Going Green in Foodservice

What We Need to Know to Make a Difference!

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Going Green – The Long and Winding Road!

Learning Objectives

- Participants will be able to define what “going green” means within foodservice management and why “going green” is good for the environment.
- Participants will be able to identify at least two easy ways to implement “green” initiatives within a foodservice operation.
- Participants will be able to list at least three areas of foodservice waste.
- Participants will be able to state the steps to developing a “green” foodservice management program.

What Does “Going Green” Mean?

What Is Sustainability?

In-Season Product
Waste Quality
Biofuels
Pre-Consumer Waste
Overproduction
Clean Air
Municipal Solid-Waste Reduction
Food Recovery
Socially Responsible Business
Natural Step
Human Toxicity
Corporate Citizenship
Local Sourcing
Ecosystem Valuation
Climate Change
Four System Conditions
Biomass
Ecological Footprint
LEED
Cleantech
USGBC
Business Ethics
Sustainability
Urban Economics
Shade Grown
Carbon Offsets
Zero Waste
Renewable Energy
Natural Capital
Organic
Life Cycle Analysis
Corporate Social Responsibility
Composting
Mission Integration
Fair Trade
Cogeneration
Biodegradable
Energy Efficiency
Recycling
Global Warming
Food Donation
Bio-swails
Vermiculture
Green
ENERGY STAR
Green Economics

Sustainability

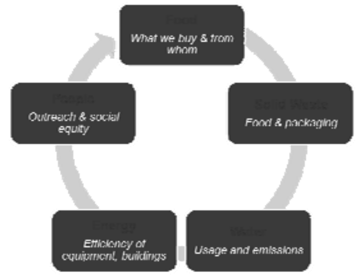
- “Meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

Natural Marketing Institute

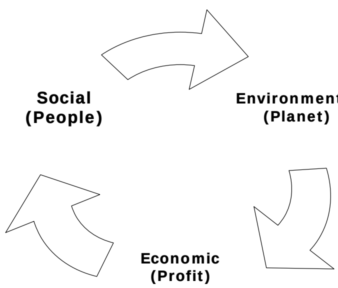
Sustainability

- REDUCE
- REUSE
- RECYCLE
- RETHINK

Sustainable (Green) Foodservice



Sustainability



Planet Impact

- "Business as usual" in our Foodservice Departments has **Environmental – Planet Impact**

Food Waste – Planet Impact

Too Important Environmentally to Ignore

In 2005 the city of Seattle, WA, shipped 485,910 tons of solid waste in 18,000 rail cars to a landfill in Eastern Oregon.

24.9% of Seattle's solid waste is food.

That's the equivalent of 4,482 rail cars filled with food.

Source: Seattle Public Utilities

Planet Impact

Each person in the United States makes **4 1/2 pounds** of garbage a day!
That is twice what we each made thirty years ago.

U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Municipal Waste in the United States: 2001 Facts and Figures (2003), pp.3 -4.

Planet Impact

- For every one garbage can of waste you put out on the curb, **<u>70</u>**

garbage cans of waste were made upstream to make the junk

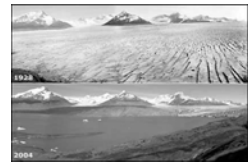
in that one garbage can you put out on the curb.

The Next Efficiency Revolution: Creating a Sustainable Materials Economy by John Young and Aaron Sachs, Worldwatch Institute (1994), p. 13.

Food Waste – Planet Impact

Too Important Environmentally to Ignore

- The decomposition of food…under anaerobic (without oxygen) conditions in landfills produces methane, a green-house gas (GHG) 21 times more potent than carbon dioxide.
- Landfills are the largest human-related source of methane in the United States, accounting for 34% of all methane emissions.
- Reduction, recovery and recycling diverts organic materials, thereby reducing GHG emissions.



Energy Waste – Planet Impact

Eco-Facts

- **The restaurant industry (#1 electricity consumer in retail sector) accounts for 33% of all U.S. retail electricity use**

- (www.dinegreen.com)

Social – People Impact

- "Business as Usual" in our Foodservice Departments has a

Social-People Impact

Food Waste – People Impact

Too Important Socially to Ignore

- "If we don't waste food (and embodied energy) resources, those resources are available for those who need them"
- "Most of our staff members don't waste food at home and many want a chance to make a difference at work"
- Quote by Andrew Shakman – ashakman@leanpath.com

People Impact

- In a January 2008 study by Lightspeed Research found that top performing companies with strong green practices have 3X more customer satisfaction than poor performers, as well as 4.7 X more employee **<u>satisfaction.</u>**

- **<u>2/19/2008 – SustainableBusiness.com News</u>**

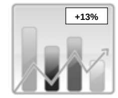
Economic Impact

- "Business as usual" or unnoticed waste has an economic impact on Foodservice Department's bottom line.

