

UCAR/NCAR Staff Suggestions for Sustainability Management Plan

During brainstorming suggestions in the August 29 and 30 Sustainability Planning Workshops (which were open to all staff), we received numerous suggestions. All suggestions listed here. Sustainability staff have provided responses and effort. additional background information for some. All suggestions will be considered and evaluated as part of the planning process. For more information, or to provide additional suggestions, contact Kimberly Kosmenko at kimberly@ucar.edu. Thank you.

Date	Impact Area	Idea/Opportunity	Barriers	Response and Background Information from Sustainability Staff
8/30/2011	Communications	Adopting standard protocol for meetings with education about recycling, sustainability procedures		Green meeting guidelines available on www.ucar.edu/sustainability as a starting point. Contact Kay Gazaway for assistance with zero waste meeting planning.
8/29/2011	Communications	Look for input from folks outside of UCAR. Feedback through a community of volunteers.		In process
8/30/2011	Communications	Mandate behavior change		
8/29/2011	Communications	Metrics that are more specific to individuals impact and ability to change. Aggregate to small group & small group metrics (Incentivize groups). Energy management dashboard to compare small groups.	Resistance to one more scientific effort	FMS plans to create a web-based "dashboard" for staff to view data on energy, water, waste and other sustainability impact areas. Currently, FMS is more interested in groups having data to evaluate their own performance over time, rather than comparing different groups with different operational needs to each other. Approach and cost will be evaluated as part of SMP development.
8/30/2011	Communications	Move into interior part of building if don't want daylight		
8/29/2011	Communications	Personal door to door communications may be more effective than surveys and memos		
8/30/2011	Communications	Survey to find out awareness of waste & diversion		
8/29/2011	Communications	Understand the biggest bang for the effort		In process. SMP will include decision making metrics to compare "apples and oranges" decisions, making it easier to rank and prioritize different types of sustainability efforts
8/30/2011	Communications	Use sweaters instead of heaters		
8/29/2011	Communications	We should add a priorities section to the SMP - lots of folks concerned about what takes priority over what		In process. SMP will include decision making metrics to compare "apples and oranges," making it easier to rank and prioritize different types of sustainability efforts

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8/30/2011	Energy	Add recirculation lines to hot water		
8/30/2011	Energy	Ban high plug load appliances (space heaters, small fridges). Set standards		
8/24/2011	Energy	Calculate GHG emissions	Calculated GHG emissions is a big impact area for UCAR.	UCAR has been conducting an annual GHG emissions inventory since 2008, and is using all GHG emissions data in SMP.
8/30/2011	Energy	Computers should go off at night. Auto-off/sleep mode	Divisional policy for computer backups happen in the middle of the night so all computers have to stay on. Lack of tools/methods for saving and shutting down (need expert to configure computer to save energy?)	
8/30/2011	Energy	Managing thermal comfort yourself		FMS will produce "how to" guide for understanding how thermostats and building systems work to help staff do this.
8/30/2011	Energy	Metric: Impact of electronic control of lights and heat/AC. Give control of all to each office/floor		
8/29/2011	Energy	Metrics for indirect Cost of Energy usage		Under consideration.
8/29/2011	Energy	Metrics for lighting vs. Computer usage	We must convince them that the data collection method is valid. they will want to combat this. The person who points out the flaw in the thing is the smart one.	Greater level of metering in FLA, and soon to be in the remodeled FL4, will allow those two buildings to be test cases for understanding breakdown of energy use by category (i.e. lighting, plug load, mechanical equipment.)

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8/30/2011	Energy	More efficient light bulbs for all overheads and floor lamps		FMS regularly evaluates lighting when remodels occur, and uses the most energy efficient reliable lighting available.
8/30/2011	Energy	old/new bas (?) controls efficiency occupant comfort		
8/30/2011	Energy	Replace outdated devices		
8/29/2011	Energy	Top-down incentive and encouragement policy		
8/30/2011	Energy		At FL2 - A/C will run for 1/2 hour or more because of hot sun on east wall (in mornings and on weekends).	
8/30/2011	Energy		At FL2 - North offices, individuals have space heaters because the area never gets sun.	
8/30/2011	Energy	Impact of energy savings		Quantifying the cost/benefits of potential energy savings opportunities important part of ongoing sustainability planning
	Energy	Lights staying on for 24 hours w/out switches?		Issue of concern may be required night lighting for safety?
8/30/2011	Energy	Metric: Plug load survey/appliance survey		Pilot survey conducted at FL4 in 2010.
8/30/2011	Energy/IEQ	Better window coverings & sun control. Prevent heat loss/gain through windows		
8/30/2011	Energy/IEQ	More thermostats throughout the building, better access and better location	At FL2 - "Thermostat wars" sometimes 2+ offices share a thermostat and cannot agree on temp.	
8/30/2011	Energy/IEQ	Use daylighting/skylights, channeling or reflectors to bring in natural light. (esp. ML/Anthes). Horizontal vs. Vertical blinds to use natural light.		

