$4,941.9
Legal Advice: Support Program	\$1,664.4	\$1,542.6	\$1,722.6
Audits, Evaluations, and Investigations	\$3,924.2	\$3,641.6	\$5,029.8
Regional Science and Technology	\$313.4	\$288.5	\$252.9
Science Advisory Board	\$449.4	\$488.9	\$573.0
Small Minority Business Assistance	\$189.3	\$240.7	\$296.1
Financial Assistance Grants / IAG Management	\$2,153.8	\$2,071.8	\$2,916.1
Clean School Bus Initiative	\$9,478.6	\$6,138.6	\$6,979.6
Diesel Emissions Reduction Grant Program	\$0.0	\$0.0	\$29,798.9
Regulatory/Economic-Management and Analysis	\$1,642.3	\$1,769.8	\$1,738.1
Total	\$638,212.4	\$601,207.6	\$685,364.2

Additional Information Related to Objective 1

Grants:

- EPA's National Clean Diesel Campaign is using a two-step approach to reduce pollution from diesel engines: emission standards for new diesel engines took effect in 2004, and more stringent emission standards for these engines in combination with ultra-low sulfur

diesel fuel went into effect in 2007. EPA will be implementing new stringent emissions standards for nonroad engines in 2008. However, because new vehicles and engines are purchased gradually over time to replace older units, EPA has developed innovative, sector-based strategies to address pollution from diesel construction equipment and heavy-duty vehicles that are currently on the road. As part of these programs, EPA awards grants to communities to retrofit engines and implement other strategies (e.g., fuel switching, idling reduction) to reduce diesel pollution.

- For fiscal year 2008, Congress appropriated funds for the first time under the Energy Policy Act (2005) to help reduce harmful emissions from heavy duty diesel engines. Through the National Clean Diesel Campaign, EPA will award grants to assist its eligible partners in building diesel emission reduction programs across the country that improve air quality and protect public health. For fiscal year 2008, the amount of funding available is \$49.2 million. This year, Clean Diesel funding is split into two basic components:
 - National Clean Diesel program (70 percent of funding)
 - State Clean Diesel Grant program (30 percent of funding)
- Across the country, EPA's regional offices awarded \$14.8 million for 50 state grants to reduce emissions in a variety of fleets and technologies. In addition, the regional offices awarded \$27.6 million for approximately 150 diesel emissions reduction projects. In addition, the Office of Transportation and Air Quality awarded \$3.4 million for grants for emerging technology projects and innovative financing projects. As these grants are implemented, areas will see less pollution. Communities will include these reductions in their clean air plans for ozone and particulate matter.
- In 2007, states received \$200 million in State and Tribal Assistance Grants. These funds allowed states to continue revising their State Implementation Plans to attain the National Ambient Air Quality Standard (NAAQS) for 8-hour ozone and particulate matter 2.5, and to reduce regional haze. These funds also provided for the continued operation of states' ambient air monitoring networks, including particulate matter 2.5, air toxics, and visibility monitoring.
- In partnership with the Department of Interior, EPA continues to track improvements in visibility in national parks and other protected areas. The Agency has improved its methods for estimating visibility range based on light-absorbing properties of particulate matter.
- Through AirNow, an EPA program that offers daily air quality forecasts as well as real-time air quality conditions for over 300 U.S. cities, citizens are more aware of air quality and associated health effects. States continue to use air monitoring data to understand the causes of particulate matter pollution so that they can develop better strategies to reduce it.
- For the National Air Toxics Trends Stations, data completeness, precision, and accuracy indicators showed improvement. EPA developed more accurate sampling and analysis methods for two national risk drivers, acrolein and hexavalent chromium. Work under community-scale air toxics monitoring grants progressed toward completion; individual project goals typically include risk assessment and identifying and characterizing local sources of hazardous air pollutants. In FY 2007, 20 new grants for air toxics monitoring community-scale assessments were awarded to state, local, and tribal agencies across the United States. EPA completed air toxics characterization and trends analyses and made them available to the public.

- EPA is working with the Hearth, Patio and Barbecue Association, the American Lung Association, and others on the Great American Woodstove Changeout—a national effort to help state, local, and tribal agencies establish campaigns to change old, dirty, “conventional” woodstoves to new, cleaner burning appliances like masonry heaters and gas, pellet, and EPA-certified woodstoves. Already in place in targeted areas, the Great American Woodstove Changeout is a voluntary effort that can effectively reduce emissions of particulates and air toxics indoors and help bring areas into attainment with the national fine particle standard. As part of each campaign, EPA encourages and supports air pollution control agencies in reaching out to the public to “Burn Clean,” that is, to burn only seasoned wood and no garbage. Burn Clean and changeout materials are available at: www.epa.gov/woodstoves.

Web Links:

AIRNow: <http://airnow.gov/>

Air Program: www.epa.gov/ebtpages/air.html

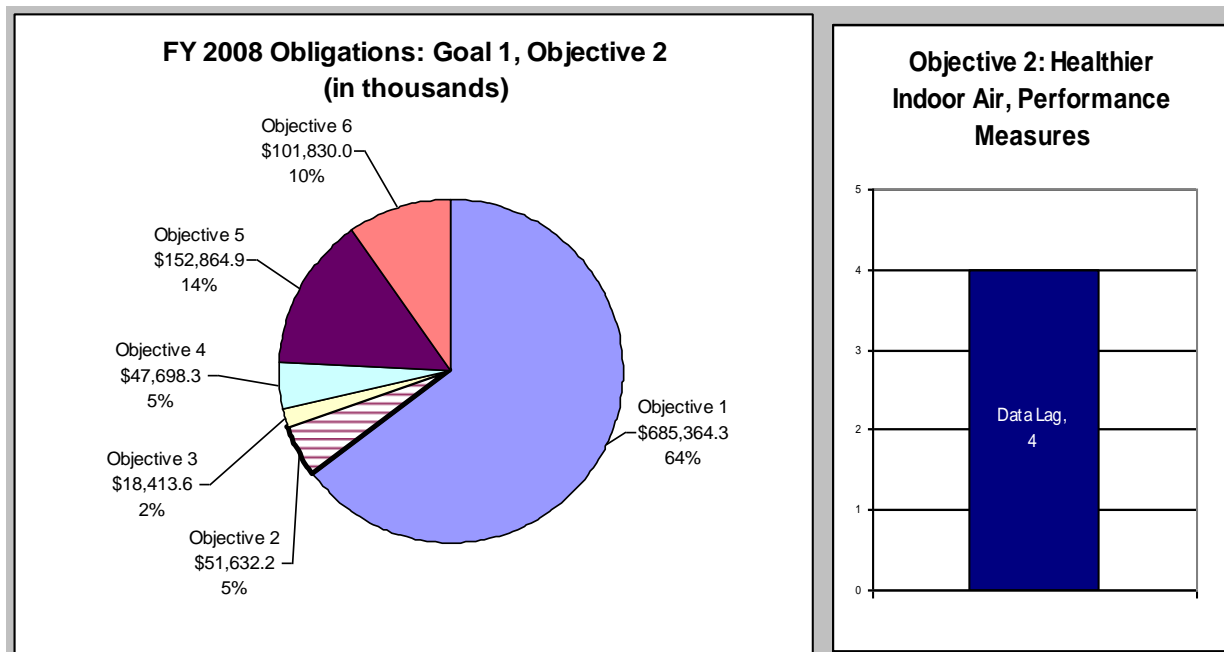
Plain English Guide to the Clean Air Act: www.epa.gov/air/caa/peg/

Toxic Air Pollutants Program: www.epa.gov/air/toxicair/

Program Assessment Rating Tool (PART):

In FY 2008, EPA developed and implemented an action plan for all Agency Program Assessment Rating Tool measures in response to a government-wide Program Assessment Rating Tool measure review. The plan leveraged ongoing strategic and annual planning and reflected measure improvements. The tables of measures and results provided in Section II of this report, “Performance Results,” identify all Program Assessment Rating Tool measures, which make up more than two-thirds of EPA’s performance measures. Please refer to www.expectmore.gov for more detailed information.

Objective 1.2: Healthier Indoor Air



EPA employs two key strategies to improve the nation's indoor air: 1) increasing public awareness of actual and potential indoor air risks so that individuals can take steps to reduce their exposure, and 2) relying on partnerships with a variety of organizations to spur action. EPA conducts outreach activities to provide the public, as well as the professional and research communities (e.g., American Medical Association; American Society of Heating, Refrigerating, and Air-Conditioning Engineers), with essential information about indoor air risks. In partnership with nongovernmental and professional entities, the Agency develops and disseminates multimedia materials to improve the design, operation, and maintenance of all types of buildings—including schools, homes, and workplaces—and bring about healthier indoor environments.

40,000 Schools Benefit From Indoor Air Quality Tools for Schools: EPA's "Indoor Air Quality Tools for Schools" effort provides individual schools, school districts, educational organizations, and educators with information on best practices, industry guidelines and sample policies, and management plans for improving indoor air quality. The EPA Indoor Air Quality Tools for Schools Awards Program recognizes schools and school districts that have demonstrated a strong commitment to improving children's health by promoting good indoor air quality. A recently released study by the Centers for Disease Control and Prevention found that 30 to 40 percent of the nation's schools have effective indoor

In 2008, EPA Region 7 recognized Lincoln Public Schools for its continued work in implementing EPA's Tools for Schools program. Lincoln Public Schools is the recipient of the EPA Tools for Schools Leadership Award. The award recognizes Lincoln Public Schools for their continued work implementing EPA's Tools for Schools program, which emphasizes prevention, diagnoses and solutions for indoor air quality. Lincoln Public Schools is the second largest public school district in Nebraska, serving approximately 32,100 students through 54 neighborhood schools.

air quality management programs in place that are grounded in EPA's program guidance; this translates to approximately 40,000 schools. In FY 2007, 1,300 additional schools began implementing indoor air quality management programs based on the Indoor Air Quality Tools for Schools Program.

EPA Aims to Reduce Asthma Triggers for Millions of People: Asthma is a serious, life-threatening respiratory disease that affects more than 22 million Americans, including 6.8 million children. Rates of asthma have risen sharply over the past 30 years, particularly among children aged 5 to 14.¹ Although there is no cure, asthma can be controlled by managing environmental asthma triggers and providing medical treatment. EPA's goal is to reduce exposure to asthma triggers for 6.5 million people by 2012. To this end, EPA provides educational material about the environmental factors—indoor and outdoor—that trigger asthma. Through FY 2007, an estimated 4.5 million people have taken all essential actions to reduce exposure to indoor environmental asthma triggers, thereby avoiding approximately 64,000 emergency room visits annually. In FY 2007, the Agency worked in conjunction with grantees to train more than 4,500 health professionals on asthma and environmental trigger management and increased national awareness of asthma triggers, through the Goldfish Public Service Campaign, to an all-time high of 33 percent. EPA exceeded its goals in FY 2007 and is on track to meet its FY 2008 goals.

