

EMBARGOED until Wednesday, July 13, 2016 at 6 a.m. Eastern

New Report: U.S. Power Sector Continues Significant Reductions of Air Pollutant Emissions

BOSTON, MA (July 13, 2016) – The nation’s largest electric producers continue to substantially reduce emissions of key air pollutants, the latest comprehensive analysis of U.S. power plant emissions shows.

The new report analyzed publicly reported data on carbon dioxide (CO₂), nitrogen oxides (NO_x), sulfur dioxide (SO₂), and mercury emissions from the nation’s 100 largest electric power producers, which account for 85 percent of the nation’s power production.

Notably, the report, [*Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States*](#), concludes that since 2000 emissions of all four major pollutants have dropped while total electricity generation and the American economy have grown.

“The nation’s electric power providers are in the midst of an unprecedented shift toward cleaner sources of energy,” said Dan Bakal, director of electric power at Ceres. “Yet progress is uneven, which highlights the need for many of the nation’s power providers to accelerate their transition to cleaner resources and lower carbon emissions.”

The report, which ranks emissions by producer and state, finds that CO₂ emissions—a key driver of climate change—totaled 1.96 billion tons in 2014. But they dropped 15 percent between 2005 and 2014, and with preliminary data suggesting another 6 percent decline in 2015, CO₂ emissions are almost back down to 1990 levels. This will help the U.S. continue to make progress towards the goals agreed upon in the Paris Climate Agreement. Despite the overall declines, there is still significant variability among power producers, with some power providers achieving fleet-wide CO₂ emissions rates that are 10 times lower than others.

“Power plants are pouring out less and less of the carbon pollution driving climate change. And America is embracing the benefits of clean energy,” said Starla Yeh, senior policy analyst in the Climate and Clean Air Program at the Natural Resources Defense Council. “Renewable energy is widely expected to continue its strong growth, which will put the electricity sector in an excellent position to help the U.S. meet its international commitments. We must reach this milestone to avoid the worst impacts of climate change.”

The report identifies three primary factors that are driving the drop in CO₂ emissions: energy efficiency improvements, coal plant retirements driven by market conditions and new air pollution standards, and an increase in generation from low- and zero-emitting resources, including natural gas, wind, and solar. Installed wind and solar capacity in the U.S. has more than doubled in the past five years to over 100 gigawatts (GW). Their combined output is now comparable to total hydroelectric generation in the U.S. Nuclear power continues to be the largest source of zero-carbon generation in the country at 62 percent of total non-emitting output.

Together with CO₂, SO₂, NO_x, and mercury are associated with environmental and public health problems, including climate change, mercury deposition, acid rain, smog, regional haze, and fine particle air pollution, which can lead to asthma and other respiratory illnesses.

Other key findings in the benchmarking report include:

- In 2014, power plant SO₂ and NO_x emissions were 80 percent and 75 percent lower, respectively, than in 1990, when Congress passed major amendments to the Clean Air Act.
- Mercury air emissions from power plants have decreased 55 percent since 2000. Mercury emissions will continue to decline as the first federal limits on mercury and other hazardous pollutants from coal-fired power plants went into effect in 2015 and 2016.
- In 2014, power plants were responsible for 62 percent of SO₂ emissions, 14 percent of NO_x emissions, 58 percent of mercury air emissions (among sources reporting to EPA's Toxic Release Inventory), and 37 percent of all CO₂ emissions in the U.S.
- Air pollution is highly concentrated among just a few electricity producers: Ten producers were responsible for 56 percent of SO₂ emissions; 43 percent of NO_x; 49 percent of mercury; and 40 percent of CO₂ emissions.
- Coal accounted for 40 percent of the power produced by the top 100 power producers, followed by natural gas at 26 percent, nuclear at 22 percent, and renewable power, including large hydroelectric, and other sources at 12 percent.

“The Benchmarking Air Emissions report is an important resource for tracking changes in the environmental performance of the U.S. electric power sector and making this information available to our stakeholders – owners, customers, employees and communities,” said Chuck Barlow, vice president of environmental strategy and policy for Entergy Corporation. “Since 2001, Entergy has operated under voluntary commitments to stabilize our CO₂ emissions through 2020 at 20 percent below year 2000 levels. Through 2015, our cumulative emissions are more than 9 percent below our 2001–2015 target. Our fleet emission intensity is well below that of a new combined-cycle gas unit.”

The Benchmarking report is the 12th in a series since 1997 highlighting environmental improvements and progress in the nation's electric sector. The 100 power producers evaluated in the report represent 85 percent of the electric power generated in the U.S. and 87 percent of the industry's air emissions. The report ranks each power company's emissions and its emission rate (determined by dividing emissions by electricity produced) for each pollutant against the emissions and rates of the other companies.