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8/29/2011	Energy/IEQ		Dealing with older buildings	
8/30/2011	Energy/Water	Energy efficiency of infrastructure equipment for electricity & water use		FMS evaluates energy efficiency when choosing new equipment.
8/30/2011	Energy/Water	Metric: Energy use by type of space (offices, labs, hallways, kitchen, etc.). Sub categories to explain usage. Look at unoccupied time as well		Energy metrics in development.
8/30/2011	Energy/Water	Metric: time to deliver hot water to peripheral fixtures (gallons lost waiting). CG2 kitchenette takes 5-10 minutes.		
8/29/2011	IEQ	Access to building automation system		Web-based dashboard will be developed as part of SMP process to provide staff with information about building energy use, water use, etc.
8/30/2011	IEQ	Acoustical improvements. Soft surfaces, absorbing furniture & paint	Sound easily carries through halls, ducts, and hard surfaces echo easily.	
8/30/2011	IEQ	Better lighting & better lighting color	Lighting dim in Anthes	Lighting currently meets building code. FMS is listening to occupant concerns and evaluating ways to support lighting comfort.
8/30/2011	IEQ	Central tracking/management system		
8/30/2011	IEQ	Covered entryways reduce cold, wind, etc entering into building		
8/29/2011	IEQ	FLA conversations easily heard inside offices		
8/29/2011	IEQ	Flex work space - coffee shop style		
8/29/2011	IEQ	IPM - Pest sprays are sprayed just a few hours before employees get to work and smells are distracting		FMS review of pest management practices to occur in the first half of 2012.

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8/29/2011	IEQ	Laptops for interior office dwellers to get to daylight options		
8/29/2011	IEQ	Leaf blowers, quiet hours 9am-4pm		
8/29/2011	IEQ	Lighting - glare control		
8/29/2011	IEQ	ML uneven heat		
8/29/2011	IEQ	Monday morning ramp up in temperatures		
8/30/2011	IEQ	More & better art/decorations		
8/30/2011	IEQ	More fresh air access. Office space ventilation with fresh air		
8/29/2011	IEQ	Office swap for preference on daylight		
8/30/2011	IEQ	Temperature control	Poor/limited temp control	
8/29/2011	IEQ	Thermal comfort communication		Contact Maintenance help desk at x1120 for assistance.
8/29/2011	IEQ	Thermostats - how they work; gang thermostats		In process. FMS will create "how to" guide to help occupants understand thermostats
8/29/2011	IEQ	Tower A: Poor acoustics, unfinished ceilings		
8/29/2011	IEQ	Trucks & CG warehouse too loud for CGI patio lunches/meetings		
8/30/2011	IEQ	Water in office spaces, kitchenettes, central meeting spaces, showers		
8/29/2011	Land use	More xeri-scaping (not just dead grass) FL & CG		Under consideration. FMS is interested in xeriscaping. Substantial up front investment required, which will need to be evaluated.
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8/30/2011	Procurement	Central green cleaning supplies - figure payment		Cleaning supplies used by contracted custodial crew currently meet LEED for Operations & Maintenance green cleaning guidelines. Supplies currently not available for use by UCAR staff. Interesting idea to create a green cleaning supply for staff use.
8/30/2011	Procurement	Cold food in café 1x per week		
8/30/2011	Procurement	DASHBOARD: Include % sustainability for procurement		Sustainability dashboard will be developed as part of SMP. Data to display is in discussion.
8/30/2011	Procurement	DASHBOARD: Include total waste generated and & waste diversion		Sustainability dashboard will be developed as part of SMP. Data to display is in discussion.
	Procurement	Faison office supplies - consolidate orders for delivery. Encourage less packaging		
8/30/2011	Procurement	Move process from paper to electronic		
8/30/2011	Procurement	Procurement composition? (what is included in process & products). Provide parameters for procurement		Under consideration
8/30/2011	Procurement	Recycling and Waste reduction through purchasing.		Under consideration
8/30/2011	Procurement	Require rechargeable batteries		
8/29/2011	Procurement	Source Reduction (less waste). Regional procurement standards		
8/29/2011	Procurement	Streamline procurement process		
8/29/2011	Procurement	Top-down incentive and encouragement policy		
8/30/2011	Procurement	What does sustainability mean for procurement?	Sustainability measures and sticking within budget	Cost effectiveness is important priority for all SMP measures.
8/30/2011	Procurement	Work w/ vendors to supply only sustainable products. Include in contract requirements		Under consideration
8/30/2011	Procurement/IEQ?	Create an indoor garden in CG2 with veggies & herbs. Herb garden in outdoor areas for café use.		Under consideration

