climate savers computing℠

FAQ FOR THE CLIMATE SAVERS COMPUTING INITIATIVE'S RESEARCH ON PROGRESS TOWARD ITS EMISSION REDUCTION GOAL

Background: In 2010, the Climate Savers Computing Initiative (CSCI) commissioned research to see if the IT industry was on track to achieve its reduction goal of 54 million metric tons by July 2011.

What is the significance of this research, and what does it show?
The study shows that CSCI's efforts have helped accelerate the reduction of worldwide CO_2 emissions that result from computing. The IT sector successfully reduced annual CO_2 emissions by somewhere between 32 million and 36 million metric tons. This reduction was achieved, in part, by CSCI's efforts to drive increased development and adoption of higher efficiency equipment and power management.

This achievement means that the IT industry has made significant progress and is well on its way (60 to 70 percent) to reaching CSCI's goal of reducing annual CO_2 emissions by 54 million metric tons by July 2011.

How did CSCI establish its original goal of 54 million metric tons of CO_2?
In 2007, the energy consumed by computing represented 2 percent of global greenhouse gas emissions each year — and it has been growing since. When the Climate Savers Computing Initiative was established in July of that year, the organization looked at the efficiency levels of average PC equipment in the marketplace. The organization reviewed the potential of new, higher efficiency equipment and established criteria for measuring increased energy savings, year over year, through June 2011. To establish a goal, CSCI compared the projected number of workstation, laptop, and server shipments (provided by International Data Corporation) to the forecasted use and deployment of power management, based on CSCI's criteria for effective PC settings. As originally developed, this goal will be achieved exclusively through desktop infrastructure (desktop PCs and laptops), server efficiencies, and client power management deployment.

What does this report represent regarding CSCI's role in reducing greenhouse gas emissions through power management and energy efficient hardware adoption?
The mission of the Climate Savers Computing Initiative is to increase the adoption of power management and the development and adoption of energy efficient computing equipment. We are not taking credit for single-handedly achieving these emissions results. However, based on our market research and surveys of our membership, more than 60 percent of CSCI's members have increased their adoption of power management while driving broader adoption in the larger market through education

and engagement efforts. In addition, CSCI's members have increased their adoption of higher efficiency equipment. Our members have a 40 percent higher adoption rate of the most energy efficient computing equipment than the market as a whole.

In addition to strides made by CSCI's membership, the organization has played a key role in bringing buyers and suppliers together to create a demand for more efficient solutions. When CSCI was established in 2007, desktop computers wasted 50 percent of the power that came from the wall. Today, through the efforts of our organization, hardware manufacturers, large IT buyers, and other key partners, we've cut that waste by at least 25 percent for new systems. As a result, just one year after the organization was established, the number of products meeting CSCI's technical criteria had jumped from zero to several hundred.

Explain how the data was uncovered for this study.
The data for this research report was gathered and analyzed by Natural Logic, an independent, third-party research firm with experience developing sustainability models that reduce energy consumption. The research firm calculated the 32 million to 36 million metric tons estimate by measuring the amount of CO_2 emissions offset by the adoption of power management and high efficiency equipment since 2007, and comparing it to projected emissions for "business as usual." Business as usual represents the projected amount of CO_2 emitted by IT equipment if shipments of energy efficient equipment continued at their 2007 rates.

Natural Logic designed the methodology for this research analysis and reviewed the potential pathways to achieving a reduction goal of 54 million tons. The data was compiled by looking at member company progress on power management adoption and market data (shipment and installed base information, PSU efficiency levels, number of units sold worldwide, operating systems in use, market research, and estimates developed through interviews with industry analysts, including Forrester Research and 451 Group).

Explain the timeline that the data represent.
This research study covers the first three program years of the Climate Savers Computing Initiative, July 1, 2007, through June 30, 2010. In its current form, the report includes projected data for shipments of higher efficiency computing equipment in the first half of 2010.

How was the data validated, and what organizations did you work with on the study?
The data and the analysis of this study have been validated by Natural Logic with additional review performed by several independent third parties.