In addition, states are ranked by the amount of each pollutant released. For example, the 10 states with the highest CO₂ pollution are: Texas, 263.3 million tons; Florida, 119 million tons; Indiana, 114.1 million tons; Pennsylvania, 109.3 million tons; Ohio, 106 million tons; Illinois, 101

million tons; Kentucky, 94.1 million tons; Missouri, 82.8 million tons; West Virginia, 79.5 million tons; and Alabama, 73.4 million tons.

When ranked by CO₂ emissions rate (lb CO₂/MWh), the top 10 states in descending order are Kentucky, Wyoming, West Virginia, Indiana and Missouri, North Dakota, Utah, New Mexico, Ohio, and Colorado.

Based on 2014 generation and emissions data from the U.S. Energy Information Administration (EIA) and EPA, the benchmarking report is a collaborative effort between Ceres; Bank of America; power producers including Calpine, Entergy, and Exelon; and the Natural Resources Defense Council. It is authored by M.J. Bradley & Associates.

Media Contacts:

Ceres:	Meg Wilcox (617) 247-0700 wilcox@ceres.org
NRDC:	Jake Thompson (202) 289-2387 jthompson@nrdc.org
Calpine:	Brett Kerr (713) 830-8809 Brett.Kerr@calpine.com
Entergy:	Ann Becker (601) 368-5014 abecker@entergy.com
Exelon:	Paul Adams (410) 470-4167 Paul.adams@constellation.com
Bank of America:	Kelly Sapp (980) 386-9514 Kelly.E.Sapp@bankofamerica.com

####

About Ceres

Ceres is a nonprofit organization mobilizing many of the world's largest companies and investors to take stronger action on climate change, water scarcity and other sustainability challenges. Ceres directs the Investor Network on Climate Risk (INCR), a network of over 120 institutional investors with collective assets totaling more than \$14 trillion. Ceres also engages with 100-plus companies, many of them Fortune 500 firms, committed to sustainable business practices and the urgency for stronger climate and clean energy policies. For more information, visit www.ceres.org or follow on Twitter @CeresNews.

About NRDC

The Natural Resources Defense Council (NRDC) is an international nonprofit environmental organization with more than 2 million members and online activists. Since 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment. NRDC has offices in New York City, Washington, D.C., Los Angeles, San Francisco, Chicago, Livingston, Montana, and Beijing. Visit us at <http://www.nrdc.org> and follow us on Twitter @NRDC.

About Calpine

Calpine Corporation is America's largest generator of electricity from natural gas and geothermal resources. Our fleet of 84 power plants in operation or under construction represents more than 27,000 megawatts of generation capacity. Through wholesale power operations and our retail business, Champion, we serve customers in 21 states and Canada. We specialize in developing, constructing, owning and operating natural gas-fired and renewable geothermal power plants that use advanced technologies to generate power in a low-carbon and environmentally responsible manner. Our clean, efficient, modern and flexible fleet is uniquely positioned to benefit from the secular trends affecting our industry, including the abundant and affordable supply of clean natural gas, stricter environmental regulation, aging power generation infrastructure and the increasing need for dispatchable power plants to successfully integrate intermittent renewables into the grid.

About Entergy Corporation

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including nearly 10,000 megawatts of nuclear power. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of approximately \$11.5 billion and more than 13,000 employees.

About Exelon

Exelon Corporation (NYSE: EXC) is a Fortune 100 energy company with the largest number of utility customers in the U.S. Exelon does business in 48 states, the District of Columbia and Canada and had 2015 revenue of \$34.5 billion. Exelon's six utilities deliver electricity and natural gas to approximately 10 million customers in Delaware, the District of Columbia, Illinois, Maryland, New Jersey and Pennsylvania through its Atlantic City Electric, BGE, ComEd, Delmarva Power, PECO and Pepco subsidiaries. Exelon is one of the largest competitive U.S. power generators, with more than 32,700 megawatts of nuclear, gas, wind, solar and hydroelectric generating capacity comprising one of the nation's cleanest and lowest-cost power generation fleets. The company's Constellation business unit provides energy products and services to approximately 2 million residential, public sector and business customers, including more than two-thirds of the Fortune 100. Follow Exelon on Twitter @Exelon.

About Bank of America

At Bank of America, our focus on Environmental, Social and Governance (ESG) factors is critical to fulfilling our purpose of helping make people's financial lives better. Our commitment to growing our business responsibly is embedded in every aspect of our company. It is demonstrated in the inclusive and supportive workplace we create for our employees, the responsible products and services we offer our customers, and the impact we help create around the world in helping local economies thrive. An important part of this work is forming strong partnerships across sectors – including community and environmental advocate groups, as well as non-profits – in order to bring together our collective networks and expertise to achieve greater impact. Learn more at www.bankofamerica.com/about and follow us on Twitter at @BofA_News.