



FAQ FOR THE CLIMATE SAVERS COMPUTING INITIATIVE'S EXPANSION INTO NETWORKING

Background: The Climate Savers Computing Initiative (CSCI) is expanding its focus to include the development, deployment, and adoption of energy efficient networking equipment and systems.

Why did the Climate Savers Computing Initiative identify networking as the right sector for its expansion?

Together with our partners and key stakeholders, the Climate Savers Computing Initiative (CSCI) initiated extensive research that revealed we could apply our competencies to commercial and home networking to create a significant impact toward reducing global IT energy consumption.

What do you expect to achieve by expanding the organization to include commercial and home networking?

Based on our research, the Climate Savers Computing Initiative estimates that the global IT industry can offset 38 million metric tons of annual CO₂ emissions by 2015 through the development and deployment of more energy efficient networking equipment worldwide. This is the equivalent of \$5 billion in energy cost savings for businesses and consumers.

By applying the same competencies CSCI has driven in the computing space, we can achieve significant reductions in energy consumption and CO₂ emissions. Our expansion is designed to drive global standards that will provide enhanced design, delivery, and adoption of high efficiency products in the networking sector.

What kinds of devices and networking systems are included in the expansion?

We will focus resources, abilities, and expertise on energy efficient products and practices to support the digital age. We are including both commercial and consumer networking equipment, with an initial focus on networking devices used by enterprise and telecoms, followed by home network equipment. Practices will include consumer and commercial awareness and adoption of higher efficiency equipment standards, technology, and best practices.

As a secondary phase, CSCI intends to further focus on the way networks communicate with connected devices in home and business environments.

Why expand into a sector that accounts for such a small fraction of commercial and residential buildings' CO₂ emissions?

A study conducted by the Lawrence Berkeley National Laboratory (LBNL) concluded that networking equipment used 1 percent of commercial and residential buildings' electricity in 2008. While that may



not seem like a significant number, it accounted for a huge amount of energy consumption and spending in the United States that year, to the tune of 18 billion KWh and approximately \$2 billion.

Why is now the right time to focus on networking energy efficiency?

As the number of networked devices continues to rise among consumers and enterprises, the demand on networks and networking equipment will increase in step. According to a study released by Lawrence Berkeley National Laboratory, the impact of networking on greenhouse gas emissions and energy consumption in commercial and residential buildings is expected to grow by approximately 6 percent annually without a focused effort to improve their energy efficiency. By addressing and reducing the environmental and economic impact of networking, CSCI intends to help enterprises and consumers avoid increases in CO₂ emissions and energy costs associated with IT in the coming years.

Who are the leaders behind this expansion?

The Climate Savers Computing Initiative's Board of Directors made the decision to expand into networking systems as part of its renewed commitment to further reduce our industry's energy consumption, costs, and environmental footprint. We have strong leadership in this endeavor from new members Cisco, Emerson Network Power, and Juniper Networks, as well as our existing board members CSC, Dell, Google Inc., HP, Intel, Microsoft, and the World Wildlife Fund.

How will you recruit new members and drive energy efficiency in this new arena?

Three top-tier networking manufacturers — Cisco, Emerson Network Power, and Juniper Networks — now join the Board of Directors to work collaboratively with the existing leadership to accelerate the shift toward increased energy efficiency in the networking sector. CSCI will drive the development of criteria, technology, and best practices in networking to facilitate significant energy, cost, and emissions savings.

What progress have you made toward achieving the greenhouse gas reduction goals initially set by the organization in 2007?

CSCI is making progress toward our goal to reduce the industry's annual greenhouse gas emissions by 54 million metric tons by July 2011. We expect to achieve this goal by increasing the adoption of power management and higher efficiency equipment. CSCI will continue to focus on improving computer efficiency and reducing the barriers to power management adoption among enterprises and consumers.



To learn more about the IT sector's progress in reducing carbon emissions since 2007, check out the [fact sheet](#) and [FAQ](#) for our recent emissions research (FAQ: http://www.climatesaverscomputing.org/toolkit/CSCI_ResearchFAQ_FINAL Fact Sheet: http://www.climatesaverscomputing.org/toolkit/CSCI_ResearchFactSheet_FINAL)

Are you including greenhouse gas reductions from networking systems in that original reduction goal?

No. The CO₂ reductions accomplished from expanding into networking systems will not be factored into the original reduction goal of 54 million metric tons. As originally developed, this goal will be achieved exclusively through desktop infrastructure (desktop PCs and laptops), server efficiencies, and power management deployment.

To track the progress of our expansion, Climate Savers Computing has developed a new emissions reduction goal related to the development and deployment of high efficiency networking equipment. That new goal is to offset 38 million metric tons of annual CO₂ emissions by 2015.

How does the expansion impact your focus on the initial goal?

While significant in terms of our potential to reduce energy consumption, the expansion into networking will not change our overall mission and goals as an organization. We will remain committed to raising awareness and increasing development and adoption of high efficiency technologies and power management, with the added inclusion of networking equipment and the infrastructure that allows networks to keep us connected.