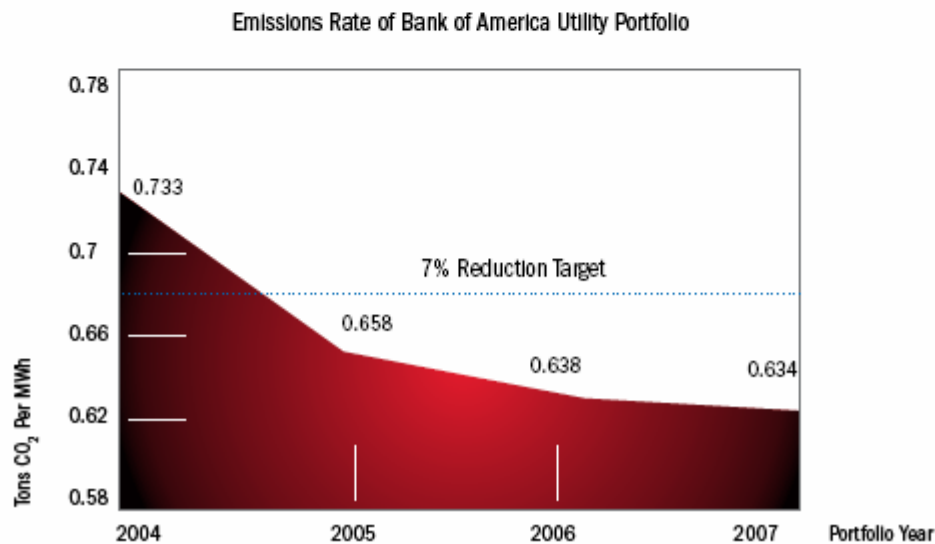


### Utilities Portfolio Emissions Reduction Methodology

Carbon dioxide (CO<sub>2</sub>) emissions from the U.S. electric power sector represent approximately one-third of all U.S. greenhouse gas emissions and 40 percent of all U.S. energy-related CO<sub>2</sub> emissions. Since 1990 these emissions have grown by more than 30 percent. Increases in the efficiency of electric power plants and shifts in fuel used from coal to natural gas or zero-emitting fuels such as nuclear and wind power have the potential to reverse this trend and lower emissions from the utility sector.

In 2004, Bank of America began considering the emissions profile of the utilities to which it extends credit. The bank committed to reducing the emissions rate of the companies in its utility portfolio 7 percent by 2008. To date, Bank of America has made significant progress in lowering the collective emissions rate for companies in its utility portfolio. This progress is attributable to two primary factors: 1) a shift in lending away from some of the highest emitting companies in the portfolio and the addition of lower emitting companies; and 2) a reduction in the emission rate of the other companies remaining in the portfolio.



## Methodology

The following describes the methodology used by Bank of America to calculate our emissions reduction commitment in the utilities portfolio:

- Bank of America defines the utility portfolio as all electric generators with whom the bank has significant lending/credit relationships.
- Obtain electric generation data (expressed as Megawatt hours (MWh)) for firms representing at least 75 percent of total generation in the portfolio.
- Obtain CO<sub>2</sub> emissions data for the same firms that represent 75 percent of total electric generation.
- Add the generation from each of the firms together to estimate total MWh for the portfolio.
- Add the emissions from each of the firms together to estimate total CO<sub>2</sub> for the portfolio.
- Divide total CO<sub>2</sub> for the portfolio by total MWh to estimate CO<sub>2</sub> emitted per MWh generated.

The most recent sources of data are used for the calculations. Data are derived from various sources including U.S. Environmental Protection Agency, Emissions and Resource Generation Integrated Database (eGRID).

<http://www.epa.gov/cleanenergy/egrid/index.htm>

U.S. Energy Information Administration, Form 906 database

[http://www.eia.doe.gov/cneaf/electricity/page/eia906\\_920.html](http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html)

Company annual and environmental reports; Ceres utility industry emissions reporting

<http://www.ceres.org>

### About the Data Set

Bank of America's methodology for estimating emission rates focuses on the largest electricity generators in its portfolio. These firms are the most likely to report electric generation and CO<sub>2</sub> emissions publicly. Use of these data ensure transparency and minimize tracking costs, ensuring consistency in application of methods.

Together, these largest generators represent 75 percent of the total estimated generation from the bank's utility portfolio. Because the largest generators will be providing base-load (24 hour provision of electricity), they are often coal-fired (a lower cost form of generation). Smaller generators often use higher cost natural gas and renewables such as wind, photovoltaics and biomass. Thus, it is likely that the largest generators have emission rates above those of the smaller generators.

The bank tests this hypothesis by performing spot checks on companies outside the large generator data set and has found their emission rates equal to or lower than the collective emission rate of the largest generators.

## Why Target a Decline in Emission Rates?

Greenhouse gas emissions performance is typically measured on an absolute basis, focusing on the change in aggregate emission levels or on an intensity basis, represented by a rate of emissions per unit of output such as Megawatt hours (MWh).

Emission rates (an intensity measurement) are the most accurate representation of the emissions performance of a utility portfolio. These rates minimize the impact of circumstances unrelated to a utility's environmental decisions such as:

**Weather Variation** - Warmer than normal summers or cooler than normal winters can increase demand for electricity and overall emissions;

**Demand Growth** - Increases in population and economic activity increase electric demand that must be met by the local utility through generation or power purchases;

**Mergers and Divestitures** - When a company acquires additional generating capacity, the apparent absolute emissions of the company grow, while the decrease in emissions from the company selling the generating units remains unaccounted for; and

**Outages for Maintenance** - When a company reduces electric generation to perform maintenance, they still need to meet electric demand, so they purchase electricity from another generator. This lowers their apparent emissions which have been shifted to another company now providing the electricity.

In contrast to absolute emission estimates, emission rates will mute the impacts of these external factors on environmental performance.

Absolute Emissions of Bank of America Utility Portfolio