Reducing Radon Exposure Saves Lives: Radon in indoor air is the second leading cause of lung cancer in America and contributes to nearly 20,000 deaths from lung cancer each year.² The purpose of EPA's indoor radon program is to promote voluntary action to reduce risks from radon. EPA estimates that in FY 2006 (the most recent year for which the Agency has complete data), the use of two voluntary public actions that EPA promotes—retrofitting homes with radon mitigation systems and building homes with radon-resistant techniques—saved approximately 600 lives.

Radon is an invisible radioactive gas that seeps into homes undetected through foundation cracks and can reach harmful levels if trapped indoors. It travels up from underground sources of uranium in the earth's crust. EPA estimates that one in 15 homes will have a radon level of 4 picocuries per liter of air or more, a level the Agency considers high. Through Radon Leaders Saving Lives, EPA is working in partnership with the American Association of Radon Scientists and Technologists and the Conference of Radiation Control Program Directors, and with state and local governments, nonprofit organizations, and radon professionals across the country to get more action on reducing the radon risk in existing and new homes. Radon preventive actions have saved an estimated 6,000 lives in the last 20 years. EPA has a goal to double that number, to 12,000 lives saved, in the next five years. At the 2008 national radon meeting the Radon Leaders Saving Lives partners unveiled a new Web portal (www.radonleaders.org) to facilitate achieving the 2012 goal. EPA will also launch a new "green" themed public service campaign during National Radon Action Month in January 2009.

FY 2008 Resources for Program Projects Supporting This Objective**

Program Projects are EPA's fundamental unit for budget execution and cost accounting and they serve as the foundations for the Agency's budget. Frequently, Program Projects support multiple performance

¹ See the Centers for Disease Control and Prevention Asthma Web site at: <http://www.cdc.gov/asthma/>

² See EPA's Radon Health Risks Web page at www.epa.gov/radon/healthrisks.html and EPA's "EPA Assessment of Risks from Radon in Homes," June 2003, EPA-402-R-03-003, at: www.epa.gov/radon/pdfs/402-r-03-003.pdf.

measures and objectives. This table lists the Program Projects and associated resources that support this objective.

**Resources associated with Program Projects might not match the goal and objective obligations exactly due to rounding.

Goal 1: Objective 2 - Healthier Indoor Air			
Program Project	FY 2006 Obligations	FY 2007 Obligations	FY 2008 Obligations
Categorical Grant: Radon	\$7,986.6	\$7,314.2	\$10,032.1
Categorical Grant: Tribal Air Quality Management	\$117.6	\$0.0	(\$9.7)
Homeland Security: Communication and Information	\$48.9	\$72.5	\$58.6
Homeland Security: Protection of EPA Personnel and Infrastructure	\$235.7	\$176.8	\$151.0
Indoor Air: Asthma Program	\$1,565.7	(\$74.7)	(\$107.6)
Indoor Air: Environment Tobacco Smoke Program	\$306.5	(\$11.9)	(\$26.9)
Indoor Air: Radon Program	\$5,471.4	\$5,614.3	\$5,735.4
Indoor Air: Schools and Workplace Program	\$348.5	(\$54.6)	(\$108.8)
International Capacity Building	\$193.8	\$30.8	\$3.2
Research: Air Toxics	(\$83.2)	(\$548.4)	(\$30.3)
Administrative Law	\$35.0	\$38.7	\$45.1
Alternative Dispute Resolution	\$9.9	\$9.4	\$11.0
Central Planning, Budgeting, and Finance	\$730.1	\$776.0	\$974.3
Civil Rights / Title VI Compliance	\$76.9	\$73.6	\$76.0
Congressional, Intergovernmental, External Relations	\$333.5	\$326.1	\$339.4
Exchange Network	\$258.5	\$269.0	\$189.9
Facilities Infrastructure and Operations	\$4,953.4	\$4,694.0	\$4,288.1
Acquisition Management	\$251.9	\$255.0	\$303.1
Human Resources Management	\$467.3	\$405.6	\$406.6
Information Security	\$50.4	\$49.4	\$66.1
IT / Data Management	\$3,281.7	\$3,199.3	\$2,858.4
Legal Advice: Environmental Program	\$351.9	\$365.6	\$385.1
Legal Advice: Support Program	\$139.6	\$120.0	\$134.5
Audits, Evaluations, and Investigations	\$285.7	\$274.5	\$373.8
Regional Science and Technology	\$24.7	\$22.2	\$20.8
Science Advisory Board	\$36.4	\$37.5	\$44.2
Small Minority Business Assistance	\$15.3	\$18.5	\$22.8
Financial Assistance Grants / IAG Management	\$441.9	\$528.6	\$588.6
Reduce Risks from Indoor Air	\$19,883.2	\$22,586.9	\$24,673.5
Regulatory/Economic-Management and Analysis	\$132.9	\$135.7	\$133.9
Total	\$47,951.7	\$46,704.6	\$51,632.2

Additional Information Related to Objective 2

Grants:

As part of its ongoing work, in FY 2006 EPA awarded grants to conduct demonstrations, training, and education and/or outreach projects in all indoor-environment program areas (including radon, asthma, and schools) that will reduce exposure to indoor air pollutants. These assistance agreements incorporated environmental results reporting and tracking requirements, which have improved the Agency's ability to evaluate the overall effectiveness of the grant. Standardized results templates are now a part of State Indoor Radon Grants work plans, and EPA expects to see improved comparability of reporting with the template.

Web Links:

Indoor Air Quality: www.epa.gov/air/basic.html#indoor

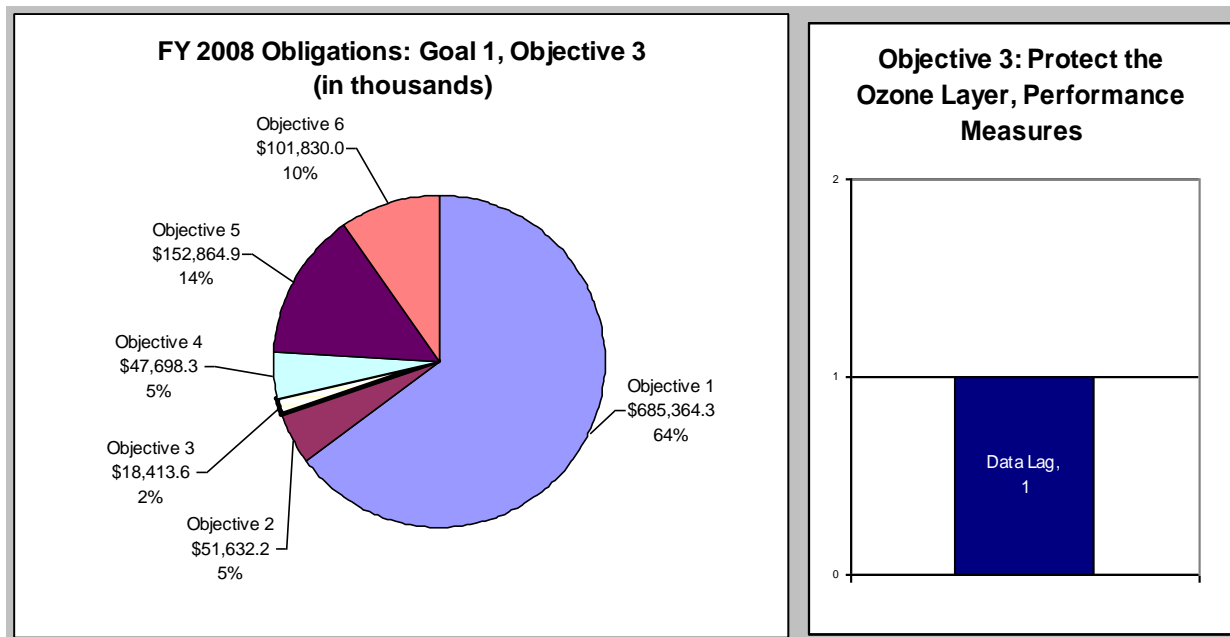
Asthma: www.cdc.gov/asthma/children.htm

Radon Program: www.epa.gov/radon/healthrisks.html

Program Assessment Rating Tool:

In FY 2008, EPA developed and implemented an action plan for all Agency Program Assessment Rating Tool measures in response to a government-wide Program Assessment Rating Tool measure review. The plan leveraged ongoing strategic and annual planning and reflected measure improvements. The tables of measures and results provided in Section II of this report, "Performance Results," identify all Program Assessment Rating Tool measures, which make up more than two-thirds of EPA's performance measures. Please refer to www.expectmore.gov for more detailed information.

Objective 1.3: Protect the Ozone Layer



The stratospheric ozone layer protects life on earth from harmful ultraviolet radiation. Scientific evidence amassed over the past 30 years indicates that the use of chlorofluorocarbons (CFCs) and other ozone-depleting substances has destroyed stratospheric ozone.

Sharp Decreases in Methyl Bromide Result From EPA Actions: EPA has been at the forefront in developing and implementing flexible, innovative, and effective approaches to ensure stratospheric ozone layer protection. In FY 2008, in accordance with the Clean Air Act and Montreal Protocol, EPA issued final exemptions for methyl bromide production and authorized important critical uses. The exemptions for continued production and import of methyl bromide will honor the U.S. commitment to obtain methyl bromide for American farmers, in a manner that is consistent with the Montreal Protocol but that also protects the ozone layer. Authorized critical uses include strawberry and tomato production as well as commodity fumigation. In 2008, production or import of methyl bromide in the United States will be almost 88 percent less than 1991 levels.

Supermarkets Join Forces to Reduce Ozone-Depleting Substances: GreenChill is an EPA cooperative alliance with the supermarket industry and suppliers to promote advanced technologies, strategies, and practices that reduce emissions of stratospheric ozone-depleting substances and greenhouse gases. Since launching last November, the GreenChill Advanced Refrigeration Partnership has nearly tripled its membership. GreenChill now has a total of 28 partners, including 19 supermarket chains, four advanced refrigeration systems manufacturers,

Since launching November 2007, the GreenChill Advanced Refrigeration Partnership has tripled its membership and prevented emissions of 2.5 million metric tons of carbon dioxide equivalent, equal to the annual emissions of almost 500,000 cars. GreenChill partners in the food retail business have refrigerant emissions rates nearly 50 percent lower than the EPA-estimated industry average.

and five chemical manufacturers.

