



# Green Technology and Sustainability

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Substances Control

Best of California  
December 3, 2008



# Housekeeping

- Please turn off or silence cell phones;
- Complete the survey and return to the registration table at the end of the day;
- Presentations will be posted on the web site after the event:

[www.govtech.com/events/BestofCA2008](http://www.govtech.com/events/BestofCA2008)





# How Green?

- Not so much

-2% global  
CO<sub>2</sub> emissions  
for ITC- same  
as aviation  
industry





# Never More Important...

- Green press everywhere
  - Go green....or else!
  - Forrester article April, 2008
    - *Measure Your Green IT Baseline Or Risk Being Caught With Your Pants Down*
- 




# Get it?

**40 %** rated environmental concerns "very important" to their companies.

**50 %** incorporate environmental criteria into purchasing decisions

**80 %** recycle hardware at the end of life





# Reasons for “greening”

## **Globally, the top three reasons for “greening”**

1. reducing energy-related expenses,
2. doing "the right thing for the environment,"
3. and bringing the IT department in line

## **Regionally:**

Europe, the biggest reason = improve the brand  
U.S., the biggest driver = reduce costs





# Saturated

- The IT industry is saturated with green IT talk. Conferences, presentations and consultants are springing up to provide guidance and advice on a range of issues that are being codified under the generic term "green IT."
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# Unsustainable

We know we have to do it –

Running out of space

Running out of power

Running out of budget

Strategies everywhere, most focus  
on Data Center



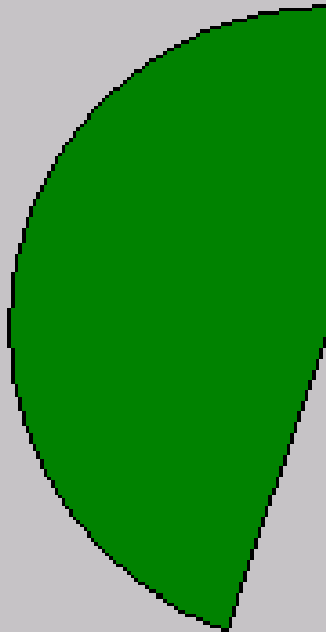


## “Green” focus on Data Centers

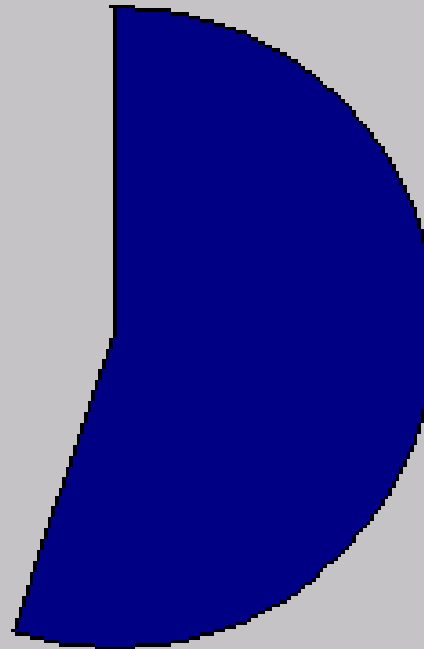
- Facilities Design; Heat and Power
  - Virtualization technologies
  - Processor Design; Server efficiency
  - Modeling and Monitoring tools
  - Processor Design
  - Integrated Energy management
  - **Desktop Energy Management**
  - **Desktop virtualization**
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# Desktop v. Data Center

PCs, Printers,  
Monitors  
45%


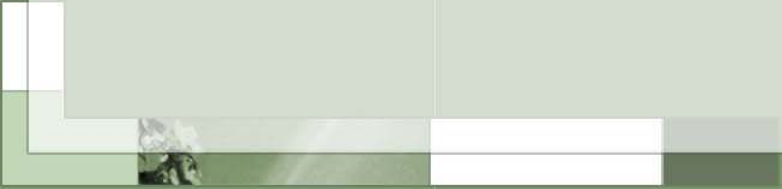



LANs, Servers,  
Telecomm  
55%




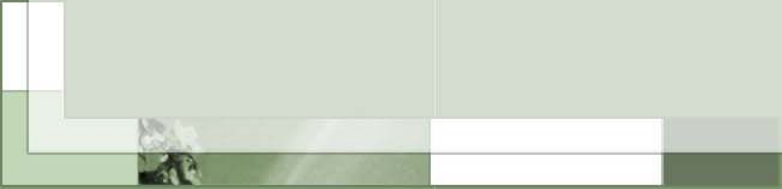


# Conceptually easy fixes for the desktop

- People-focused issues
  - Recognize need for focus
  - Build (people) systems to monitor, measure
  - Sustain the activity
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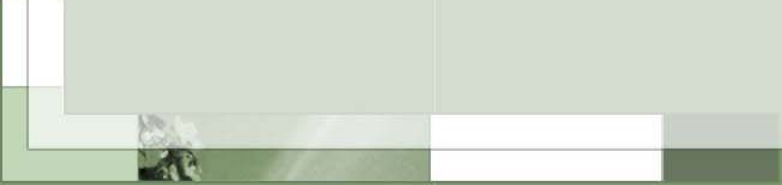


# Conceptual Onion has lots of layers

- Define your Green IT strategy
  - Establish a baseline
  - Use metrics that are practical and realistic
  - Buy Green IT products and services
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- 



