

Dell's Facility Energy Efficiency Efforts



Sarah Gibson

Global Environmental Programs Manager

Sarah_Gibson@Dell.com

Outline

- Dell and the Environment
- Energy and GHG Emissions
- Climate and Energy Strategy



Dell and the Environment

Dell Profile

- Founded in 1984
- World HQ in Round Rock, Texas
- Revenues \$57B*
- 90,000 employees*
- 11 global manufacturing facilities
- Retail, service & distribution facilities
- Regional offices in > 50 countries

* FY07



Dell's goal: to be the greenest technology company on the planet.



Dell Energy Profile



On-site Operations

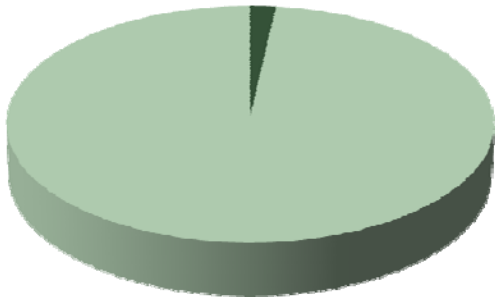
Energy Use

- *Primarily purchased electricity*

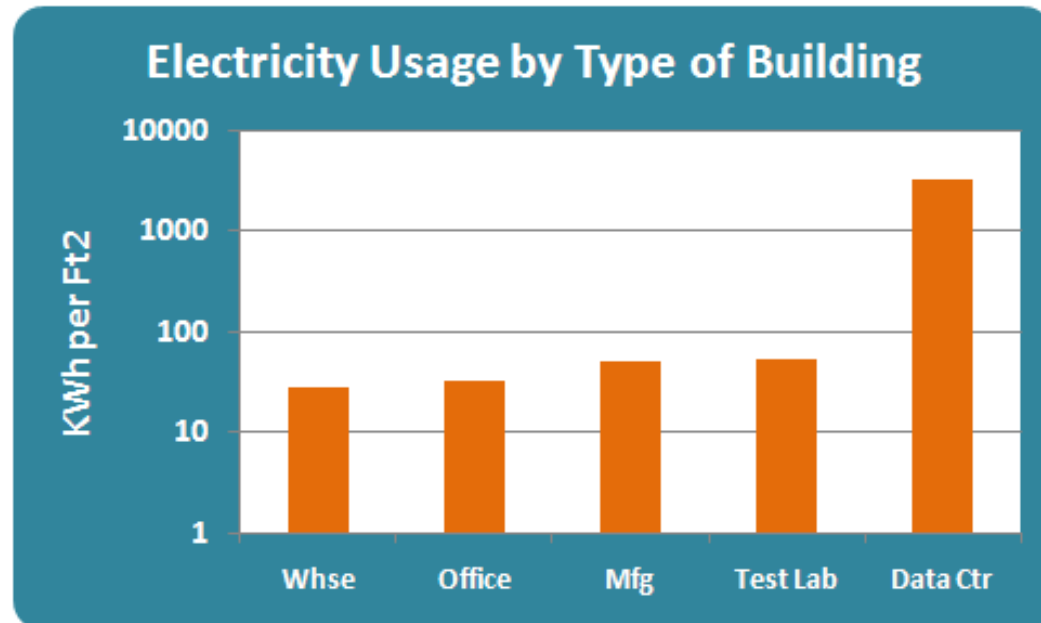


GHG Emissions Profile

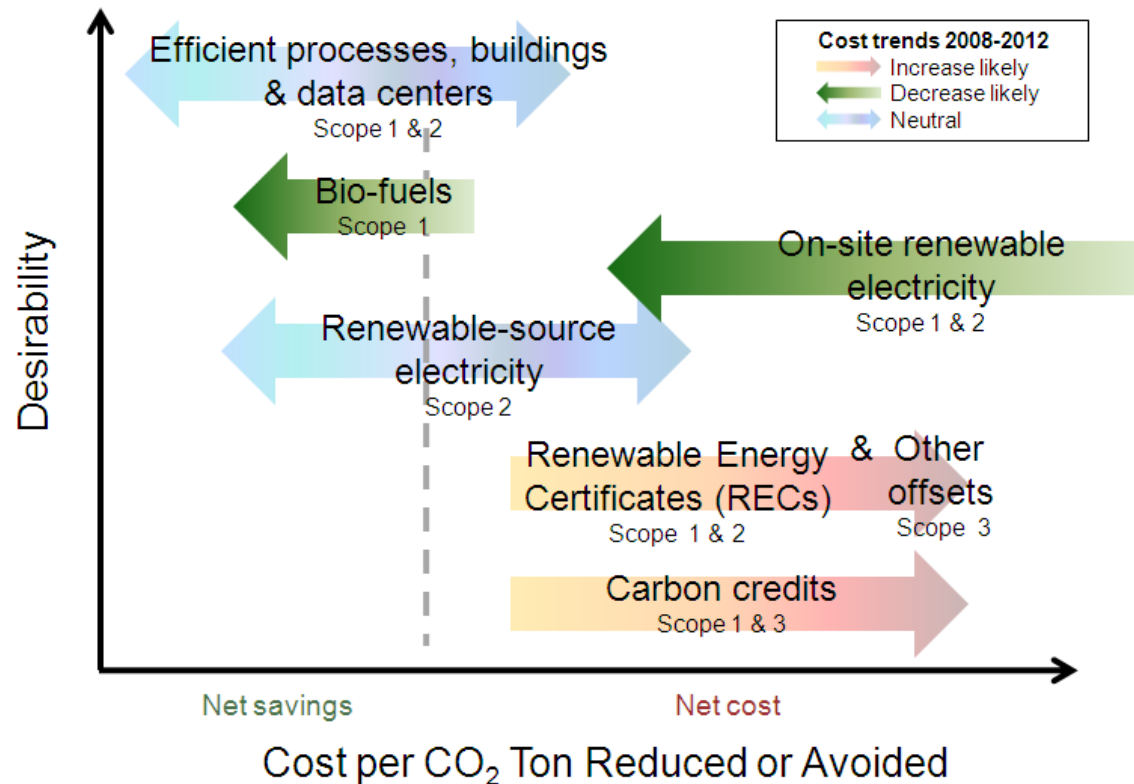
CO2 Emissions 2006



- Scope 1
7000 metric tons
- Scope 2
377,000 metric tons



GHG Reduction Strategies



Dell priorities

1. Reduce Scope 1 & 2 emissions
2. Use greener electricity
3. Offset some Scope 3 emissions



Current & Ongoing Site Energy Projects



Office Equipment



HVAC Equipment



Lighting



Data Centers



Office Equipment

Remote Power Management

- Automatically powers down desktop systems at night
- Software 1E Night Watchman
- Projected savings:
 - 17.5 Million kWh per year
 - \$1.2 Million / year



Other opportunities

- Replacing CRT monitors with LCD monitors
 - Savings \$41 /unit and 426 kWh/unit annually*

HVAC Equipment

Chillers

- Replaced motor controls with VFDs
 - Savings: \$120K and 1.7 Million kWh annually

Other Projects

- ECMs on fractional hp motors
- Installation of energy management systems
- Retro-commissioning
- Replacing end of life equipment



Lighting

