



## Beyond Green

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# Agenda

- **Why Sustainability?**
- **ASUs Sustainability Story**
- **Green Purchasing**
- **Can We Do This Ourselves?**
- **Upcoming RFP: Zero Waste**
- **Key Things to Go Do**

# President Crow on Sustainability

- [http://www.youtube.com/watch?v=i0xAp\\_Gq-w](http://www.youtube.com/watch?v=i0xAp_Gq-w)

# Sustainability

- **Not about the planet; it is about us**
- **Mars has no people**
- **Mars seems happy**
- **If Earth had no people...**
- **Earth would be happy**
- **Probably happier!**

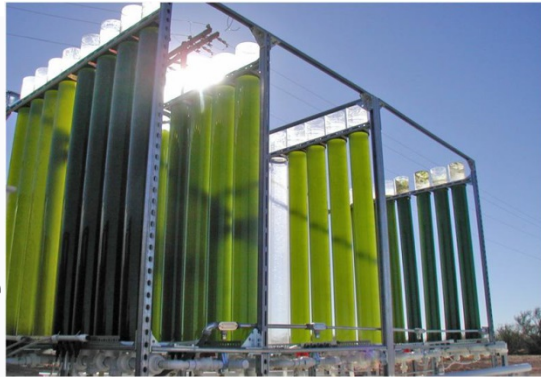
# Arizona State University's Story

In general:

- We are BIG on Sustainability
- Global Institute of Sustainability
- American College & University Presidents Climate Commitment  
(<http://presidentsclimatecommitment.org/>)
- Founding Member of Sustainable Purchasing Leadership Council – 1<sup>st</sup> University

# Arizona State's Four Major Sustainability Goals

1. Carbon Neutrality
2. Zero Solid/Water Waste
3. Principled Practice
4. Active Engagement



<http://sustainabilityplan.asu.edu/>



# Carbon Neutral - Energy

- **\$70M Energy Performance Contract**
- **23.5 MW of solar, 25 by July**
- **No cost to ASU for solar**
- **Power Purchase Agreements**



# Carbon Neutral - Transport

- **Subsidize 1.7M one-way trips per year**
- **Free shuttles connect four campuses**
- **Car-sharing Program**
- **Alternative fuel vehicles**
- **Biodiesel Station under construction**
- **Student run bicycle co-op**





# Zero Solid Waste



- **Recycling**
- **Food/Compost**
- **Reusables**
- **Durable goods**



# Zero Water Waste

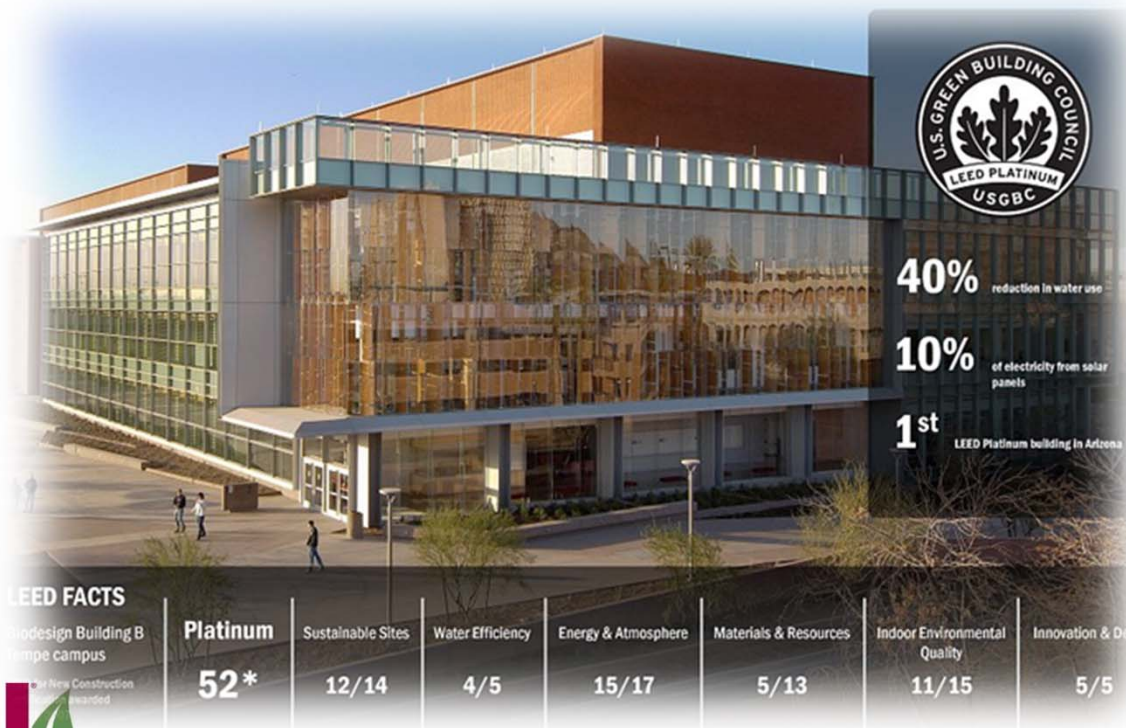
- **Most water efficient available**
  - Waterless urinals
  - low flow faucets
- **Converted to filtered water and use personal water bottles**



