Energy Manageme Greenhouse Gas Emissions Reductions at IBM

Andres Rodriguez
Program Manager, Energy & Climate
IBM Corporate Environmental Affairs



From 1990 through 2019, IBM conserved 7.7 million MWh of electricity, avoiding 4.5 million metric tons of CO₂ emissions and saving \$646 million.

IBM's Energy & Climate Goals



Energy Conservation

Achieve energy conservation equal to 3% of annual energy consumption.



Renewables

Procure 55% of the electricity IBM consumes from renewable sources by 2025.

All three goals are applicable to IBM managed facilities as well as third-party managed spaces.



CO₂ Emissions Reduction

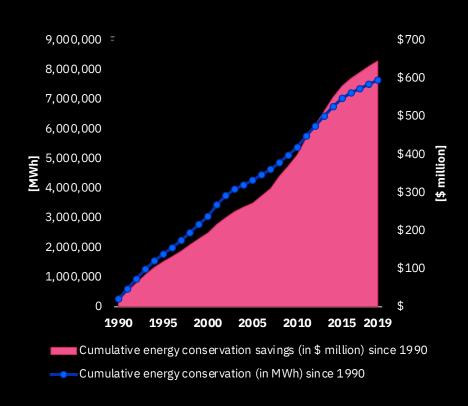
Reduce CO₂ emissions associated with IBM's energy consumption 40% by 2025 against base year 2005.

IBM's Energy Conservation Results

IBM's long-standing commitment to energy conservation dates to the 1970s when we issued a corporate-wide policy on energy conservation and set our first energy conservation goal. And energy conservation has been a corner stone of our climate protection program.

IBM implemented 1,660 energy conservation projects at nearly 230 locations globally in 2019. These projects delivered annual energy savings of 136,000 MWh, equal to 3.2% of our total energy use during 2019 and surpassing the corporate goal of 3%.

They also avoided 47,000 metric tons of CO₂ emissions and saved \$14.4 million in expense. The avoided emissions were equivalent to removing more than 10,000 passenger vehicles from the road during the year.

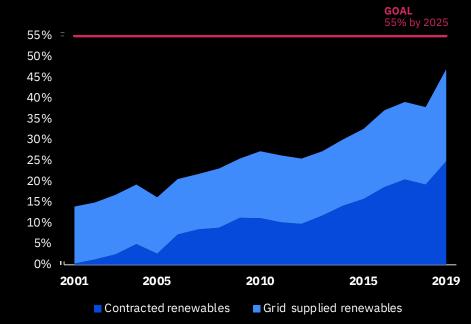


IBM's Renewable Electricity Consumption

IBM's strategy is to purchase renewable electricity that is generated in the grid regions where our consumption of electricity occurs.

IBM does not use 'unbundled' Renewable Energy Certificates (RECs) to claim renewable electricity consumption.

In 2019, 47% of the electricity consumed across IBM's operations came from renewable sources. This amount includes renewables IBM directly contracts for through its power suppliers (25%) and renewables received from the grid (22%).



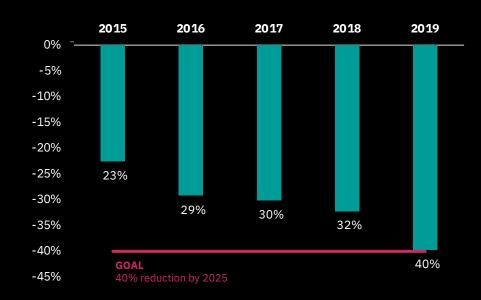
IBM's use of renewable electricity as a percent of global electricity consumption (covering both IBM and third party managed locations).

IBM's Greenhouse Gas (GHG) Emissions Reductions

Energy conservation and switching to using renewable electricity are the main drivers for GHG emissions reductions at IBM.

IBM does not use carbon offsets to claim GHG emissions reductions.

IBM's 2019 operational CO₂ emissions associated with energy consumption were reduced by 39.7% against base year 2005, nearly meeting our 2025 goal.



IBM's operational CO₂ emissions reduction versus its 2005 baseline. CO₂ emissions include those from both IBM and third party managed locations.

A Sampling of External Recognition of IBM's Leadership

2019: Climate Leadership Award in the 'Goal Setting' category

2018: Climate Leadership Award in the 'Goal Achievement' category

2018: Smart Energy Decisions Innovation Award

2018: Energy Management National Award from the Canadian Industry Partnership for Energy Conservation.

2018: EU Code of Conduct for Data Centres Award

2017: Climate Leadership Award in the 'Organizational Leadership' category

2017: Energy Management Insight Award

2015: Alliance to Save Energy Chairman's Award

2014: Climate Leadership Award in the 'Goal Achievement' category

2013: Climate Leadership Award in the 'Supply Chain Leadership' category

2013: Platts Global Energy Award in the 'Efficiency Initiative Commercial End Customer' category

2012: Climate Leadership Award in the 'Organizational Leadership' category

2011: Association of Energy Engineers' International Corporate Energy Management Award

Other notable earlier awards: Industrial Energy Technology Conference Energy Award (2009), U.S. EPA Climate Protection Award (1998 and 2006), Alliance to Save Energy Star of Energy Efficiency Award (1998), Association of Energy Engineers' International Corporate Energy Management Award (1992).