Manufacturing / Fulfillment Buildings

- Replaced high-bay metal halide with T5 fixtures
 - Savings: \$0.20/sf and 0.33 W/sf annually*
- LED loading dock lights (under evaluation)



Office Buildings

- Replaced T8s with T5 fixtures
 - Savings: \$0.07/sf and 0.24 W/sf annually*
- Replaced stairway and decorative halogen lights with fluorescent lighting



*Manufacturing Lighting operations 24/7 -365, Office lighting operation hours 14 hour M-F S-S 8 hours



Data Centers

IT Equipment

- Energy-star and Energy-smart upgrades
- Virtualization

Building Equipment

- Re-designed cooling configurations
- Metering the HVAC load

Considerations for New DCs

- Consolidation
- Location



Other Activities

Design Standards

- Revised internal new building design standards to include LEED criteria, including energy efficiency

Manufacturing & Fulfillment Projects



Employee Engagement

- Green Teams
- Recognition Programs



Related Initiatives



Dell pledges to be reduce global GHG emissions by 15% per dollar revenue from 2007 to 2012, and to achieve net zero global GHG emissions by 2008 and maintain that level through 2012.



*Green Buildings
Waste Reduction*



Beyond Operations



Supply Chain
Leadership
Collaboration
(SCLC)

Suppliers

Product
Design



End of Life



Transportation



Customer Use



Take a Tour of Our New Plant

PLANT A TREE FOR ME



Together, we can make a world of difference.



“Dell has made green a priority. But it’s not really enough that Dell, or any company, is an environmental leader. I’m challenging every company to join us in this commitment. It’s the right thing to do for the Earth we all share.”

Michael Dell

Oracle OpenWorld Keynote Address

November 14, 2007



Thank You