# Principled Practice

**New buildings LEED Silver**  
**14 tons composted per day**  
**22% food from 150 miles**

**Print uses 100% recycled paper**  
**Green Purchasing Policy**



**U.S. GREEN BUILDING COUNCIL**  
**LEED PLATINUM**  
**USGBC**

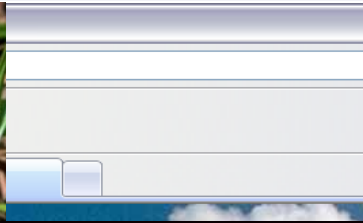
**40%** reduction in water use  
**10%** of electricity from solar panels  
**1<sup>st</sup>** LEED Platinum building in Arizona

**LEED FACTS**

LEED Facts	Platinum	Sustainable Sites	Water Efficiency	Energy & Atmosphere	Materials & Resources	Indoor Environmental Quality	Innovation & Design
Biodesign Building B Tempe campus 2014 LEED Platinum New Construction awarded	<b>52*</b>	12/14	4/5	15/17	5/13	11/15	5/5



# Active Engagement



the Sustainability Toolbox  
Strategies and Resources for Sponsoring Green Offices and Events

UNIVERSITY	<b>Core Expectations for Staff</b>	<b>Rating 5 (high) - 1 (low)</b>				
	See "Evaluation Rating Chart" prior to rating	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
	<b>Service-oriented, Positive Attitude, Helpful</b>					
	<b>Trustworthy, Adheres to Ethics and Compliance Standards</b>					
	<b>Collaborative, Team-oriented</b>					
	<b>Productive , Commitment to ASU</b>					
	<b>Flexible, Adaptable</b>					
	<b>Respectful Communicator</b>					
	<b>Resourceful, Committed to Sustainability</b>					



Program comes to D the following resources:

Internet	TREES	WATER	ENERGY	SOLID WASTE	GREENHOUSE GASSES
	8	3,350	5.59	371	730
	FULLY GROWN	GALLONS	MILLION BTU	POUNDS	POUNDS