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8/30/2011	Transportation	Better RTD route between foothills/downtown		Contact RTD to provide feedback. http://www.rtd-denver.com/ContactUs.shtml
8/29/2011	Transportation	Bicycles for rent or bikeshare		Blue Bikes are available to borrow for all UCAR staff/visitors on payroll. Boulder B-cycle bike share stations at CG and FL, memberships available to all staff/visitors on payroll at no cost to employee. See www.ucar.edu/sustainability and click on "Bikes"
8/29/2011	Transportation	Carbon footprint for business travel vs. regular commute		UCAR completes annual GHG inventory for all Scope 1 and Scope 2 emissions. Part of SMP discussion will be how to account for Scope 3 emissions, such as business travel and commuting.
8/29/2011	Transportation	Consolidate business travel reasons/trips		
8/30/2011	Transportation	Electric car charging stations (47th St.)		See Delphi question #628 at http://www2.ucar.edu/staffnotes/delphi
8/29/2011	Transportation	Encourage van/car pooling by implementing FSA pre-tax deductions for expenses.		
8/30/2011	Transportation	Evaluation of current fleet (including planes)		Transportation Services seeks procure the most efficient vehicles available from GSA to meet divisional needs.
8/29/2011	Transportation	Flexible community, wifi access; laptop access		
8/29/2011	Transportation	Hybrid shuttles		Transportation Services interested in transitioning to HEV vans when they become available. Battery technology for large vehicles has not yet matured.

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8/29/2011	Transportation	Incent NCAR shuttle use (& car parking at bottom of hill)		Agree to the premise of this suggestion to encourage shuttle ridership. However, the Table Mesa Shopping Center parking lot is a privately-owned business lot, and therefore it would not be appropriate for UCAR to encourage staff to park there when commuting.
8/29/2011	Transportation	Incentive for parking/taking the shuttles		
8/30/2011	Transportation	Manage shuttle times more efficiently. Reduce runs during slow periods. Make pickups more centralized in Bldr.	Empty shuttles	Shuttle route designed to avoid duplication with existing RTD/City of Boulder bus routes. Existing bus routes currently connect with downtown.
8/29/2011	Transportation	Metrics for secondary energy usage through transportation to/from work		In progress
8/30/2011	Transportation	Pedestrian crosswalks & walkways, stop lights, flashers, etc. to make safer/easier to walk in between buildings		
8/30/2011	Transportation	Secure/Sheltd bike parking		Sustainability staff welcome suggestions of specific bike parking areas, and have been able to locate new racks based on staff input in two locations. To date, FMS staff have done the best we can to provide covered parking with the limited space available.
8/30/2011	Transportation	Small Intra-campus carts		
8/30/2011	Transportation/IEQ?	Showers in all buildings		
8/29/2011	Waste	"No Trash" Day!		

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8/30/2011	Waste	(Goals) Freecycle working well, e-waste in place		FreeCycle inventory will be available for online order starting in early 2012. Sustainability staff welcome specific suggestions to improve FreeCycle. E-waste collection in place, is well utilized, and is a priority for all UCAR electronics. Suggestions for continued improvement welcome.
8/30/2011	Waste	Analysis of waste stream		Waste audit conducted on 7/28/11. Results will be published with SMP.
8/29/2011	Waste	Analysis of waste receptacles & signage locations. Ongoing audits. Education about recycling waste contamination - "when in doubt throw it out."	Convincing folks to dig through trash	Sustainability staff review recycling infrastructure on an ongoing basis, and always welcome observations and suggestions from staff. Recycling education is part of new hire orientation, and is ongoing.
8/29/2011	Waste	Clear path to answer questions about waste. More opportunities for feedback.	Limited feedback given on what works	Contact sustainability@ucar.edu anytime to ask questions or provide feedback on recycling - or anything else related to sustainability. See also www.ucar.edu/sustainability
8/29/2011	Waste	Competition Incentives (Free paper?)		
8/29/2011	Waste	Compost bins that aren't more difficult to use than open trash cans	Space limitations; e.g. bins are big	Commercial compost collection is in its infancy and Boulder-area businesses are early adopters. Limited selection of bins at currently commercially available at reasonable prices that meet effectiveness criteria. As compost collection becomes more mainstream, better bins will become available.