# Some Possibilities

- Put someone in charge of “Green”
  - Build enthusiasm in the workplace
  - Change your mental model about how much you or your Agency can do to influence
  - Boost capacity for productivity, innovation, growth in clean ways
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- 




# Sustainability

- Roomaphant

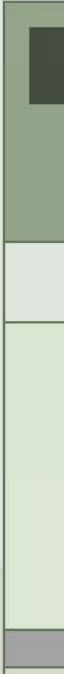
*(rum-a-fant) n. [new] < combination of elephant (a large mammal with exceedingly long nose (trunk) and room (small space into which shoving an elephant would be challenging).*

***Concept, item, issue of considerable size that seemingly remains unrecognized or dealt with.***







## Manufacturing computers is not a clean or green process

- Making computers is not clean at this point.
  - We don't know how much power is used in the process
  - The stuff that contaminates soil and water is pretty dirty
  - And throwing them away does not throw away the dirt.
- 



# Wasted.

- 130,000 (estimated) computers being discarded daily [source: US EPA]
  - Fastest growing component of the municipal waste stream in the US
  - We have to do better as an industry
- 
- 



What now?

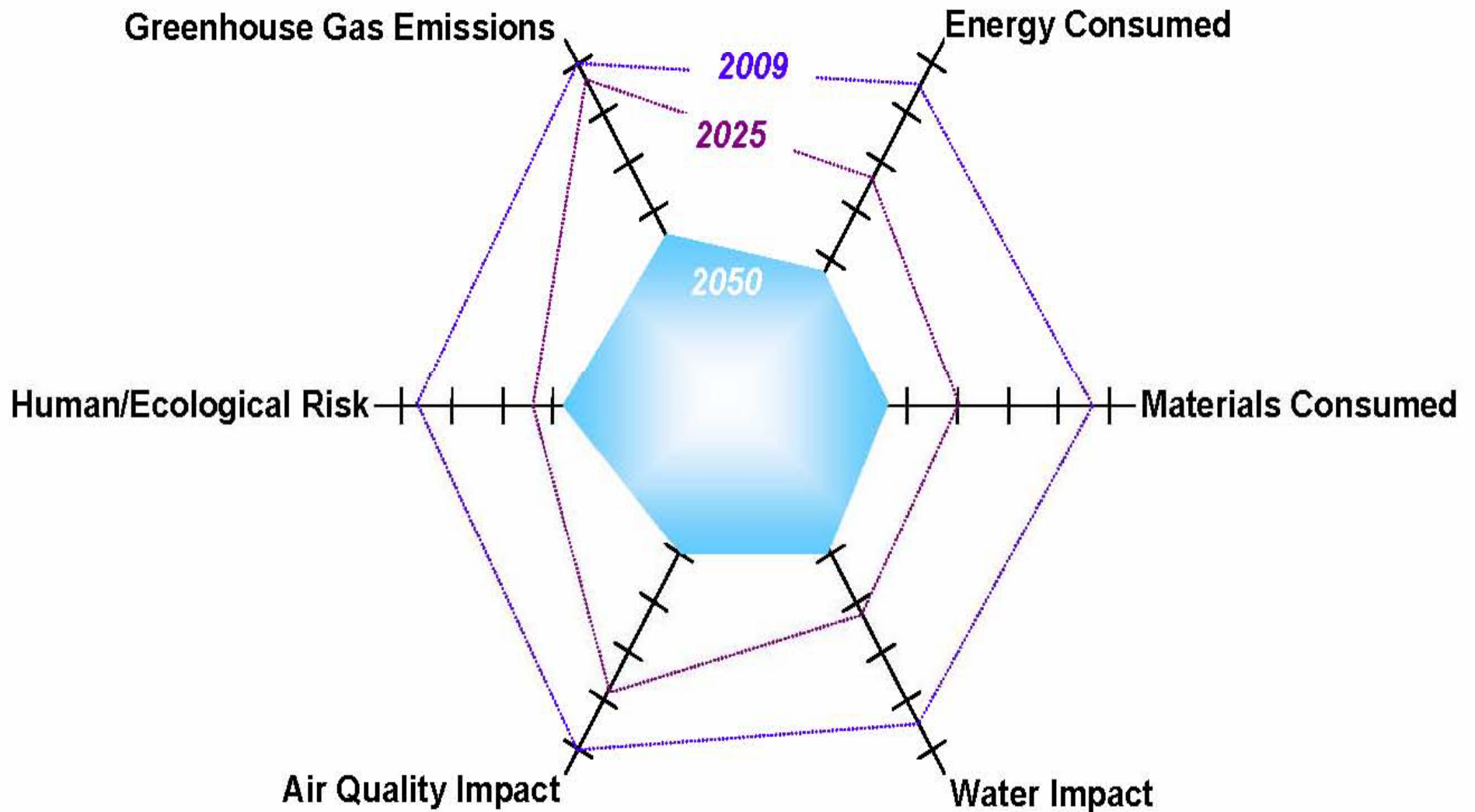


**426,000: Number of cell phones retired each day in U.S.**






# Think holistically





# Use IT to “green” Operations

- Lead Change toward sustainable practices
    - Increase government online transaction delivery
    - Telework, use more laptops
    - Buy green, travel green, work green
    - Collaborative technologies
    - Implement an Environmental Management System
- 



# With your help

- California can be...
  - Green Leaders
  - Giants in Greening
  - Green Giants





## Following the end of session

- Lunch will be held in room 307 starting at 11:45 am
- Join us at 12:40 pm in room 306 for the General Session:

### **The Changing Face of California**