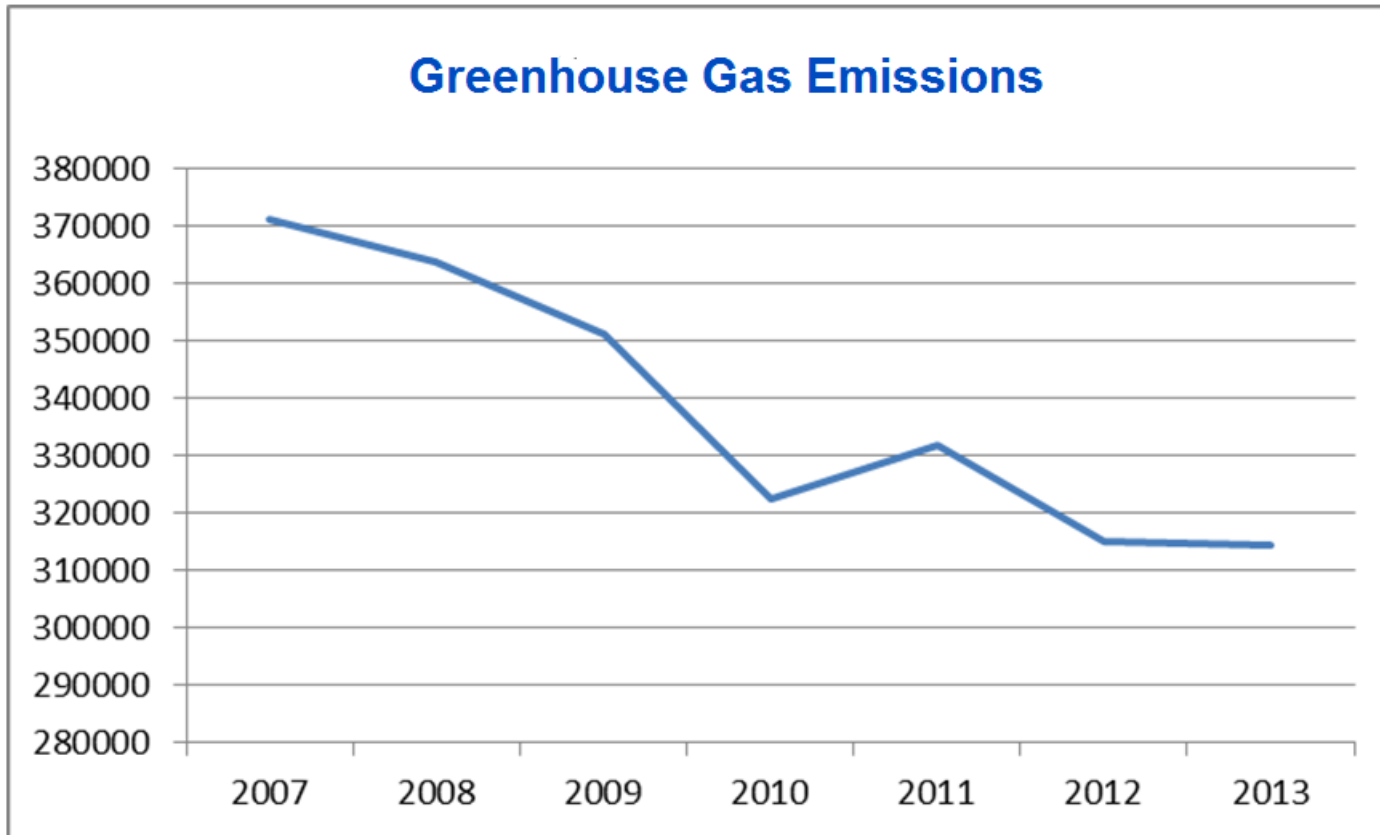
- IN THIS ISSUE:**
- Win a fellowship to fund a climate action project
  - Help clean up Fossil Creek
  - Get tips for making college life greener
  - Find out why a climate expert says you should eat less meat

[Forward this email](#)

