

Terms and Definitions

ACEEE—American Council for an Energy Efficient Economy.

adaptation—Actions taken to prepare for and respond to the effects of climate change. Examples include building sea walls, constructing facilities at higher elevations, and expanding reservoirs.

AFV—Alternative-fuel vehicle.

AIA—American Institute of Architects.

BAU—Business as usual. A scenario assuming no additional new measures to reduce emissions.

BMP—Best management practice.

CA LEV-II—California Low-Emission Vehicle Phase II.

CAFE—Corporate average fuel economy.

CCS—Carbon dioxide capture and storage.

CCSC—Climate Change Steering Committee (Metropolitan Washington Council of Governments).

CFL—Compact fluorescent lighting.

climate change—Any long-term significant change in the “average weather” that a given region experiences. Average weather may include average temperature, precipitation, and wind patterns. It involves changes in the variability or average state of the atmosphere over durations ranging from decades to millions of years. These changes can be caused by dynamic processes on Earth and by external forces, including variations in sunlight intensity and, more recently, human activities. In recent usage, especially in the context of environmental policy, the term climate change often refers to changes in modern climate (see global warming). Current studies indicate that radiative forcing by greenhouse gases is the primary cause of global warming. Greenhouse gases are also important in understanding Earth’s climate history. According to these studies, the greenhouse effect, which is the warming produced as greenhouse gases trap heat, plays a key role in regulating Earth’s temperature. (Accessed at: <http://en.wikipedia.org>.)

CLRP—*The Financially Constrained Long-Range Transportation Plan* is a regional transportation plan prepared by the National Capital Region Transportation Planning Board. (Accessed at: <http://www.mwcog.org/clrp/>.)

CO₂—Carbon dioxide.

CO₂e—Carbon dioxide equivalent. Emissions of any greenhouse gas (methane, nitrous oxide, hydrofluorocarbons) can be expressed in terms of its equivalent emissions of CO₂ through adjustments using the respective global warming potential (see GWP).

COG—Metropolitan Washington Council of Governments.

Cool Counties—On July 16, 2007, at the National Association of Counties Annual Conference in Richmond, Virginia, 12 pioneering counties representing 17 million people launched Cool Counties. The initiative seeks to marshal the resources of all 3,066 counties across the nation to address the challenges climate change poses to U.S. communities. Participating counties commit to four smart actions:

- reducing our own contributions to climate change through our internal operations;
- demonstrating regional leadership to achieve climate stabilization and protect our communities;
- helping our communities become climate resilient; and
- urging the federal government to support our efforts.

CSP—Concentrating solar power.

DC—District of Columbia.

DOTs—Departments of transportation.

DTP—Department of Transportation Planning (Metropolitan Washington Council of Governments).

eGRID—Emission & Generation Resource Integrated Database (U.S. Environmental Protection Agency).

EIA—Energy Information Administration (U.S. Department of Energy).

EOR—Enhanced oil recovery.

EPA—U.S. Environmental Protection Agency.

ESCO/Energy Performance Contract—Energy service company. Firms offer up-front capital to complete energy projects and use energy cost savings as repayment.

FY—Fiscal year.

GDP—Gross domestic product.

GHG—Greenhouse gas. A gas, such as water vapor, carbon dioxide, methane, perfluorocarbons, and hydrofluorocarbons, that absorbs and re-emits infrared radiation, warming Earth's surface and contributing to climate change (see http://www.unisdr.org/eng/library/lib-terminology-eng_home.htm).

global warming—The increase in the average temperature of the Earth's near-surface air and oceans since the mid-twentieth century, and its projected continuation. The Intergovernmental Panel on Climate Change concludes "most of the observed increase in globally averaged temperatures since the mid-twentieth century is very likely due to the observed increase in anthropogenic (man-made) greenhouse gas concentrations" via the greenhouse effect. Natural phenomena, such as solar variation combined with volcanoes, probably had a small warming effect from pre-industrial times to 1950 and a small cooling effect from 1950 onward. (Accessed at: http://en.wikipedia.org/wiki/Global_warming.)

green power—Electricity generated through non-fossil fuel sources, such as wind, solar, and geothermal energy.

GSA—General Services Administration.

GtCO₂e—Gigaton of carbon dioxide-equivalent.

GtC/yr—Gigaton of carbon per year.

GWP—Global warming potential is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale that compares the gas in question to that of the same mass of carbon dioxide (whose GWP is by definition 1). (Accessed at: <http://en.wikipedia.org>.)

HFCs—Hydrofluorocarbons.