GreenChill partners are working to meet their goals with approaches such as improving equipment leak tightness at installation, developing a Retrofits Best Practices Guideline, and setting goals to convert more supermarkets to advanced refrigeration technologies. To chart their progress in the future, GreenChill's supermarket partners created baseline measurements of corporate-wide refrigerant emissions in 2007 and developed refrigeration management plans to reduce those emissions in 2008. Compared with the rest of the supermarket industry, GreenChill partners are already emitting fewer ozone-depleting refrigerants and greenhouse gases than their competitors—and saving money at the same time. The partners' savings in operating costs total almost \$13 million. In addition to reducing ozone-depleting substances, this program has the benefit of preventing emissions of 2.5 million metric tons of carbon dioxide equivalent, equal to the annual emissions of almost 500,000 cars. If every supermarket in the nation joined GreenChill and reduced emissions to the current GreenChill average, the industry could annually prevent the release of 13 million metric tons of carbon dioxide equivalent and 157 tons of ozone-depleting substances.

International Action Helps Reduce Ozone-Depleting Substances: The participation of developing countries is essential to ensure timely restoration of the ozone layer. The United States works with its international partners through the Montreal Protocol to reduce ozone-depleting substances. In 2007, the United States, with support from EPA, proposed to accelerate the phase-out of hydrochlorofluorocarbons (HFCs) by 10 years, adding interim reduction steps, setting an earlier baseline, and, as first priority, phasing out the hydrochlorofluorocarbons that are most damaging to the ozone layer. These proposals further U.S. efforts to address ozone layer protection, cleaner air, and climate change by calling on the global community to accelerate the phase-out of hydrochlorofluorocarbons.

FY 2008 Resources for Program Projects Supporting This Objective**

Program Projects are EPA's fundamental unit for budget execution and cost accounting, and they serve as the foundations for the Agency's budget. Frequently, Program Projects support multiple performance measures and objectives. This table lists the Program Projects and associated resources that support this objective.

***Resources associated with Program Projects might not match the goal and objective obligations exactly because of rounding.*

Goal 1: Objective 3 - Protect the Ozone Layer			
Program Project	FY 2006 Obligations	FY 2007 Obligations	FY 2008 Obligations
Homeland Security: Communication and Information	\$12.2	\$18.3	\$14.7
Homeland Security: Protection of EPA Personnel and Infrastructure	\$93.5	\$73.0	\$66.4
Stratospheric Ozone: Domestic Programs	\$5,455.7	\$5,376.0	\$5,040.0
Stratospheric Ozone: Multilateral Fund	\$8,582.9	\$11,315.0	\$9,683.0
Administrative Law	\$8.7	\$9.8	\$11.3
Alternative Dispute Resolution	\$2.5	\$2.4	\$2.8
Central Planning, Budgeting, and Finance	\$322.6	\$401.2	\$421.6
Civil Rights / Title VI Compliance	\$14.7	\$13.7	\$13.6
Congressional, Intergovernmental, External Relations	\$50.2	\$49.3	\$49.7
Exchange Network	\$64.3	\$68.0	\$47.7

Facilities Infrastructure and Operations	\$1,536.0	\$1,477.8	\$1,301.5
Acquisition Management	\$84.6	\$92.5	\$113.5
Human Resources Management	\$149.7	\$139.2	\$146.1
Information Security	\$19.7	\$19.9	\$27.1
IT / Data Management	\$1,200.1	\$1,200.4	\$1,099.2
Legal Advice: Environmental Program	\$85.7	\$92.8	\$97.0
Legal Advice: Support Program	\$38.1	\$32.1	\$37.4
Audits, Evaluations, and Investigations	\$109.8	\$127.1	\$136.5
Regional Science and Technology	\$2.5	\$2.8	\$0.5
Science Advisory Board	\$9.1	\$9.5	\$11.1
Small Minority Business Assistance	\$3.8	\$4.7	\$5.7
Financial Assistance Grants / IAG Management	\$156.2	\$21.8	\$53.5
Regulatory/Economic-Management and Analysis	\$33.1	\$34.3	\$33.6
Total	\$18,035.7	\$20,581.6	\$18,413.5

Additional Information Related to Objective 3

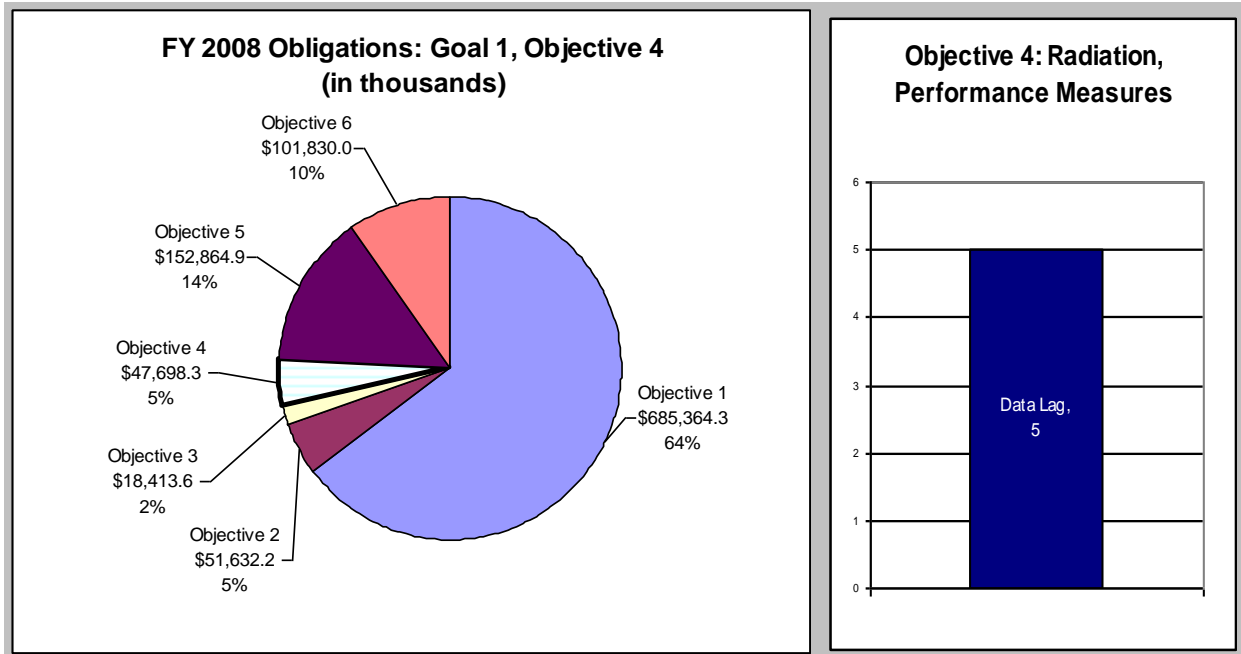
Web Links:

Ozone Depletion: www.epa.gov/ebtpages/airatmospozonedepletion.html

Program Assessment Rating Tool:

In FY 2008, EPA developed and implemented an action plan for all Agency Program Assessment Rating Tool measures in response to a government-wide Program Assessment Rating Tool measure review. The plan leveraged ongoing strategic and annual planning and reflected measure improvements. The tables of measures and results provided in Section II of this report, "Performance Results," identify all Program Assessment Rating Tool measures, which make up more than two-thirds of EPA's performance measures. Please refer to www.expectmore.gov for more detailed information.

Objective 1.4: Radiation



EPA's Radiation Protection Program minimizes unnecessary releases of radiation and helps mitigate impacts to human health and the environment, should unwanted releases occur. The program manages a nationwide environmental radiation monitoring program, RadNet, and actively responds to accidents and incidents involving nuclear or radiological material. It also oversees the safe disposal of radioactive waste and provides generally applicable standards to all federal agencies for protecting human health and the environment from radioactive material.

EPA Works With Other Departments and Agencies to Safely Dispose of Waste: EPA supports safe and environmentally sound radioactive waste management by maintaining certification and oversight responsibilities for U.S. Department of Energy (DOE) waste disposal activities at the Waste Isolation Pilot Plant; providing technical support to the Nuclear Regulatory Commission in applying pending standards at Yucca Mountain; coordinating with other federal agencies and states to develop mechanisms for controlling industrial materials with a radioactive component; and developing waste management regulations to facilitate the disposal of low-activity mixed waste by combining existing mandated requirements with traditional radiological waste management components. The EPA waste characterization program is focused on inspecting Department of Energy radioactive waste generator sites and supports the department's goals for disposal of defense-related transuranic radioactive waste at the Waste Isolation Pilot Plant. In 2008, the Department of Energy made approximately 1,000 waste shipments of transuranic waste to the Waste Isolation Pilot Plant.

On September 30, 2008, EPA established radiation standards for the proposed spent nuclear fuel and high-level radioactive waste disposal facility at Yucca Mountain, Nevada. The Yucca Mountain standards are in line with approaches used in the international radioactive waste management community.

EPA Reduces Time Needed to Review Waste for Disposal: EPA continues its oversight responsibilities for waste disposal activities at waste generator sites and the Waste Isolation Pilot Plant site itself. Through the Program Assessment Rating Tool process, EPA developed a way to track progress in this program area by measuring the time it takes for EPA to approve waste characterization program modifications at Department of Energy waste generator sites without diminishing EPA's oversight responsibilities and without modifying EPA's technical approach. From an FY 2004 baseline of 150 days, EPA had already reduced the number of days for approval to 86 in FY 2007, the most recent year for which the agency recorded data.

EPA Nears Target for Monitoring Systems: In FY 2008, EPA continued to enhance RadNet and strengthen the response capabilities in the existing monitoring system, including its ability to provide near real-time data directly to EPA decision-makers, states, local officials, and the Department of Homeland Security. With the information that the radiation monitoring program provides, health officials can guide the public to take essential actions to reduce exposures to radiation. By monitoring potential impact to population and public health, RadNet supports EPA's role in incident assessment. Through the Program Assessment Rating Tool process, EPA developed a measure to track progress in this program area by measuring the percentage of the most populous U.S. cities with a RadNet ambient radiation air monitoring system, which will provide data to assist in protective action determinations. EPA is well on its way to its target of 90 percent of the most populous cities by 2010, having reached 87 percent by 2007.

EPA Participates in Emergency Preparedness and Response Exercises: EPA's Radiological Emergency Response Team members are systematically provided with the knowledge, skills, equipment, and support systems needed to respond to emergencies involving radioactive materials. To this end, the program undertakes preparedness activities, including developing and streamlining response plans and procedures, providing guidance and training to first responders, and testing plans and procedures during exercises. In FY 2008, EPA participated in several major radiological emergency response exercises designed to increase preparedness. EPA was a major player in "TOPOFF," the Top Officials 4 Full-Scale Exercise, which included more than 15,000 participants representing federal, state, territorial, and local entities working in Oregon, Guam, Arizona, and Washington, D.C. EPA also developed and implemented an exercise designed to practice response to an overseas incident; supported the Department of Energy in its nuclear weapons exercise, Diablo Bravo; and supported several nuclear power plant exercises throughout FY 2008.