**Sustainability at ASU**  
Global Institute of



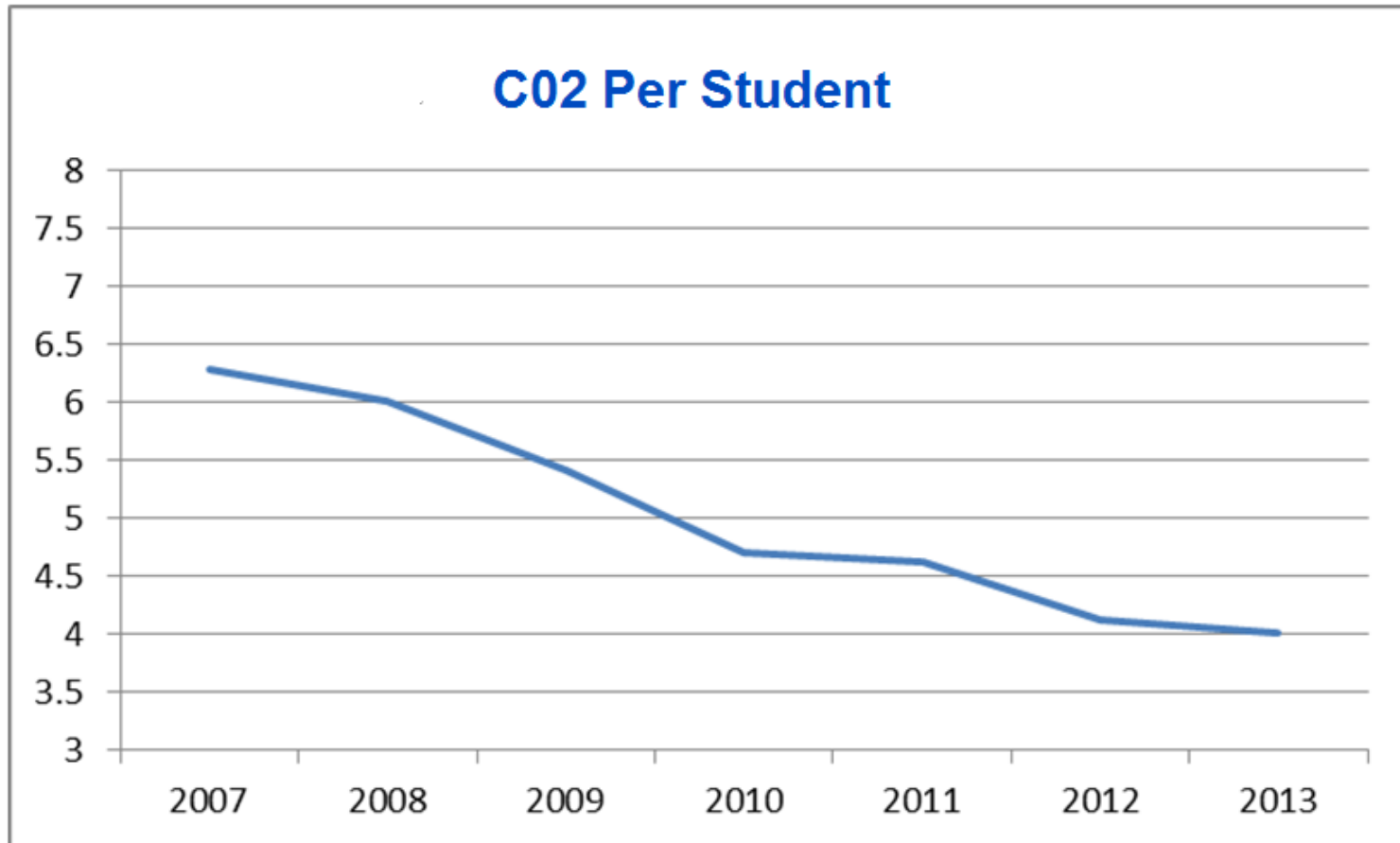
# And we are getting results.....



