Operational CO_2 emissions goal

IBM's operational CO_2 emissions reduction goal covers emissions associated with energy used to power our global operations. These emissions include more than 96% of IBM's total Scope 1 and Scope 2 GHG emissions. They also include emissions associated with the generation of electricity consumed at IBM data centers which are located in facilities managed by third parties. Although most IBM data centers are located in facilities managed by IBM, the data centers at locations managed by third parties are also an integral part of IBM's business operations. Scope 1 and Scope 2 emissions not covered in our operational CO_2 emissions reduction goal are those resulting from the use of fuels for transportation and from the use of refrigerants and chemicals with a global warming potential. Together these excluded emissions made up 3.9% of IBM's combined Scope 1 and Scope 2 emissions during 2018.

From 2017 to 2018, IBM reduced operational CO_2 emissions by 3% (43,000 metric tons) to 1,375,000 metric tons. When measured against our 2005 baseline, we reduced CO_2 emissions by 32.2%. Our energy conservation projects and the migration of IT workloads to the IBM Cloud platform primarily contributed to this reduction.

Reduced CO_2

IBM's 2018 operational CO_2 emissions were reduced by 32.2% versus the 2005 baseline.

IBM's operational CO_2 emissions associated with the use of fuel and electricity were reduced by 3% from 2017 to 2018.

IBM's GHG emissions subject to its 4th generation operational CO_2 emissions reduction goal	
	2018
Emissions associated with IBM's use of fuels for operations such as heating	82,314
Emissions associated with IBM's purchased electricity and energy commodities	963,304
Emissions associated with the generation of electricity consumed by IBM's data centers located in third-party managed facilities	329,409
Total emissions covered by goal	1,375,027
Operational CO_2 emissions reduction against 2005 baseline	-32.2%

GHG emissions inventory (see our IBM and the Environment website)

IBM's overall GHG emissions inventory includes 100% of our Scope 1 and Scope 2 emissions. It also includes estimates of emissions in five Scope 3 categories for which we either were able to make credible assumptions or had reliable data. IBM does not attempt to estimate Scope 3 emissions in other categories. Although broad approximations of Scope 3 GHG emissions can be helpful in identifying where the greatest amounts of GHG emissions may be generated during the lifecycle of a general process, product, or service on a macro level, the assumptions that must be made to estimate Scope 3 emissions in most categories do not enable credible, factual numbers.