EPA Increases Readiness for Emergency Response: EPA developed a measure to track progress in readiness for emergency response by measuring the level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations (measured as the percentage of radiation response team members and assets that meet response criteria). The 2005 baseline for the emergency response program readiness was 50 percent. The measured readiness level was 83 percent in FY 2007, the most recent year for which data are available. EPA, working with federal and state partners, has continued to develop and expand RadMap during FY 2008. RadMap is a geographic information systems-based, interactive desktop tool providing quick access to information on long-term radiation monitoring locations across the country. RadMap is designed for emergency responders and provides access to key information on more than 1,600 radiological monitors and sampling stations. The number of systems covered in RadMap more than tripled during FY 2008.

EPA Radioactive Materials Labs Conduct Thousands of Tests: Throughout FY 2008, EPA scientists and field response staff provided continued support to state, tribal, and local

governments who were faced with situations involving radioactive material. EPA's two laboratories with unique radioanalytical expertise conducted more than 11,000 analyses of air, water, and soil samples. Additionally, the labs supported partners with training, field sampling and analyses, and technical advice on radiological incidents.

FY 2008 Resources for Program Projects Supporting This Objective**

Program Projects are EPA's fundamental unit for budget execution and cost accounting, and they serve as the foundations for the Agency's budget. Frequently, Program Projects support multiple performance measures and objectives. This table lists the Program Projects and associated resources that support this objective.

***Resources associated with Program Projects might not match the goal and objective obligations exactly because of rounding.*

Goal 1: Objective 4 - Radiation			
Program Project	FY 2006 Obligations	FY 2007 Obligations	FY 2008 Obligations
Homeland Security: Communication and Information	\$58.8	\$93.8	\$73.2
Homeland Security: Preparedness, Response, and Recovery	\$5,102.5	\$3,947.6	\$7,886.6
Homeland Security: Protection of EPA Personnel and Infrastructure	\$416.5	\$333.1	\$278.1
Radiation: Protection	\$15,739.0	\$17,120.0	\$17,094.4
Radiation: Response Preparedness	\$5,667.8	\$6,345.1	\$6,767.8
Administrative Law	\$45.0	\$53.2	\$60.1
Alternative Dispute Resolution	\$14.7	\$17.0	\$17.0
Central Planning, Budgeting, and Finance	\$585.7	\$596.5	\$827.2
Civil Rights / Title VI Compliance	\$78.4	\$77.3	\$75.0
Congressional, Intergovernmental, External Relations	\$275.8	\$287.6	\$281.1
Exchange Network	\$318.4	\$354.7	\$242.7
Facilities Infrastructure and Operations	\$5,259.2	\$5,707.0	\$5,775.6
Acquisition Management	\$820.6	\$946.6	\$1,070.3
Human Resources Management	\$753.0	\$770.7	\$807.7
Information Security	\$85.7	\$94.1	\$126.9
IT / Data Management	\$5,193.0	\$5,412.5	\$4,819.3
Legal Advice: Environmental Program	\$418.7	\$480.4	\$483.7
Legal Advice: Support Program	\$172.3	\$155.6	\$176.9
Audits, Evaluations, and Investigations	\$208.8	\$191.0	\$270.7
Regional Science and Technology	\$14.6	\$16.9	\$4.8
Science Advisory Board	\$46.8	\$51.6	\$58.8
Small Minority Business Assistance	\$19.7	\$25.4	\$30.4
Financial Assistance Grants / IAG Management	\$617.3	\$215.6	\$291.7
Regulatory/Economic-Management and Analysis	\$171.0	\$186.6	\$178.3
Total	\$42,083.3	\$43,479.9	\$47,698.3

Additional Information Related to Objective 4

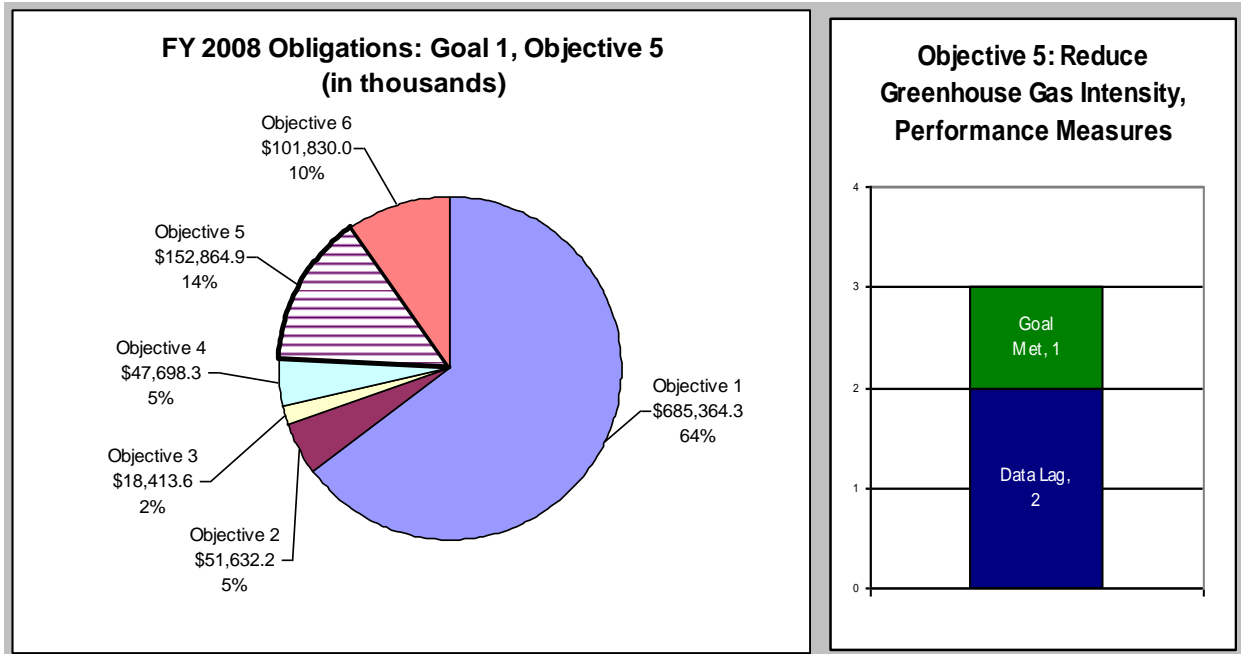
Web Links:

Radiation and Radioactivity: www.epa.gov/ebtpages/radiationandradioactivity.html

Program Assessment Rating Tool:

In FY 2008, EPA developed and implemented an action plan for all Agency Program Assessment Rating Tool measures in response to a government-wide Program Assessment Rating Tool measure review. The plan leveraged ongoing strategic and annual planning and reflected measure improvements. The tables of measures and results provided in Section II of this report, "Performance Results," identify all Program Assessment Rating Tool measures, which make up more than two-thirds of EPA's performance measures. Please refer to www.expectmore.gov for more detailed information.

Objective 1.5: Reduce Greenhouse Gas Intensity



In February 2002, the President announced a new approach to global climate change, designed to harness the power of the marketplace and technological innovation. The President set a national goal to cut greenhouse gas intensity by 18 percent by 2012, which the US is on track to meet. In support of the President's goal, EPA's climate protection programs promote the avoidance of 162 million metric tons of carbon equivalent annually by 2012, up from 58 million metric tons of carbon equivalent in 2002. Of this additional 104 million metric tons of carbon equivalent, 24 million will be attributable to the sustained growth of many climate programs and are reflected in the Administration's business-as-usual projection for greenhouse gas intensity improvement; the remaining 80 million metric tons of carbon equivalent will contribute to attaining the President's goal of 18 percent greenhouse gas intensity improvement.

EPA manages a number of efforts, such as ENERGY STAR and The SmartWay Transport Partnership, to remove marketplace barriers to accelerate the adoption and deployment of energy efficiency technology and in the building, industrial, and transportation sectors of the economy. EPA programs do not provide financial subsidies. Instead, they work by overcoming market barriers to energy efficiency: lack of clear and objective information on technology opportunities; lack of awareness of products, services, and transportation choices; low incentives to manufacturers for research and development; split incentives; and high transaction costs.

EPA Programs Reduce Emissions of Greenhouse Gases: EPA's climate protection programs reduced emissions of carbon dioxide (CO₂) and other potent greenhouse gases, such as methane and perfluorocarbons (PFCs), and will continue to deliver substantial energy and environmental benefits over the next decade. Because many of the investments promoted through EPA's climate programs involve energy-efficient equipment with lifetimes of decades or more, the investments made to date will continue to deliver environmental and economic

benefits through 2012 and beyond. EPA currently estimates that, based on investments in equipment already made because of EPA's programs, organizations and consumers across the country will net savings of about \$130 billion and reduce greenhouse emissions by more than 800 million metric tons of carbon equivalent over the next 10 years.³ These programs continue to offer highly cost-effective approaches for delivering environmental benefits across the country.

EPA's international activities help provide developing and industrialized countries with greater information and the increased technical capacity they need to implement emission reduction policies and climate protection programs. In addition, EPA works with state and local governments interested in technical, educational, and outreach assistance for clean energy projects that reduce carbon emissions.

ENERGY STAR Saves Billions in Energy Consumption: In 2007, Americans, with the help of ENERGY STAR, saved \$16 billion on their energy bills and avoided greenhouse gas emissions equivalent to those of 27 million vehicles. To date, more than 2.5 billion ENERGY STAR-qualified products have been sold, and nearly 840,000 new homes and 4,000 office buildings, schools, hospitals, and public buildings have earned the ENERGY STAR label. ENERGY STAR qualified products, homes, and buildings provide the quality, features, and personal comfort today's consumers expect. EPA introduced ENERGY STAR in 1992 as a voluntary market-based partnership to reduce greenhouse gas emissions through increased energy efficiency. Today, in partnership with the U.S. Department of Energy, ENERGY STAR offers businesses and consumers energy-efficient solutions to conserve energy, save money, and help protect the environment for future generations. More than 12,000 organizations are ENERGY STAR partners, committed to improving the energy efficiency of products, homes, buildings, and businesses.

More Than 4,000 Manufacturing Plants Earn EPA's ENERGY STAR Rating: Energy use in commercial buildings and manufacturing plants accounts for nearly half of the total U.S. greenhouse gas emissions and nearly 50 percent of energy consumption nationwide. For more than a decade, EPA has worked with businesses and organizations to reduce greenhouse gas emissions through strategic energy management practices. Today, there are ENERGY STAR qualified facilities in every state across the country. To qualify for the ENERGY STAR, a building or manufacturing plant must score in the top 25 percent using EPA's National Energy Performance Rating System.

