



Enabling
Energy
Efficiency
In the
Data Center

Integrated Archive Systems “Green” Resource Center

Stacy Schwarz-Gardner
EVP of Technical Marketing and Emerging Technologies

“Green” Strategy Considerations

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What does Green Really Mean?

- A better question – What does Sustainability really mean?
- Answer – “Meeting the needs of today without compromising the needs of the future”
 - Reducing CO2 emissions and carbon footprint through increased energy and fuel efficiency and through the use of renewable sources of energy.
 - Giving back what we take!

Who is Integrated Archive Systems?

Data Management Solutions Specialists!

- We provide solutions to help you manage your data in an efficient, cost effective, and scalable fashion.
- Our solutions meet the following *data management* challenges:
 - *Data Storage*
 - *Data Protection*
 - *Data Recovery*
 - *Data Archival*
 - *Data Virtualization*
 - *Data Security*
 - *Data Access: Servers/Blades and Networking*
 - *Data Management Tools*



Who is Integrated Archive Systems?

- Founded in 1994, 15th year of business
- IAS is a “Woman Owned Business Enterprise” (WBE)
- West Coast Centric - but support customers with national and global presence
- IAS is focused on Green and Sustainability
 - Enabling Energy Efficiency In The Data Center
 - Green IT and Sustainability practice



Who is Integrated Archive Systems? CMAS Partners



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Who is Integrated Archive Systems? Other Featured Partners



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Who is Integrated Archive Systems? State, County, City, Municipal Customers

- City of Cupertino
- City of San Jose
- City of Concord
- East Bay Municipal Utility District (EBMUD)
- Santa Clara Superior Court
- City of Sunnyvale
- San Mateo City College
- Contra Costa County
- Santa Clara Valley Water
- San Jose Police Department
- Riverside County Department of Social Services
- Imperial County
- Alameda County Sheriff's Office
- California State Bar Association
- State of California Office of Emergency Services
- CA Office of Systems Integration
- CA Secretary of State



IAS Green Policies and Initiatives

- Leadership eco responsibility role since 2004
- Mission Statement: Environmental policy whereby IAS will achieve minimal impact on the global eco-system
- Certified as a business that gets 100% of our energy/power from renewal sources (such as wind/solar/hydro) – green power network.

http://www.eere.energy.gov/greenpower/buying/buying_power.shtml



IAS Green Policies and Initiatives

- Member of Sustainable Silicon Valley – SSV is engaging prominent Valley organizations to work towards self-imposed goals of reducing regional carbon dioxide (CO2) emissions.

<http://www.sustainablesiliconvalley.org/>

- We encourage our partners to strive for the same goals within their own organizations from the way they conduct business to their product design, packaging, and delivery



IAS Green Policies and Initiatives

- Employee Hybrid Program (since 2004)
 - Goals: Reduce GHG emissions & fuel costs
 - Employees with IAS for 12 months will receive \$10K (gross) towards the purchase of a hybrid vehicle
 - Employees that have had their hybrid for 2 years and intend on keeping it for a total of three years can receive an additional \$10K (gross) towards the purchase of a second hybrid vehicle for primary use of the spouse of the IAS employee.



IAS Green Policies and Initiatives

- Leverage procurement strategies that evaluate all of the following:
 1. Do we really need it?
 2. Sustainability model of the supplier
 3. Impact on power and cooling from a CO2 emissions perspective
 4. Packaging
 5. Total Lifecycle of the product/solution through disposition
 6. Will it reduce overall costs to the company



IAS Green Policies and Initiatives

- Recycle...Recycle...Recycle...
- Battery Recycling
- Internal Composting
- Recycling of all computer hardware/electronic components
- Use of recycled materials at all possible opportunities
- Controlled lighting where possible
- Leveraging equipment from our Partners (SUN, Netapp etc.) which are eco-responsible



Sustainability Areas of Focus

- Employee Education
- Company Facilities – sustainability design
- Company internal usage policies
- Company procurement policies
- Partner/supplier sustainability polices
- Product lifecycle: design, manufacturing, packaging, shipping strategies, take back - recycle, disposal strategies

IT Sustainability Accelerators

- Rising power prices and demands of servers
- Climate change and environmental impact, Growing concern about carbon footprint
- More interest in the use of virtualization and cloud computing capabilities
- Interest in improved collaboration across and among global firms
- Customer and Industry Image/Perception
- To Save Money and Reduce Costs



IT Sustainability Inhibitors

- Bogus company claims of being Green
- The absence of data or agreement on metrics
- Looking for an economic case for “Green” –
What’s the ROI?
- Resistance to Change

Procurement Guidelines

- **Research company procurement policies.**
 - Find out if and to what extent your company's procurement policies give price preference to environmentally preferable products.
- **Screen suppliers and subcontractors in regards to their sustainability practices.**
- **Work with suppliers to collaborate on an action plan.**

Source: Green Procurement, Greenbiz.com



Green Action Plan

- **Work with management to create employee incentives for environmental considerations**
- **Create internal buzz within the company:**
 - Corporate news letters focused on sustainability
 - Corporate challenges and goals aligned with incentives
 - Encourage the 3 R's: reuse, reduce and recycle
 - Focused efforts with clear results
 - Improved profitability by reducing waste and increased efficiencies
 - Improved stock price based on customer and public perception of eco/sustainability positioning
- **Share information – join forums**



How IAS Can Help!

- Provide Data Management Solutions which are designed to:
 - Increase power and cooling efficiency
 - Reduce Carbon footprint
 - Use Eco-friendly technologies
- Eco-assessments
- Green strategy development
- Green IT procurement guidelines
- Data center environmental planning and strategy