Down 15.3% despite adding 29% in space and 33% in enrollment



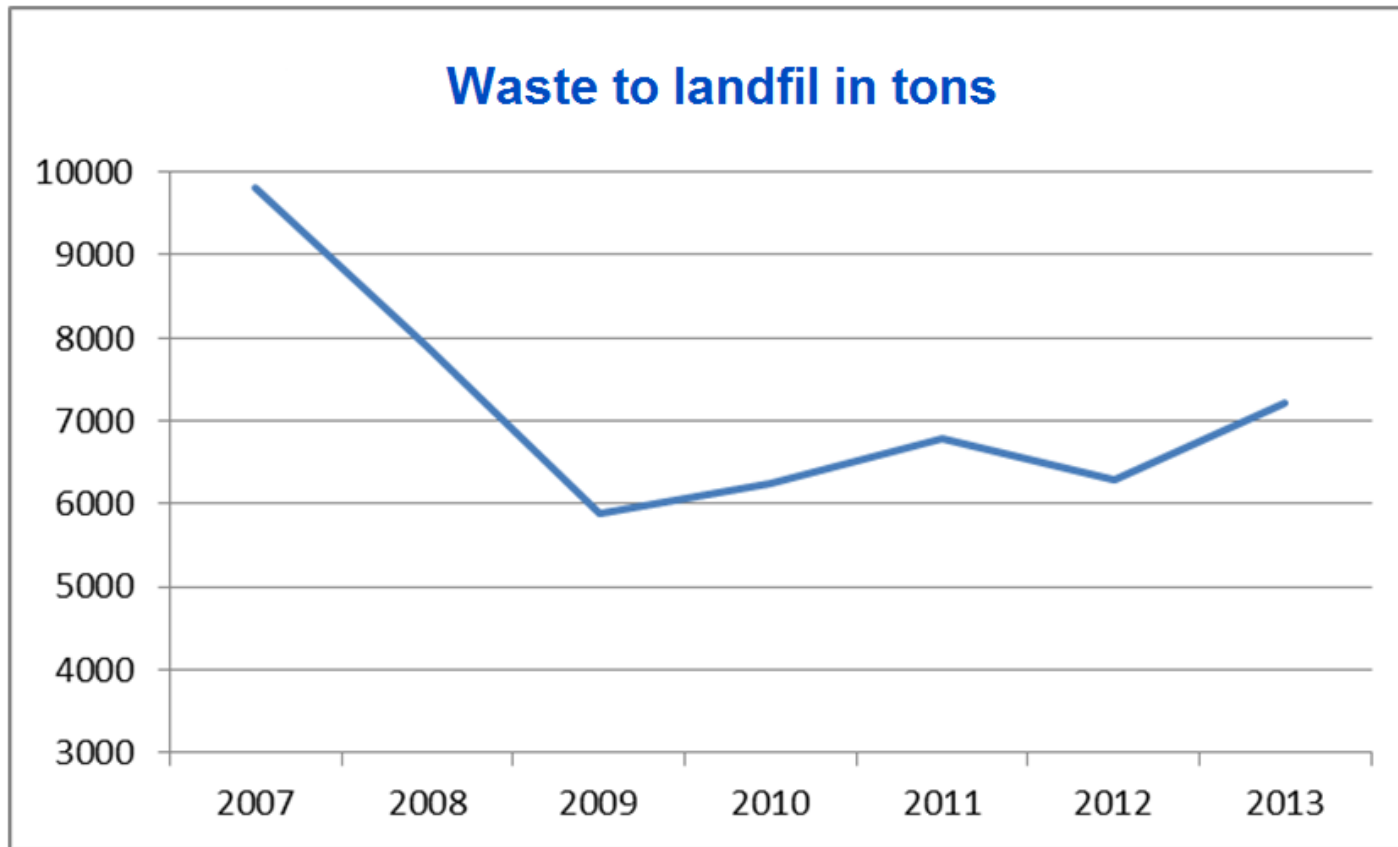
# And we are getting results.....



Down 36.2% despite adding 33% more students



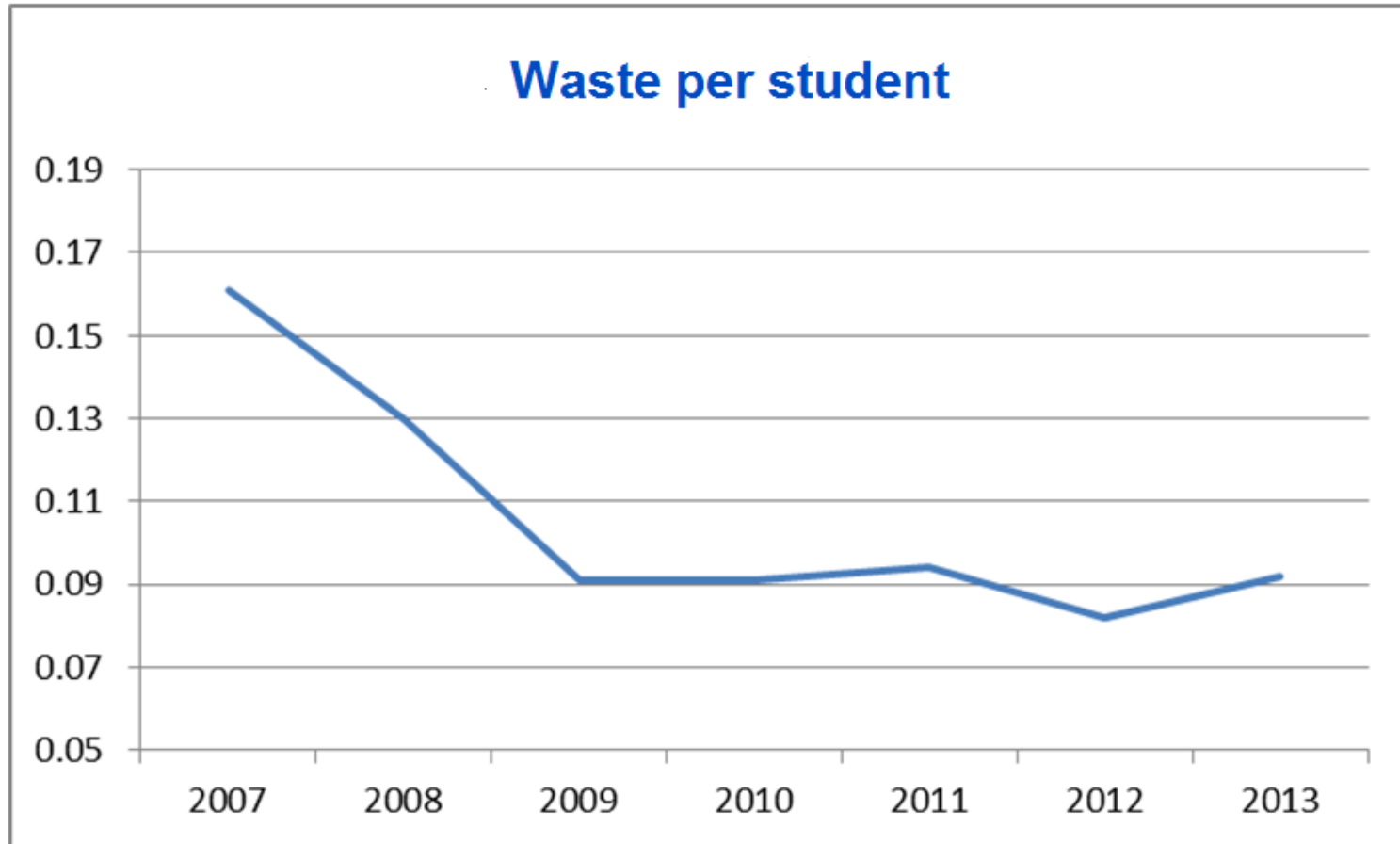
# And we are getting results.....