The number of commercial buildings and manufacturing plants to earn the ENERGY STAR for superior energy efficiency is up by more than 25 percent in the past year, and the amount of carbon dioxide emissions reduced has reached an all-time high of more than 25 billion pounds. Nearly 4,100 buildings and manufacturing plants have earned the ENERGY STAR through the end of 2007, with the addition of more than 1,400 in 2007 alone. They include about 1,500 office buildings, 1,300 supermarkets, 820 K-12 schools, and 250 hotels. Also, more than 185 banks, financial centers, hospitals, courthouses, warehouses, dormitories, and—for the first time—big-box retail buildings earned the ENERGY STAR. More than 35 manufacturing plants, such as cement, auto assembly, corn refining, and—new this year—petroleum refining, are also being recognized. In total, these award-winning commercial buildings and manufacturing plants have saved nearly \$1.5 billion annually in lower energy bills and prevented carbon dioxide emissions equal to the emissions associated with electricity use of more than 1.5 million American homes for a year, compared with typical buildings. Commercial buildings that have earned the

³ 2006 estimated annual results.

ENERGY STAR use nearly 40 percent less energy than average buildings and emit 35 percent less carbon dioxide into the atmosphere, thus reducing their carbon footprint. About 500 ENERGY STAR buildings use 50 percent less energy than average buildings. Many of these buildings excel due to good energy management practices such as routine energy efficiency benchmarking.

SmartWay Transport Saves More Than 500 Million Gallons of Diesel: Cars, trucks, aircraft, and other components of the nation's transportation system emit nearly one-third of total U.S. greenhouse gas emissions. SmartWay Transport is EPA's flagship voluntary program for improving fuel efficiency and reducing greenhouse gases and air pollution from the freight transportation industry. This innovative collaboration, launched in 2004, is composed of partnerships, financial incentives, policy and technical solutions, and research and evaluation projects that find new ways to optimize the transportation networks in a company's supply chain. Endorsed by major freight industry associations, companies, and trade publications, SmartWay Transport is leading the way to greater fuel efficiency and lower emissions from the freight sector, while presenting a model of government and industry cooperation for public and private benefits. Participating companies benchmark their current freight operations, identify technologies and strategies to reduce their carbon emissions, track emission reductions, and project future improvement.

As of September 2008, more than 1,000 SmartWay partners drive approximately 600,000 trucks and travel nearly 52 billion miles per year. With their three-year commitments to upgrade trucks with auxiliary power units, fuel-efficient tires, enhanced trailer aerodynamics, and other improvements, SmartWay partners are saving more than 500 million gallons of diesel fuel—a cost benefit of more than \$2 billion—and eliminating nearly 6 million tons of carbon dioxide emissions that contribute to global climate change. SmartWay partners will also reduce nitrogen oxides by 30,000 tons and particulate matter by 800 tons.

In September, 2008, EPA committed more than \$1 million to assess the economic and technical feasibility of recovering and using methane from coal mines in China. If methane recovery programs are implemented at all three project sites, up to 1.8 million metric tons of carbon dioxide equivalent could be reduced each year. That's equal to the annual emissions of up to 330,000 passenger vehicles.

Hybrid Delivery Trucks Aim to Reduce Fuel Consumption: EPA's Clean Automotive Technology Program demonstrated a new hydraulic hybrid United Parcel Service delivery vehicle. The unique United Parcel Service delivery vehicle features EPA-patented hydraulic hybrid technology. During FY 2008, EPA worked with its industry technology transfer partners transferring its hydraulic hybrid vehicle experience and know-how, developing the first generation of road-worthy pre-production hydraulic hybrid vehicles to begin road testing over the next few years. United Parcel Service announced that it has ordered seven hydraulic hybrid delivery trucks for its fleet, the first two of which will be deployed in Minneapolis, Minnesota, early next year. Developed by EPA, Eaton Corporation, and Navistar, the vehicles store braking energy as hydraulic pressure, then use that to launch the vehicle from a stop, achieving a fuel economy improvement of 45-50 percent.

Advance Notice of Proposed Rulemaking on Climate Change Published: In FY 2008, EPA released an Advance Notice of Proposed Rulemaking (ANPR) soliciting public input on the complexity and magnitude of the question of whether and how greenhouse gases could be effectively controlled under the Clean Air Act. This action was in response to the April 2, 2007, Supreme Court decision in *Massachusetts v. EPA*, which found that greenhouse gas emissions

could be regulated if EPA determines greenhouse gas emissions cause or contribute to air pollution that can reasonably be expected to endanger public health or welfare. With the Advance Notice of Proposed Rulemaking, EPA is evaluating the broader ramifications of the decision throughout the Clean Air Act, which covers air pollution from both stationary and mobile sources. The Advance Notice of Proposed Rulemaking solicits public input as EPA considers the specific effects of climate change and potential regulation of greenhouse gas emissions. In the advance notice, EPA presented and requested comment on the best available science, requested relevant data, and asked questions about the advantages and disadvantages of using the Clean Air Act to potentially regulate stationary and mobile sources of greenhouse gases. The Advance Notice of Proposed Rulemaking also reviewed various petitions, lawsuits, and court deadlines before the Agency, as well as the profound effect that regulating under the Clean Air Act could have on the economy.

EPA-State Clean Energy and Climate Change Forum Held

- Led by Regional Administrator Richard Greene, EPA's Region 6 Office welcomed more than 30 officials and representatives from six states to the first regional dialogue on climate change.
- The first-of-its-kind forum is part of the Region 6 Clean Energy and Climate Change Strategy that calls for expanding partnerships to address the factors that contribute to climate change.
- The forum's main goals were to familiarize participants with state and federal perspectives; better understand individual and mutual concerns; and identify follow-up needs.
- Senior representatives from state environmental agencies took part in the roundtable discussions and shared their climate change strategies and suggestions.
- In addition representatives from Great Britain shared lessons learned from the United Kingdom's climate change policies.

FY 2008 Resources for Program Projects Supporting This Objective**

Program Projects are EPA's fundamental unit for budget execution and cost accounting, and they serve as the foundations for the Agency's budget. Frequently, Program Projects support multiple performance measures and objectives. This table lists the Program Projects and associated resources that support this objective.

***Resources associated with Program Projects might not match the goal and objective obligations exactly due to rounding.*

Goal 1: Objective 5 - Reduce Greenhouse Gas Intensity			
Program Project	FY 2006 Obligations	FY 2007 Obligations	FY 2008 Obligations
Climate Protection Program	\$85,882.0	\$117,999.8	\$123,247.9
Homeland Security: Communication and Information	\$79.3	\$158.7	\$124.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$571.2	\$565.3	\$482.1
Administrative Law	\$56.7	\$84.7	\$95.5
Alternative Dispute Resolution	\$16.0	\$20.6	\$23.2
Central Planning, Budgeting, and Finance	\$1,980.7	\$2,727.3	\$3,517.8
Civil Rights / Title VI Compliance	\$101.3	\$125.6	\$122.3
Congressional, Intergovernmental, External Relations	\$364.6	\$470.8	\$468.1

Exchange Network	\$419.1	\$589.0	\$401.6
Facilities Infrastructure and Operations	\$9,747.4	\$11,194.8	\$10,122.2
Acquisition Management	\$525.2	\$763.1	\$900.7
Human Resources Management	\$937.8	\$1,151.9	\$1,170.6
Information Security	\$120.3	\$161.2	\$217.7
IT / Data Management	\$7,405.7	\$9,386.4	\$8,268.2
Legal Advice: Environmental Program	\$559.8	\$803.1	\$811.7
Legal Advice: Support Program	\$243.6	\$276.0	\$308.8
Audits, Evaluations, and Investigations	\$668.1	\$856.8	\$1,130.6
Regional Science and Technology	\$20.0	\$27.8	\$10.4
Science Advisory Board	\$59.0	\$82.1	\$93.4
Small Minority Business Assistance	\$24.8	\$40.4	\$48.2
Financial Assistance Grants / IAG Management	\$494.6	\$570.3	\$1,016.7
Regulatory/Economic-Management and Analysis	\$215.5	\$297.1	\$283.2
Total	\$110,492.7	\$148,352.8	\$152,864.9

Additional Information Related to Objective 5

Grants:

Grants are an integral part of the Climate Change Program's efforts to reduce greenhouse gas emissions through energy efficiency, clean energy, and cost-effective partnerships with industries and governments. The climate change grant program seeks proposals from eligible entities that will advance national, regional, state and local energy efficiency and clean energy programs through market-based approaches to program design, outreach, and delivery, as well as by fostering information exchange. Programs or projects should demonstrate potential to create lasting change in the marketplace for energy-efficient and clean energy products, services, and best practices. Grant funding also supports technical, outreach, and education projects to advance public and private sector climate goals; projects for collecting and analyzing economic data relating to climate change; and programs, such as Methane to Markets, that facilitate climate technology transfer in developing countries. All of the activities supported by the climate change program's grant funds reduce greenhouse gas emissions and contribute to achieving performance goals.

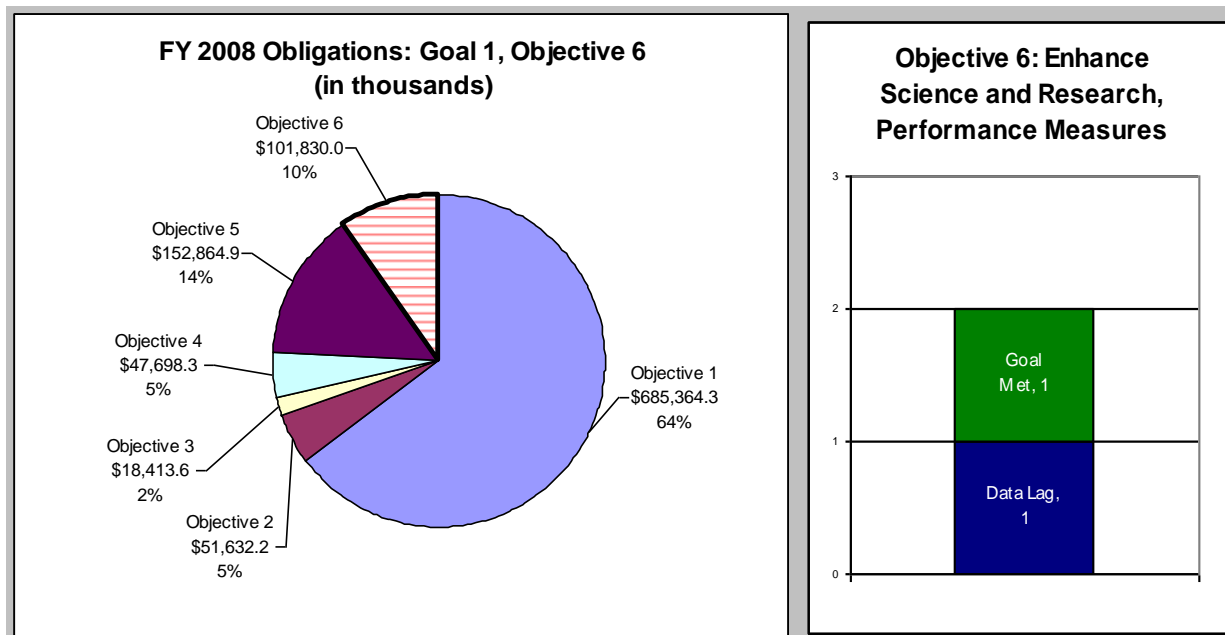
Web Links:

Energy Star Program: www.energystar.gov/

Program Assessment Rating Tool:

In FY 2008, EPA developed and implemented an action plan for all Agency Program Assessment Rating Tool measures in response to a government-wide Program Assessment Rating Tool measure review. The plan leveraged ongoing strategic and annual planning and reflected measure improvements. The tables of measures and results provided in Section II of this report, "Performance Results," identify all Program Assessment Rating Tool measures, which make up more than two-thirds of EPA's performance measures. Please refer to www.expectmore.gov for more detailed information.