Food Waste – Profit Impact

Too Important <u>Economically</u> to Ignore

- Wholesale food prices rose <u>13%</u> over the last two years.
- Pre-consumer food waste represents at least **<u>4-10%</u>** of the food you purchase!
- Compliments of Andrew Shakman (ashakman@leanpath.com)



"OK! I want to save money, help the planet, and inspire and involve my staff."

How do I begin?

Start at the Top – and work your way down

Going Green – It's the right thing to do!

Work with your administrators

Assess your institution – look for waste. Determine how to measure the waste

Prioritize – start at the top of the waste hierarchy (pre-consumer waste)

Set Goals – utilize your team

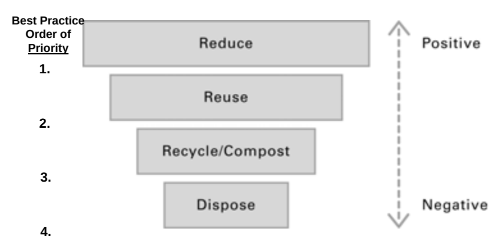
Develop your own action plan & schedule

Types of Waste

- Energy waste
- Water waste
- Solid waste – pre & post consumer
- Labor waste

Waste Management Hierarchy

(compliments of Andrew Shakman – ashakman@leanpath.com)



Energy & Water Audits

- Read electric and gas meter on the same day of each month. Track the usage trends.
- Monitor water usage by reading the water meter on the same day of each month (if available) or calculate usage by piece of equipment

Average Pre-Consumer Food Waste

- **4-10%** of food purchases
- Sometimes as high as **12-15%**

Source: LeanPath/ValuWaste

How can this lead to waste?

- We make sure patients receive the right meal even if it requires several trays
- We don't want to run out -- so we justify retail padding
- We fulfill catering requests in good faith regardless of actual attendance
- We leave appliances "on" to avoid the inconvenience of a waiting period.
- We save time and labor by using a convenience product or changing a procedure and then we don't reuse (reschedule) the labor time that we have freed up.
- We focus on our many other priorities because we're not aware of the scope of the waste problem and/or we don't believe there's much we can do to solve it.

Reuse

- Food Donations
- Animal Feed Donations
- Bio-fuel

Recycle - Compost

- Recycle vs. Compostable Dishes/Glassware
- Check your local municipality regulations
- Work with your vendors – less packaging
- Compost

Best Management Practices

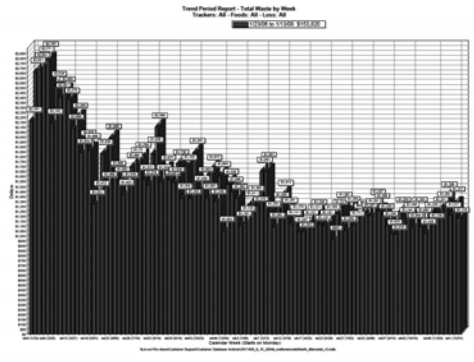
- Compliments of Andrew Shakman (ashakman@leanpath.com)

Best Practices - North Memorial Hospital (Robbinsdale, MN)

Aramark Foodservice

- Implementation of ValuWaste tracking system from LeanPath.
- First year saw a 48% reduction in pre-consumer waste - savings of more than 60,000 pounds of food and waste savings of $47,615
- The foodservice staff took pride in their individual and team contribution and a chain reaction started "creating new levels of engagement, and establishing bridges for stronger outreach to other departments.

1/23/06 – 1/13/08 = **$153,820**



Dining Services

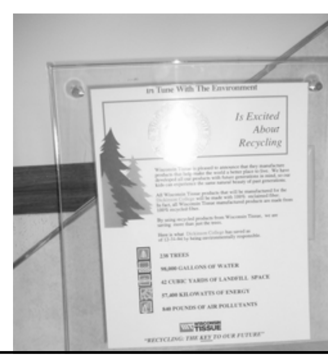
- Efforts to save $ started in 1993 with napkin baskets. $7K a year savings just with this simple step!
- Approx. 200-300 lbs. of food waste is collected each day and composted.
- A $93,000 state grant and a $5,000 Hobart grant helped to purchase a food pulper – composted food waste reduces landfill cost and fuel /waste removal. Plus $1,300 savings annually on trash bag costs.