Down 24.3% despite adding 29% more space and 33% more students



# And we are getting results.....



Down 43.0% despite adding 33% more students





## And we are getting results.....

- **76,611 STUDENTS**
- **78,100 SOLAR PANELS**
- **10,000 BICYCLISTS**
- **3,200 TONS DIVERTED FROM LANDFILL**
- **40 LEED BUILDINGS**
- **23.5 MW SOLAR POWER**
- **4 CAMPUSES**
- **1 GOAL**

# SUSTAINABILITY



# AASHE and Stars

- **The Association for the Advancement of Sustainability in Higher Education (AASHE)**
- **Sustainability Tracking, Assessment & Rating System™ (STARS)**
- **60 are currently Gold**
- **ASU achieved Gold again this year**
- **Purchasing policies and results reported on**
- **Who is racing us to Platinum?**



# ASU Green Purchasing Policies

- **PUR 210: Policy for buying environmentally preferred products and services**
- **<http://www.asu.edu/aad/manuals/pur/pur210.html>**

# ASU Green Purchasing Policies

- **Focused on:**
  - **Energy**
  - **Water**
  - **Toxins/Pollutants**
  - **Biobased products**
  - **Forest Conservation**
  - **Recycling**
  - **Packaging**
  - **Green Building**

# ASU Green Purchasing Policies

- **PUR 211: Value Based Standard for Business Relationships**
- [Http://www.asu.edu/aad/manuals/pur/pur211.html](http://www.asu.edu/aad/manuals/pur/pur211.html)

# Green Purchasing - Energy

- **EPEAT Gold**
- **Recycled copier supplies**
- **Cut devices but add technology – 60% buy in**
- **Meet Energy Star, or in upper 25%**
- **Vehicles use bio-diesel**
- **Most efficient lighting**

## Green Purchasing – Toxins

- **Cleaning products biodegradable, phosphate-free, and citrus-based**
- **Green Seal or EcoLogo certified products**
- **Surface acting agents and detergents are biodegradable and phosphate-free**
- **Vacuums meet Green Label Testing Program**
- **No lead or mercury**
- **Integrated pest management – Send landscape waste compost to Singh Farms (fertilizer)**

# Green Purchasing -Water

- **Most efficient water appliances available**
  - **Converted to filtered water and use personal water bottles**