Objective 1.6: Enhance Science and Research



EPA's research programs support a sound scientific foundation for decisions to protect and improve air quality.

Research Informs National Ambient Air Quality Standards: In FY 2008, EPA completed 100 percent of its planned actions toward reducing uncertainty in the science that supports standard-setting and air quality management decisions. In controlled human studies, EPA scientists evaluated how ultrafine, fine, and coarse particles in the air affect the respiratory and cardiovascular health of humans. Researchers found that breathing in these particles affects blood clotting, can cause changes in heart rate, and can result in mild lung infections. Other studies in animals suggest that long-term particulate matter exposure increases the risk of atherosclerosis, commonly known as "hardening of the arteries," a condition in which fatty substances coat the inner lining of arteries. EPA continues to study long-term particulate matter exposure to and effects in humans.

The Agency provided research, data, and advice, which were critical in National Ambient Air Quality Standards reviews and decisions on ozone, nitrogen oxides, sulfur oxides (SO_x), and lead. Additionally, the Agency's research supported locomotive and marine rule decisions, as well as decisions in the greenhouse gas advanced notice of proposed rulemaking. Ongoing research continues to provide information that can be used in future rulemaking and other decisions.

EPA's Clean Air Research Program developed and evaluated a new, real-time, *in situ* method to measure air pollutants, which allows researchers and environmental managers to characterize area source emissions. EPA researchers put this method into practice to measure total site elemental mercury at a chlor-alkali facility in FY 2008. This effort significantly increased knowledge about fugitive mercury emissions from chlor-alkali facilities. The Clean Air Research

program also teamed up with Region 8 and the state of Colorado to complete a two-week field study using optical remote sensing to characterize emissions of volatile organic compounds and greenhouse gases from upstream oil and gas operations.

EPA Research Helps States: EPA provided states with new tools and models in 2008 to improve their understanding of particulate matter and other pollutant sources in support of State Implementation Plans. For example, states are applying one model called Positive Matrix Factorization to evaluate the contributions of various sources, such as cement manufactures, to ambient air particulate concentrations. The sector-specific model results are informing regulatory decisions on performance standards for that sector. Another example is a new “open-path optical remote sensing method,” developed to characterize air emissions as they happen. This method can measure mercury at chlor-alkali facilities, as well as air contaminants such as volatile organic compounds and greenhouse gas emissions generated from oil and gas operations. The research will help EPA inform regulatory decisions by improving emissions inventories. Additionally, state and local organizations are using this method to develop action plans for meeting EPA’s particulate matter regulations. The Agency also released an update of the Community Multiscale Air Quality modeling system including improvements to the sulfur, nitrogen and mercury predictions. This system integrates multiple models to help environmental managers and policymakers predict and make decisions regarding air quality and air emission impacts on humans and ecosystems.

Research Improves Understanding of Health Effects from Air Pollution: EPA research in FY 2008 produced valuable information on the health effects of diesel exhaust. This research demonstrated that diesel exhaust can affect certain susceptible groups (notably asthmatics in this case) altering indicators that suggest a tendency to wheeze, a hallmark of asthma exacerbation. These findings contribute to a strategy to compare the potency of various sources of particulate matter and their effects on human health, including those with specific susceptibility.

EPA research in FY 2008 also helped understand the neurotoxic effects of exposure to volatile organic compounds, a class of hazardous air pollutants. The research informed incorporation of physiologically based pharmacokinetic models into setting Acute Exposure Guideline Levels for volatile organic compounds, such as those associated with new fuels and fuel additives.

FY 2008 Resources for Program Projects Supporting This Objective**

Program Projects are EPA’s fundamental unit for budget execution and cost accounting, and they serve as the foundations for the Agency’s budget. Frequently, Program Projects support multiple performance measures and objectives. This table lists the Program Projects and associated resources that support this objective.

***Resources associated with Program Projects might not match the goal and objective obligations exactly because of rounding.*

Goal 1: Objective 6 - Enhance Science and Research			
Program Project	FY 2006 Obligations	FY 2007 Obligations	FY 2008 Obligations
Clean Air Allowance Trading Programs	\$3,744.7	\$0.0	\$0.0
Climate Protection Program	\$20,921.9	\$456.0	(\$100.3)
Congressionally Mandated Projects	\$6,616.2	\$5,475.5	\$0.0
Federal Support for Air Quality Management	\$375.6	\$0.0	\$0.0
Federal Support for Air Toxics Program	\$210.4	\$0.0	\$0.0

Homeland Security: Communication and Information	\$128.1	\$172.4	\$137.4
Homeland Security: Protection of EPA Personnel and Infrastructure	\$724.0	\$458.7	\$339.6
Radiation: Protection	\$1,417.2	\$0.0	\$0.0
Research: Air Toxics	\$19,269.0	\$13,810.6	\$1,359.7
Research: Particulate Matter	\$11,450.0	(\$534.9)	(\$241.8)
Research: Troposphere Ozone	\$952.7	(\$37.8)	(\$11.9)
Administrative Law	\$91.6	\$92.0	\$105.8
Alternative Dispute Resolution	\$25.8	\$22.4	\$25.7
Central Planning, Budgeting, and Finance	\$2,678.4	\$1,964.7	\$2,200.0
Civil Rights / Title VI Compliance	\$152.7	\$127.2	\$125.4
Congressional, Intergovernmental, External Relations	\$515.2	\$455.2	\$454.7
Exchange Network	\$677.1	\$638.1	\$445.0
Facilities Infrastructure and Operations	\$2,770.6	\$4,245.7	\$7,999.1
Acquisition Management	\$901.9	\$880.0	\$1,070.2
Human Resources Management	\$1,530.1	\$1,274.3	\$1,362.9
Information Security	\$191.8	\$180.1	\$255.7
IT / Data Management	\$8,445.4	\$7,476.9	\$6,828.1
Legal Advice: Environmental Program	\$899.1	\$871.8	\$903.4
Legal Advice: Support Program	\$402.8	\$302.6	\$350.0
Audits, Evaluations, and Investigations	\$916.7	\$625.0	\$715.0
Regional Science and Technology	\$24.0	\$25.4	\$2.9
Science Advisory Board	\$95.2	\$89.1	\$103.5
Small Minority Business Assistance	\$40.1	\$43.9	\$53.5
Financial Assistance Grants / IAG Management	\$442.5	\$655.3	\$561.8
Research: NAAQS	\$53,270.9	\$63,025.8	\$18,690.1
Regulatory/Economic-Management and Analysis	\$348.2	\$322.7	\$313.9
Research: Clean Air	\$0.0	\$0.0	\$57,780.5
Total	\$140,229.9	\$103,118.7	\$101,829.9

Additional Information Related to Objective 6

Grants:

- In a study of more than 65,000 women over the age of 50, EPA grantees found that the risk of having a heart attack or other cardiovascular event—and the risk of dying from that event—was significantly higher in areas with higher average airborne particulate matter levels. This study adds to the growing evidence that air pollution, especially fine particulate matter, has important adverse health consequences. (Supported by Grant Entitled: “Northwest Research Center for Particulate Air Pollution and Health.”)
- EPA-funded researchers in Southern California found that local exposure to traffic on a freeway has adverse effects on children's lung development, which could result in important deficits in lung function in later life. (Supported by Grant Entitled: “Southern California Center for Airborne Particulate Matter.”)

- EPA grantee research findings have revealed new information about the atmospheric processes that lead to formation of organic particulate matter, helping to explain the discrepancy between atmospheric measurements and air quality model predictions. These results will be used to develop effective and efficient emission control strategies to reduce particulate matter levels. (Supported by the Following Four Grants: 1) “Atmospheric Processing of Organic Particulate Matter: Formation, Properties, Long Range Transport, and Removal”; 2) “Fundamental Experimental and Modeling Studies of Secondary Organic Aerosol”; 3) “Highly Time-Resolved Source Apportionment Techniques for Organic Aerosols Using the Aerodyne Aerosol Mass Spectrometer”; and 4) “Secondary and Regional Contributions to Organic PM: A Mechanistic Investigation of Organic PM in the Eastern and Southern United States.”)

Web Links:

The Clean Air Research Program supports EPA’s goal of clean air by conducting leading-edge research and developing a better understanding and characterization of human health and environmental outcomes. Additional information on the program can be found at:

www.epa.gov/pmresearch.

Program Assessment Rating Tool:

In FY 2008, EPA developed and implemented an action plan for all Agency Program Assessment Rating Tool measures in response to a government-wide Program Assessment Rating Tool measure review. The plan leveraged ongoing strategic and annual planning and reflected measure improvements. The tables of measures and results provided in Section II of this report, “Performance Results,” identify all Program Assessment Rating Tool measures, which make up more than two-thirds of EPA’s performance measures. Please refer to www.expectmore.gov for more detailed information.

Goal 1: Clean Air and Global Climate Change

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

OBJECTIVE: 1.1: HEALTHIER OUTDOOR AIR

Through 2011, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.

Performance Measures Met	Performance Measures Not Met	Data Available After November 17, 2008	Total Performance Measures
0	0	15	15

SUB-OBJECTIVE: 1.1.1: Ozone and PM2.5

By 2015, working with partners, improve air quality for ozone and PM2.5.

Strategic Target (1)

By 2015, reduce the population-weighted ambient concentration of ozone in all monitored counties by 14 percent from the 2003 baseline.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(M9) Cumulative percent reduction in population-weighted ambient concentration of ozone in monitored counties from 2003 baseline.	3	6	5	7	6	6	8	Data Available 2009	Percentage
Baseline - The ozone concentration measure reflects improvements (reductions) in ambient ozone concentrations across all monitored counties, weighted by the populations in those areas. To calculate the weighting, pollutant concentrations in monitored counties are multiplied by the associated county populations. The units for this measure are therefore "million people parts per billion." The 2003 baseline is 15,972 million people-ppb.									