HVAC—Heating, ventilation, and air conditioning.

ICLEI—Local Governments for Sustainability is an international association of local governments and national and regional local government organizations that have made a commitment to sustainable development. ICLEI was founded in 1990 as the International Council for Local Environmental Initiatives.

IGBG—Intergovernmental Green Building Group, a COG work group.

IPCC—The Intergovernmental Panel on Climate Change is a scientific body tasked to evaluate the risk of climate change caused by human activity. The panel was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, two organizations of the United Nations. (Accessed at: <http://en.wikipedia.org>.)

Kyoto Protocol—The Kyoto Protocol is an international agreement reached in 1997 in Kyoto, Japan, to address the problems of climate change. Currently 137 developing countries, including industrialized countries, have ratified the agreement. It commits 38 industrialized countries to reduce their greenhouse gas emissions, and has a target of reducing emissions to 6 percent below 1990 levels by 2012.

LED—Light-emitting diode.

LEED—Leadership in Energy and Environmental Design Green Building Rating System™.

LEED-ND—Leadership in Energy and Environmental Design—Neighborhood Development.

MARA—Mid-Atlantic Regional Assessment.

Mayor's Agreement—On February 16, 2005, the Kyoto Protocol, the international agreement to address climate disruption, became law for the 141 countries that have ratified it to date. On that day, Seattle Mayor Greg Nickels launched the U.S. Mayors Climate Protection Agreement to advance the goals of the Kyoto Protocol through leadership and action by at least 141 American cities. By the 2005 U.S. Conference of Mayors Annual Meeting in June, 141 mayors had signed the agreement. In May 2007, Tulsa Mayor Kathy Taylor became the 500th mayor to sign on. Under the agreement, participating cities commit to take following actions:

- Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from anti-sprawl land-use policies to urban forest restoration projects to public information campaigns;
- Urge their state governments and the federal government to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol—a 7% reduction from 1990 levels by 2012; and
- Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system.

MD—Maryland.

MDPC—Metropolitan Development Policy Committee, a COG committee.

mitigation—Actions taken to reduce the probability and risk of future climate change, including all measures to reduce emissions of greenhouse gases.

MMt—Million metric tons.

MMtCO₂e—Million metric tons of carbon dioxide equivalent.

mpg—Miles per gallon.

MPO—A metropolitan planning organization is a federally required planning body responsible for transportation planning and project selection in its region.

MWAA—Metropolitan Washington Airports Authority.

MWAQC—Metropolitan Washington Air Quality Committee.

MWCOG—Metropolitan Washington Council of Governments.

MWh—Megawatt-hour.

NACAA—National Association of Clean Air Agencies.

NCAR—National Center for Atmospheric Research.

NOAA—National Oceanic and Atmospheric Administration.

NSCT—National Science and Technology Council.

NVTC—Northern Virginia Transportation Commission.

PJM—The regional electricity grid operator for the Mid-Atlantic region.

PUC—Public utility commission.

PV—Photovoltaic.

RECs—Renewable energy certificates.

RGGI—The Regional Greenhouse Gas Initiative is a cooperative effort by ten northeastern and Mid-Atlantic states to reduce carbon dioxide (CO₂) emissions from electricity generating plants. RGGI includes Maryland, Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

RPS—Renewable portfolio standards establish a minimum percentage of electricity supply that must be derived from renewable energy sources, such as solar energy or wind energy.

STAC—Scientific and Technical Advisory Committee (Chesapeake Bay Program).

TOD—Transit-oriented development.

TPB—The National Capital Region Transportation Planning Board serves as the metropolitan planning organization for the metropolitan Washington region.

UNFCCC—The United Nations Framework Convention on Climate Change is an international environmental treaty produced at the United Nations Conference on Environment and Development, informally known as the Earth Summit, held in Rio de Janeiro in 1992. The treaty is aimed at stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic (or man-made) interference with the climate system. The treaty as originally framed set no mandatory limits on greenhouse gas emissions for individual nations and contained no enforcement provisions; it is therefore considered legally nonbinding. Rather, the treaty included provisions for updates (called "protocols") that would set mandatory emission limits. The principal update is the Kyoto Protocol, which has become much better known than the UNFCCC itself.

USCCSP—U.S. Climate Change Science Program.

U.S. DOE—U.S. Department of Energy.

U.S. EPA—U.S. Environmental Protection Agency.

USGBC—United States Green Building Council.

VA—Virginia.

VMT—Vehicle miles traveled.

WMATA—Washington Metropolitan Area Transit Authority.

WRI—World Resources Institute.