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8/29/2011	Waste	Compostable vs Recyclable - what's better? Current practice for events is to figure out which one is easiest based on what is being served, and just choose 1 (either composting or recycling).		Whether compostable or recyclable products are environmentally preferable varies from one category of products to another. Sustainability staff are happy to answer specific questions. Contact us at sustainability@ucar.edu
8/29/2011	Waste	Double-sided printing is not a norm - single-sided defaults. Maybe Papercut or other print assignment/budget system? Find use for single sided?		
8/29/2011	Waste	Easy access to freecycle		FreeCycle items will be available online starting in early 2012. FreeCycle locations are currently available in CG2, FL2 and ML.
8/30/2011	Waste	Include in new hire orientation - sustainable waste diversion program. Also build more orientation tools for internal education		Recycle/compost education has been part of new hire orientation for 4+ years.
8/30/2011	Waste	Include recycling at UCAR for materials that are hard to recycle at home		Unfortunately, we are unable to collect recyclable materials from home due to cost of handling non-UCAR items. Sustainability staff are happy to point you toward recycling resources in your community.
8/29/2011	Waste	Input from admin and contractors (maintenance)		
8/30/2011	Waste	Internal education on double-sided printing. Switch default to BW double-sided		
8/30/2011	Waste	Investigate donating computers to BVSD		Property department currently has program to donate numerous excessed items to local schools. Sustainability program coordinates with Property to donate items as appropriate.
8/30/2011	Waste	Less paper towel use in kitchen (people dry dishes with paper)		

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8/29/2011	Waste	Maybe a video of a tour of the Boulder recycling facilities?		
8/29/2011	Waste	More compostable materials		
8/30/2011	Waste	Reuse of excess equipment & donation of excess to area schools		Property department currently has program to donate numerous excessed items to local schools. Sustainability program coordinates with Property to donate items as appropriate.
8/30/2011	Waste	Reuse packaging materials (w/ new computers) - offer to employees to take during holiday to wrap/pack presents		
8/30/2011	Waste	School Donation Program - furniture/office supplies works well		Property department currently has program to donate numerous excessed items to local schools. Sustainability program coordinates with Property to donate items as appropriate.
8/29/2011	Waste	Sustainable shipping policies		
8/29/2011	Waste	Touchless high-speed hand dryers in bathrooms. Or paper towels (look at energy use vs. waste?)		
8/30/2011	Waste	Using furniture reuse program as model - donate waste reduction		Two programs currently in place to address this. FreeCycle collects re-usable office supplies from staff and makes them available for re-use within UCAR. Property department has program to donate numerous excessed items to local schools.
8/29/2011	Waste	Video of recycling/composting (what goes where). Put staff into the video		See www.ucar.edu/sustainability and click on "New Hires" Video refresh under consideration.
8/30/2011	Waste	Workshop on how to recycle/compost		
8/30/2011	Waste	Zero waste competition w/ party for reward (with booze & food)		

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8/29/2011	Waste	Zero waste pictures on bins need to be pics of actual items used at NCAR/UCAR		Our recent waste audit showed that a wide variety of items end up in our recycle, compost and trash streams, more than any one sign can demonstrate.
8/30/2011	Waste	Zero waste signage refresh quarterly to get attention		
8/29/2011	Water	Filtered water bottle filling station for staff, hikers & visitors		
8/30/2011	Water	Low flow or dual flush toilet options		
8/30/2011	Water	Metric: Water use during unoccupied times - leaks? control areas vs. operator errors.		
8/29/2011	Water	Metrics for indirect Cost of Water	Employees don't see how they directly impact water use.	
8/29/2011	Water	Steam seen exiting building on a cold day; due to water consumption at Mesa lab?		Source of steam may be cooling towers or boiler flues. Unclear from comment which source the commenter observed.