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
Explanation - Due to reporting cycle, data are unavailable until 2009.									

Strategic Target (2)

By 2015, reduce the population-weighted ambient concentration of PM2.5 in all monitored counties by six percent from the 2003 baseline

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(M91) Cumulative percent reduction in population-weighted ambient concentration of fine particulate matter (PM-2.5) in all monitored counties from 2003 baseline.	2	4	2	7	3	8	4	Data Available 2009	Percentage
Baseline - The PM 2.5 concentration reduction annual measure reflects improvements (reductions) in the ambient concentration of fine particulate matter PM 2.5 pollution across the monitored counties, weighted by the populations in those areas. To calculate this weighting, pollutant concentrations in monitored counties are multiplied by the associated county populations. Therefore, the units for this measure are "million people micrograms per meter cubed: (million people µg/mg3)". The 2003 baseline is 2,581 million people-µg/mg3. Beginning in FY 2005, the 2000 Mobile6 inventory is used at the baseline for mobile source emissions.									
Explanation - Due to reporting cycle, data are unavailable until 2009.									

Strategic Target (3)

By 2011, reduce emissions of fine particles from mobile sources by 134,700 tons from the 2000 level of 510,550 tons.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(P34) Tons of PM-2.5 Reduced since 2000 from Mobile Sources	61,217	61,217	73,460	73,460	85,704	85,704	97,947	Data Available 2009	Tons
Baseline - The 2000 baseline for PM 2.5 from mobile sources is 510,552 tons.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

Strategic Target (4)

By 2011, reduce emissions of nitrogen oxides (NOx) from mobile sources by 3.7 million tons from the 2000 level of 11.8 million tons.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(O34) Millions of Tons of Nitrogen Oxides (NOx) Reduced since 2000 Reduced from Mobile Sources	1.69	1.69	2.03	2.03	2.37	2.37	2.71	Data Available 2009	Millions of Tons
Baseline - The 1995 baseline was 12.0M tons for mobile source NOx emissions. The 2000 baseline was 11.8M tons for mobile source NOx emissions.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

Strategic Target (5)

By 2011, through federal emission standards, reduce annual emissions of volatile organic compounds from mobile sources by 1.9 million tons from the 2000 level of 7.7 million tons.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(O33) Millions of Tons of Volatile Organic Compounds (VOCs) Reduced since 2000 from Mobile Sources	0.86	0.86	1.03	1.03	1.20	1.20	1.37	Data Available 2009	Millions of Tons
Baseline - The 1995 baseline was 8.1M tons for mobile source VOC emissions. The 2000 baseline was 7.7M tons for mobile source VOC emissions.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

Strategic Target (6)

By 2018, visibility in eastern Class I areas will improve by 15 percent on the 20 percent worst visibility days, as compared to visibility on the 20 percent worst days during the 2000-2004 baseline period.

Strategic Target (7)

By 2018, visibility in western Class I areas will improve by five percent on the 20 percent worst visibility days, as compared to visibility on the 20 percent worst days during the 2000-2004 baseline period.

Strategic Target (8)

By 2011, with EPA support, 30 additional tribes (6 per year) will have completed air quality emission inventories. (FY 2005 baseline: 28 tribal emission inventories.)

Strategic Target (9)

By 2011, 18 additional tribes will possess the expertise and capability to implement the Clean Air Act in Indian country (as demonstrated by successful completion of an eligibility determination under the Tribal Authority Rule). (FY 2005 baseline: 24 tribes.)

No Strategic Target

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(M92) Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value.	17	28	21	39	21	42	25	Data Available 2009	Percentage
Baseline - Baseline was zero in 2003.									
Explanation - Due to reporting cycle, data are unavailable until 2009									
(M83) Cumulative percent reduction in the average number of days during the ozone season that the ozone standard is exceeded in baseline non-attainment areas, weighted by population	8	27	12	31	16	28	19	Data Available 2009	Percentage
Baseline – 2003 baseline is zero.									
(M94) Percent of major NSR permits issued within one year of	65	69	70	70	75	83	78	Data Available	Percentage

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
receiving a complete permit application.								2009	
Baseline - The baseline for NSR permits issued within one year of receiving a complete permit application is 61 percent in 2004.									
Explanation – Due to reporting cycle, data are unavailable until 2009									
(M95) Percent of significant Title V operating permit revisions issued within 18 months of receiving a complete permit application.	88	88	91	91	94	81	100	Data Available 2009	Percentage
Baseline - The 2004 baseline for significant title V operating revisions issued within 18 months of receiving a complete permit application is 85 percent.									
Explanation – Due to reporting cycle, data are unavailable until 2009									
(M96) Percent of significant and new Title V operating permits issued within 18 months of receiving a complete permit application.	79	79	83	83	87	51	95	Data Available 2009	Percentage
Baseline - The 2004 baseline for new title V operating permits issued within 18 months of receiving a complete permit application is 75 percent.									
Explanation – Due to reporting cycle, data are unavailable until 2009									
(P33) Tons of PM-10 Reduced since 2000 from Mobile Sources	62,161	62,161	74,594	74,594	87,026	87,026	99,458	Data Available 2009	Tons
Baseline - Beginning in FY 2005, the 2000 mobile inventory is used as the baseline for mobile source emissions. The 2000 baseline for PM-10 from mobile source is 613,497 tons.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

SUB-OBJECTIVE: 1.1.2: Air Toxics

By 2011, working with partners, reduce air toxics emissions and implement area-specific approaches to reduce the risk to public health and the environment from toxic air pollutants.

Strategic Target (1)

By 2010, reduce toxicity-weighted (for cancer risk) emissions of air toxics to a cumulative reduction of 19 percent from the 1993 non-weighted baseline of 7.24 million tons.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(001) Cumulative percentage reduction in tons of toxicity-weighted (for cancer risk) emissions of air toxics from 1993 baseline.			34	Data avail. 2008	35	Data Available 2009	35	Data Available 2011	Percentage
<p>Baseline - The toxicity-weighted emission inventory will utilize the National Emissions Inventory (NEI) for air toxics along with the Agency's compendium of cancer and noncancer health risk criteria to develop a risk metric that can be tabulated and tracked on an annual basis. The baseline is based on emission inventory data from 1990-1993. The baseline is in 1993. Air toxics emissions data are revised every three years to generate inventories for the NEI, which replaced the National Toxics Inventory (NTI). The intervening years between updates of the NEI, the model EMS-HAP (Emissions Modeling System for Hazardous Air Pollutants) is used to estimate and project annual emissions of air toxics. As new inventories are completed and improved inventory data are added, the baseline (or total tons of air toxic) is adjusted.</p>									
<p>Explanation - Due to a major modification to the National Emissions Inventory, 2006 and 2007 data will not be available until 2009.</p>									

Strategic Target (2)

By 2010, reduce toxicity-weighted (for non-cancer risk) emissions of air toxics to a cumulative reduction of 55 percent from the 1993 non-weighted baseline of 7.24 million tons.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(002) Cumulative percentage reduction in tons of toxicity-weighted (for noncancer risk)			58	Data avail. 2008	58	Data Available 2009	59	Data Available 2011	Percentage

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
emissions of air toxics from 1993 baseline.									
<p>Baseline - The toxicity-weighted emission inventory will utilize the National Emissions Inventory (NEI) for air toxics along with the Agency's compendium of cancer and noncancer health risk criteria to develop a risk metric that can be tabulated and tracked on an annual basis. The baseline is based on emission inventory data from 1990-1993. The baseline is in 1993. Air toxics emissions data are revised every three years to generate inventories for the NEI, which replaced the National Toxics Inventory (NTI). The intervening years between updates of the NEI, the model EMS-HAP (Emissions Modeling System for Hazardous Air Pollutants) is used to estimate and project annual emissions of air toxics. As new inventories are completed and improved inventory data are added, the baseline (or total tons of air toxic) is adjusted.</p>									
<p>Explanation - Due to a major modification to the National Emissions Inventory, 2006 and 2007 data will not be available until 2009.</p>									

SUB-OBJECTIVE: 1.1.3: Chronically Acidic Water Bodies

By 2011, reduce the number of chronically-acidic water bodies in acid-sensitive regions by two percent from 1984 levels.

Strategic Target (1)

By 2011, reduce national annual emissions of sulfur dioxide (SO₂) from utility electrical power generation sources by approximately 8.45 million tons from the 1980 level of 17.4 million tons, through implementation of the Acid Rain Program and Clean Air Interstate Rule, achieving and maintaining the Acid Rain statutory SO₂ emissions cap of 8.95 million tons.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(A01) Tons of sulfur dioxide emissions from electric power generation sources	6,900,000	7,200,000	7,000,000	8,000,000	7,500,000	8,450,000	8,000,000	Data Available 2009	Tons Reduced
<p>Baseline - The baseline year is 1980. The 1980 SO₂ emissions inventory totals 17.4 million tons for electric utility sources. This inventory was developed by National Acid Precipitation Assessment Program and is used as the basis for reductions in Title IV of the Clean Air Act Amendments. These data are also contained in EPA's National Air Pollutant Emissions Trends Report. Statutory SO₂ emissions cap for year 2010 and later is at 8.95 million tons, approximately 8.5 million tons below 1980 emissions level. "Allowable SO₂ emission level" consists of allowance allocations granted to sources each year under several provisions of the Act and additional allowances carried over, or banked, from previous years.</p>									

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
Explanation - Due to reporting cycle, data are unavailable until 2009									

Strategic Target (2)

By 2011, reduce total annual average sulfur deposition and mean ambient sulfate concentration by 30 percent from 1990 monitored levels of up to 25 kilograms per hectare for total sulfur deposition and 6.4 micrograms per cubic meter for mean ambient sulfate concentration.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(A21) Percent change in annual average sulfur deposition	No FY05 Target	No FY05 Target	No FY06 Target	No FY06 Target	29	38	No FY08 Target	No FY08 Target	Percentage Reduced
Baseline - Sulfur deposition contributes to acidification of lakes and streams, making them unable to support fish and other aquatic life. Reductions in sulfur deposition are critical to reducing the number of chronically acidic water bodies. Ambient sulfate and ambient nitrate ("acid rain" "particulate") contribute to unhealthy air and respiratory problems in humans, especially children and other sensitive populations. The baseline is established from monitored site levels based on consolidated map of 1989-1991 showing three years of deposition levels produced from the CASTNET sites (http://www.epa.gov/castnet/sites.html). This measure sets targets in 5 year increments.									
Explanation - This measure sets targets in five year increments; there is no target for FY 2008.									