Dining Services

- Water usage is down nearly 1.2 million gallons a year.
- Recycling efforts – bins are placed in all dining facilities. Patrons can use their own cup and "take away" a beverage from the dining hall.
- Up to 100 gallons of fryer oil is converted into bio-fuel each week – the fuel helps to run garbage trucks to farm equipment to the College President's car.

It all started with napkins on the table.

Dickinson College has Saved More Than Just $ by Using Recycled Paper Napkins



Signage to Encourage Sustainability

More Signage

Bring Your Own Cup

Making Food from Scratch Can Help in Other Ways

One Dumpster Where There Used to be Two

Ready to Add to the Compost Pile

“Some see plastic bottles- I see another opportunity to make a change” Keith Martin

Packaged from Bulk – Fruit &Yogurt Parfaits in Compostable Containers

Dickinson College Signage

- “In our continued effort to be more sustainable, we are eliminating most beverages in individual containers. With this endeavor, we will be eliminating 22,664 bottles this semester alone. As reported in the news recently, many plastic bottles are actually ending up in landfills. Please join us as we continue to pursue this issue.”

Welcome to Dickinson College’s Farm

Solar Heated Hothouse at Dickinson’s College Farm

Dickinson’s College Farm’s Compost Pile

Farm Buildings – Solar Power

Solar Panels

The Future at Dickinson College Foodservice Department

- Trayless in the Fall of 2009
- Plan each winter for spring crop planting. “Not every kid can eat turnip soup everyday!” (Keith Martin)
- Continue to strive for excellence.

- Winterthur is known for it’s love of gardens and the environment.
- Foodservice at Winterthur (Restaurants Associates) helps the environment by using compostable dishes and recycled napkins. Fresh local produce is purchased when available.

- Winterthur has the Did You Know Campaign that uses signage to point out:
- Fresh Local Food
- Compostable Dishware & Glasses
- Warnings to only take what you need.

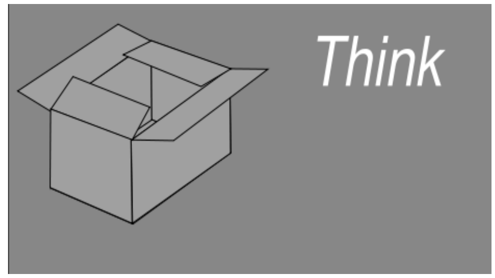
La Salle University

- New “Elements” café in the recently purchased West Campus. (Old Germantown Hospital)
- Buy local as much as possible
- No fryer!
- Recycling – complete building
- Plans for composting
- Three interns completed management/green projects (hospital based, industry based and university based)

ACTS Retirement-Life Communities®

- Environmental Stewardship at ACTS
- Community recycling programs
- Compact fluorescent bulbs
- Purchasing energy efficient appliances and building systems
- Installation of water-reduction devices
- Partnerships with residents and employees to conserve resources and reduce waste

(public domain image)



Start Small

- Start cooking with hot, not cold water
- Stagger start-up times for equipment
- Rearrange oven shelves before turning oven on and don't peek
- Calibrate oven temps frequently
- Compile a list of needed items before opening refrigerator/freezer doors
- Thaw food in refrigerator rather than under cold running water
- Fill dishwasher to capacity – turn off between dish batches
- Replace high-flow valve with low-flow varieties
- Keep your ventilation hoods clean – actually keep everything clean
- Use compact fluorescent light bulbs – use 66% less energy and last longer, too
- Unplug things that glow…..use power strips instead.

Summary

- Going Green – It's the right thing to do!
- Check your local municipality for regulations about recycling
- Work with your administrators
- Prioritize – start at the top of the waste hierarchy
- Set Goals – utilize your team
- Develop your own action plan & schedule
- Measure & Evaluate your success

Remember the Garbage Train?

- Our world will thank-you!

Source: Seattle Public Utilities

Recommended Resources

http://www.practicegreenhealth.org
Waste management information

http://www.gghc.org
Green standards for healthcare foodservice

http://www.leanpath.com
Waste Management Guide, Food Waste Flyer newsletter, Food Waste Focus blog

www.dinegreen.com
The Green Restaurant Association

Good Luck!

- Thank-you
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- Questions?