



Cisco IT Executive Presentation Environmental Measures

Version 12, Q1, FY09

Produced by the Cisco on Cisco team within Cisco IT

Background and Key Messages

25% reduction in GHG emissions from operations and business airline travel by 2012

- Labs and Data Centers
- Product efficiency
- Cisco Connected Workspace
- Collaboration technologies
- Reduce energy in facilities using network-based IT tools
- Incorporate environmental standards into new and existing sites
- Educate employees and provide an example for our customers

Executive Summary



TelePresence

Virtual travel with Cisco TelePresence technology and Web conferencing collaboration suites

321 TelePresence rooms worldwide

216,046+ TelePresence meetings globally (279,738+ hours of meetings)

89,996+ metric tons of carbon emissions saved

~\$166.66 million saved in deferred travel costs



Mobile Workforce

Cisco encourages mobility for employees to work from home using collaboration technologies

Cisco Virtual Office and VPN hardware and software solutions provide high-quality voice and improved security for working from home



Cisco Connected Workplace

Flexible working environment. Higher levels of job satisfaction and productivity. Benefits for the enterprise and the environment

Accommodates double the employees as traditional office environment

Reduces per-capita equipment, IT infrastructure, and power



Energy Efficient Cisco Production Data Center

Two-pronged approach to energy efficiency in new production data center in Richardson, Texas

1. Green considerations in 40 separate site construction areas (mechanical, electrical, and operational construction elements)

2. SODC framework reduces power and space needs, increases agility and service resiliency. Services moved into the network for more electrical efficiency than traditional designs

TelePresence

At Cisco, virtual travel is possible using Cisco TelePresence technology and Web conferencing collaboration suites.

FACTS

- Cisco IT has deployed 321 TelePresence rooms worldwide
- 216,046+ meetings have used TelePresence to date (279,738+ hours of TelePresence meetings)
- ~19 percent of total TelePresence meetings resulted in travel avoidance and saved 89,996+ metric tons of carbon emissions
- TelePresence technology has saved Cisco ~US\$166.66 million in deferred travel costs, based on conservative estimates
- A one-way plane trip from San Francisco to Tokyo = 98 hour long TP meeting. Two, 1-hour TP meetings/week in a year = One-way plane trip from San Francisco to Tokyo

Mobile Workforce

Cisco Virtual Office and VPN hardware and software solutions enable employees to work more efficiently from home and reduce commutes to Cisco offices.

FACTS

- **12,000 employees use Cisco Virtual Office solution in 70 different countries**
- **Employees typically work 3 days at home and are 28% more productive**
- **Cisco users avoid an average of 36.4 commuting miles per day working at home – i.e. 62,899,200 driving miles avoided a year**
- **Cisco users reduce auto emissions by 30,435 tons of CO2 annually, saving more than \$168,561 per year in re-forestation project costs necessary to offset the automobile carbon footprint**
- **Project 20,000 users in 2009 (about one-third of total employee base)**

Cisco Connected Workplace

Higher levels of job satisfaction and productivity offered by Cisco Connected Workplace benefit the enterprise and the environment.

FACTS

By implementing the Cisco Connected Workplace, Cisco

- Reduces number of per-capita IT-related devices by **22 percent**
- Reduces cabling requirements by **54 percent**
- Reduces total IT equipment wattage by **44 percent**
- Increases office space utilization by **40 percent**
- Reduces greenhouse gas emissions
- Helps lower the traffic congestion and alleviated the strains of commuting

Energy Efficient Cisco Production Data Center

By deploying efficient network architectures, Cisco IT moved services that provide more electrical efficiency than traditional designs into the network.

FACTS

- **Reduced overall appliance count by six per logical server group, removing 600 Watts per group. Network service modules provide a more efficient architecture than an appliance-based one (Cisco has approximately 250 server groups x 600 Watts each)**
- **Driven utilization on 5 Petabytes (PB) of storage to approximately 70 percent through network-based storage virtualization**

Environmental Measures – Benefits Snapshot

Operational Excellence

- **TelePresence:**
 - 216,046+ meetings to date
 - Travel avoidance gained by 41,6651+ of total meetings and savings of 89,996+ metric tons of carbon emissions
- **Mobile Workforce:**
 - Cisco VPN provides high-quality voice and improved security for working from home
- **Cisco Connected Workplace:**
 - Reduced number of per-capita IT-related devices by 22%
 - Reduced cabling requirements by 54%
 - Reduced total IT equipment wattage by 44%
 - Increased office space utilization by 40 percent
 - Reduced greenhouse gas emissions
- **Energy Efficient Cisco Production Data Center:**
 - Reduced overall appliance count by six per logical server group, removing 600 Watts per group
 - Driven utilization on 5 Petabytes (PB) of storage to ~70% through network-based storage virtualization

Productivity

- **TelePresence:**
 - One-way plane trip from San Francisco to Tokyo = 98 hour-long TP meeting.
 - Two, 1-hour TP meetings/week in one year = one-way plane trip from San Francisco to Tokyo
- **Cisco Connected Workplace:**
 - Helps lower the traffic congestion and alleviated strains of commuting
- **Mobile workforce:**
 - Employees typically work 3 days at home and are 28% more productive

Cost Savings

TelePresence technology saved Cisco \$166.66 million in deferred travel costs, based on conservative estimates.

To learn more about Cisco IT
real world deployments, visit

www.cisco.com/go/ciscoit



CISCO