# Green Purchasing – Biobased products

- **Biodegradable and compostable plastics**
- **American Society for Testing and Materials (ASTM) standards on plastic paper coatings and compostables**
- **Biobased fuels encouraged (Bio-diesel)**
- **Paper, paper products, and construction products made from non-wood plant products**
  - **30% and 100% post consumer waste**
  - **Bamboo (grass not wood)**



# Green Purchasing – Forest Conservation

- **Certified Wood**
- **Purchase or use of previously used or salvaged wood and wood products are encouraged.**

## Green Purchasing - Recycle

- **Recycled asphalt, concrete, aggregate base when practicable**
- **Reclaimed stone and brick**
- **Parking products with highest Post Consumer Waste content (cones, signs, barricades)**
- **Preference for durable, reusable, or refillable products (computer components – keep case)**

## Green Purchasing – Packaging

- **Reusable, recyclable, or compostable packaging**
  - **Require matrix from suppliers in Waste Aversion**
- **Minimization of packaging is encouraged**
- **Beginning to require vendor removal of packaging**
- **Vending plastic bottles an issue**
  - **\$108K/year to eliminate**
  - **Plastic spills less (classrooms)**
  - **Half full when recycled**

# Green Purchasing - Buildings

- **Construction/renovations incorporate green features**
- **LEED Silver (40 buildings)**
- **No volatile organic compounds**
- **Carpet firms must have approved carpet recycling plan**
- **No chloroflourocarbon and halon**



# Green Purchasing - Landscaping

- Sustainable landscape management, including integrated pest management, drip irrigation, composting, local mulch, etc.
- Landscape structures of recycled content (benches)
- Low-water plants required



## Social Justice - Services

- **Equal Employment Opportunity**
- **Meet immigration law**
- **Wages, hours, leaves, child labor**
- **Health and safety**
- **No forced labor**
- **No harassment or abuse**
- **No controlled substances**

# Social Justice - Services

- **No weapons**
- **Fair wages and benefits**
- **Environmental responsibility**
- **Employee education and training**
- **Employee languages**
- **Grievance process**



## Social Justice - Construction

- **Health insurance part-time and dependents**
- **Must hire Arizona residents**
- **10% apprentices on the job**
- **1% of payroll to a recognized apprenticeship program**
- **Include diversity businesses**
- **Must report on above before paid**

# Cost Impact

- **Some sustainable initiatives will cost more**
  - Investing in future
  - TCO
  - CO2 reduction per investment
- **Transparent with management on cost trade-offs**
- **Supplier relationship management to share goals/business challenges together**
  - Zero waste RFP

## What else do we do?

- **Every RFP has a Sustainability Questionnaire**  
[http://www.asu.edu/purchasing/forms/sustainability\\_IA.pdf](http://www.asu.edu/purchasing/forms/sustainability_IA.pdf)
- **Illusion of Choice**
  - **Green products shown first in SunRISE (Sciquest)**
- **Individual Accountability**
  - **Employees evaluated on sustainability in performance appraisals**
  - **Peer pressure/education: Did you mean to throw that away?**

# Challenges

- **Procurement Sustainability Metrics—You can't manage what you don't measure**
  - Rely on suppliers and good assumptions
  - A big task for new Manager of Data Analysis
- **We are still inundated with paper!**
  - Looking at going paperless—Canon engaged
    - Records retention
    - Technology
    - Update next year!

## Can we do all this ourselves?

- **Ameresco: Due Diligence on Biogas from wastewater treatment plant. Could save 35,000 MT CO<sub>2</sub>**
- **Aramark: Drives Zero waste**
- **AORA: first hybrid solar tulip**
- **Enterprise: Leasing vehicles**
- **Canon: Reduce copies**



# What we are working on: Zero Waste RFP

- **Four components**
  - **Trash (cheapest—But needs to decrease)**
  - **Recycling (more costly than trash—But needs to increase)**
  - **Compost (Costly—economies of scale)**
  - **Aversion (how do you capture)**
- **Underlying all of this is behavior modification**
- **Waste Management is the incumbent**
- **Could be awarded to one or many.....**

# Things to Do

- **What is core to your institution?**
- **Embrace that!**
- **Our goals on sustainability**
- **Sustainable purchasing policies**
- **Incorporate sustainability into buying**
- **Learn from peers in Higher Ed and other**
  - **AASHE / Sustainable Purchasing Council**
  - **NAEP!**
- **Have fun!**

# Thank you!