Strategic Target (3)

By 2011, reduce total annual average nitrogen deposition and mean total ambient nitrate concentration by 15 percent from 1990 monitored levels of up to 11 kilograms per hectare for total nitrogen deposition and 4.0 micrograms per cubic meter for mean total ambient nitrate concentration.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(A11) Percent change in annual average nitrogen deposition	No FY05 Target	No FY05 Target	No FY06 Target	No FY 06 target	10	18	No FY08 Target	No FY08 Target	Percentage Reduced
Baseline - Nitrogen deposition contribute to acidification of lakes and streams, making them unable to support fish and other aquatic life. Reductions in nitrogen deposition are critical to reducing the number of chronically acidic water bodies. Ambient nitrate ("acid rain" "particulate") contribute to unhealthy air and respiratory problems in humans, especially and other sensitive populations. The baseline is established from monitored site levels based on consolidated map of 1989-1991 showing three years of deposition levels produced from									

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
the CASTNET sites (http://www.epa.gov/castnet/sites.html). This measure sets targets in 5 year increments.									
Explanation - This measure sets targets in five year increments; there is no target for FY 2008.									

OBJECTIVE-LEVEL MEASURES

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(N35) Limit the increase of CO emissions (in tons) from mobile sources compared to a 2000 baseline.	0.84	0.84	1.01	1.01	1.18	1.18	1.35	Data Available 2009	Tons
Baseline - The 2000 baseline was 79.2 M tons for CO.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

OBJECTIVE: 1.2: HEALTHIER INDOOR AIR

Through 2012, working with partners, reduce human health risks by reducing exposure to indoor air contaminants through the promotion of voluntary actions by the public.

Performance Measures Met	Performance Measures Not Met	Data Available After November 17, 2008	Total Performance Measures
0	0	4	4

SUB-OBJECTIVE: 1.2.1: Radon

By 2012, the number of future premature lung cancer deaths prevented annually through lowered radon exposure will increase to 1,250 from the 1997 baseline of 285 future premature lung cancer deaths prevented.

No Strategic Target

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(R10) Number of additional homes (new and existing) with radon reducing features	173,000	194,000.	180,000	219,000	190,000	Data Available 2009	225,000	Data Available 2010	Number of Homes
Baseline – The baseline for the performance measure was 1996 (107,000 homes).									
Explanation - Due to reporting cycle, data are unavailable until 2010									

SUB-OBJECTIVE: 1.2.2: Asthma

By 2012, the number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers will increase to 6.5 million from the 2003 baseline of 3 million. EPA will place special emphasis on children and other disproportionately impacted populations.

No Strategic Target

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(R15) Number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers.	No FY05 Target	No FY05 Target	4,100,000	Data Available 2009	No FY07 Target	No FY07 Target	No FY08 Target	No FY08 Target	Number of People
Baseline – 2003 baseline is 3,000,000. This measure sets targets in 3 year increments.									
Explanation - This measure sets targets in three year increments; there is no target for FY 2008.									
(R16) Percent of public that is aware of the asthma program's media campaign.	>20%	31	>20%	33	>20	Data Available Late 2008	>20	Data Available 2009	Percentage
Baseline – 2003 baseline is >20 percent.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(R17) Additional health care professionals trained annually by EPA and its partner on the environmental management of asthma triggers.	2000	3,380	2000	3,582	2000	4,582	2000	Data Available 2009	Number of healthcare professionals
Baseline – 2003 baseline is 2,360.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

SUB-OBJECTIVE: 1.2.3: Schools

By 2012, the number of schools implementing an effective indoor air quality management plan will increase to 40,000 from the 2002 baseline of 25,000.

No Strategic Target

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(R22) Estimated annual number of schools establishing indoor air quality programs based on EPA's Tools for Schools guidance.	2500	3,000	1,200	1,200	1,100	1,346	1,100	Data Available 2009	Number of schools
Baseline - The nation has approximately 118,000 (updated to include new construction) schools. Each school has an average of 525 students, faculty, and staff for a total estimated population of 62,000,000. The IAQ "Tools for Schools" Guidance implementation began in 1997. Results from a 2002 IAQ practices in schools survey suggest that approximately 20-22 percent of U.S. schools report an adequate effective IAQ management plan that is in accordance with EPA guidelines.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

OBJECTIVE: 1.3: PROTECT THE OZONE LAYER

By 2030, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and overexposure to ultraviolet radiation, particularly among susceptible subpopulations, such as children, will be reduced.

Performance Measures Met	Performance Measures Not Met	Data Available After November 17, 2008	Total Performance Measures
0	0	1	1

Strategic Target (1)

By 2015, reduce U.S. consumption of Class II ozone-depleting substances to less than 1,520 tons per year of ozone-depleting potential from the 2003 baseline of 9,900 tons per year.

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(S01) Remaining U.S. consumption of HCFCs, in tons of Ozone Depleting Potential (ODP).	<9,900	6,770	<9,900	6,205	<9,900	Data avail. 2009	<9,900	Data Available 2010	Tons
Baseline – The base of comparison for assessing progress on the annual performance goal is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each Ozone Depleting Substance (ODS) is weighted based on the damage it does to the stratospheric ozone – this is the ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equal production plus import minus export.									
Explanation - Due to reporting cycle, data are unavailable until 2010									

OBJECTIVE: 1.4: RADIATION

Performance Measures Met	Performance Measures Not Met	Data Available After November 17, 2007	Total Performance Measures
0	0	5	5

Through 2011, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.

Strategic Target (1)

By 2011, the radiation program will maintain a 90 percent level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations. (2005 baseline is a 50 percent level of readiness.)

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(R35) Level of readiness of radiation program personnel and assets to support Federal radiological emergency response and recovery operations (measured as percentage of radiation response team members and assets that meet scenario-based response criteria).	Baseline	50	75	78	80	83	85	Data Available 2009	Percentage
Baseline – 2005 baseline is 50 percent.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

Strategic Target (2)

By 2011, 77 percent of the U.S. land area will be covered by the RadNet ambient radiation air monitoring system. (2001 baseline is 35 percent of the U.S. land area.)

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(R34) Percentage of most populous U.S. cities with a RadNet ambient radiation air monitoring system, which will provide data to assist in protective action determinations.	Baseline	55	65	67	80	87	85	Data Available 2009	Percentage
Baseline – 2005 baseline is 55 percent.									
Explanation - Due to reporting cycle, data are unavailable until 2009									
(R39) Level of readiness of	Baseline	0	7	7	20	21	35	Data	Percentage

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
national environmental radiological laboratory capacity (measured as percentage of laboratories adhering to EPA quality criteria for emergency response and recovery decisions).								Available 2009	
Baseline – 2005 baseline is zero.									
Explanation - Due to reporting cycle, data are unavailable until 2009									
(R36) Average time of availability of quality assured ambient radiation air monitoring data during an emergency	Baseline	2.5	1.9	1.9	1.3	1.3	1.0	Data Available 2009	Number of Days
Baseline – 2005 baseline is 2.5.									
Explanation - Due to reporting cycle, data are unavailable until 2009									
(R37) Time to approve site changes affecting waste characterization at DOE waste generator sites to ensure safe disposal of transuranic radioactive waste at WIPP (measured as percentage reduction from a 2004 baseline).	20	24	30	33	40	43	46	Data Available 2009	Percentage
Baseline – 2004 baseline is zero.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

OBJECTIVE: 1.5: REDUCE GREENHOUSE GAS INTENSITY

By 2012, 160 million metric tons of carbon equivalent (MMTCE) of emissions will be reduced through EPA's voluntary climate protection programs.

Performance Measures Met	Performance Measures Not Met	Data Available After November 17, 2008	Total Performance Measures
1	0	2	3

SUB-OBJECTIVE: 1.5.1: Buildings Sector

Buildings Sector. By 2012, 46 MMTCE will be reduced in the buildings sector (compared to the 2002 level).

No Strategic Target

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(G02) Million metric tons of carbon equivalent (MMTCE) of greenhouse gas reductions in the buildings sector.	23.8	28.2	26.5	30.1	29.4	36.1	32.4	Data Available 2009	MMTCE
<p>Baseline - The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002 which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the estimates.</p>									
<p>Explanation - Due to reporting cycle, data are unavailable until 2009</p>									

SUB-OBJECTIVE: 1.5.2: Industrial Sector

Industry Sector. By 2012, 99 MMTCE will be reduced in the industry sector (compared to the 2002 level).

No Strategic Target

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(G16) Million metric tons of carbon equivalent (MMTCE) of greenhouse gas reductions in the industry sector.	53.5	64.1	57.8	68.7	62.6	72.9	67.7	Data Available 2009	MMCTE
<p>Baseline - The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002 which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the estimates.</p>									
Explanation - Due to reporting cycle, data are unavailable until 2009									

SUB-OBJECTIVE: 1.5.3: Transportation Sector

By 2012, 15 MMTCE will be reduced in the transportation sector (compared to the 2002 level).

No Strategic Target

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(G06) Million metric tons of carbon equivalent (MMTCE) of greenhouse gas reductions in the transportation sector.	0.3	0.3	0.6	0.6	0.9	1.15	1.5	1.6	MMTCE
<p>Baseline - The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002 which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the</p>									

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
estimates.									
Explanation - Due to reporting cycle, data are unavailable until 2009									

OBJECTIVE: 1.6: ENHANCE SCIENCE AND RESEARCH

Through 2012, provide sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of human health and environmental outcomes.

Performance Measures Met	Performance Measures Not Met	Data Available After November 17, 2007	Total Performance Measures
1	0	1	2

OBJECTIVE-LEVEL MEASURES

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
(H34) Percent progress toward completion of a hierarchy of air pollutant sources based on the risk they pose to human health.	Baseline	5	10	10	30	UD	50	Data Unavailable	Percent
Baseline - In 2005, the program began measuring its progress in completing a hierarchy of air pollutant sources based on the risk they pose to human health and completed 5 percent of the hierarchy. This measure contributes to EPA's goal of developing a better understanding and characterization of human health and environmental outcomes related to clean air.									
Explanation - EPA's Board of Scientific Counselors will provide feedback regarding how to most meaningfully									
(H35) Percent planned actions accomplished toward the long-term goal of reducing uncertainty in the science that support standard setting and air quality management decisions.	100	94	100	94	100	100	100	100	Percent
Baseline - In 2003, the program began measuring its planned actions that support the long-term goal of reducing uncertainty in the									

Annual Performance Measures and Baselines	FY 2005		FY 2006		FY 2007		FY 2008		Unit
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	
<p>science that supports the standard-setting and air quality management decisions. The program completed 71 percent of its actions in support of this goal in 2003. This measure contributes to EPA's goal of developing a better understanding and characterization of human health and environmental outcomes related to clean air.</p>									