

**WHAT DO YOU MEAN BY  
“GREEN” PRACTICES?**

*We'll show you.*

**WILL I HAVE TO SPEND MONEY?**

*No, not necessarily.*

**DO MY CUSTOMERS REALLY CARE?**

*Yes.*

**WILL IT HELP MY BUSINESS?**

*Yes.*

**MY EMPLOYEES, DO THEY CARE?**

*Ask them.*

**HOW DO I GET THEM TO HELP?**

*Everybody benefits. We'll show you.*

**WILL “GREENING” SAVE ME MONEY?**

*Definitely!!*

**OKAY! WHERE DO I START?**

*Keep It Simple!*

*Open this guide and follow the steps.*



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**A K.I.\$.**  
*Keep It Simple*  
**GREEN PRACTICES  
GUIDE**



**TO HELP PREVENT  
FACILITY  
VIOLATIONS**

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## How to begin?



“The man who removes a mountain begins by carrying small stones.”  
—Chinese Proverb

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## RESOURCES AT A GLANCE



**ENERGY Mass Save** provides energy audits, rebates and other energy efficiency measures: [www.masssave.com/business](http://www.masssave.com/business)  
**MA Dept. of Energy and Environmental Affairs (DOER):**  
[www.mass.gov/eea/energy-utilities-clean-tech/energy-efficiency/ee-for-business-institutions/](http://www.mass.gov/eea/energy-utilities-clean-tech/energy-efficiency/ee-for-business-institutions/)

**Energy Star Program:** [www.energystar.gov](http://www.energystar.gov) **Energy Use and Energy Efficiency in Restaurants:**  
[www.energystar.gov/ia/business/small\\_business/restaurant\\_factsheet.pdf](http://www.energystar.gov/ia/business/small_business/restaurant_factsheet.pdf)  
**Energy Star Guide for Restaurants putting Energy into Profit:**  
[www.energystar.gov/ia/partners/publications/pubdocs/restaurant%20guide%20508%20-%20Dec%202009.pdf](http://www.energystar.gov/ia/partners/publications/pubdocs/restaurant%20guide%20508%20-%20Dec%202009.pdf)



### GREEN CLEANING & GREEN PURCHASING

**Green Seal :**Listing of all GS-37 certified cleaning products:

[www.greenseal.org/findgreensealproductsandservices.aspx](http://www.greenseal.org/findgreensealproductsandservices.aspx)

**Eco Logo:** Listing of all Eco Logo products for home and institutions: [www.ecologo.org](http://www.ecologo.org)

**US EPA Environmentally Preferable Purchasing:** [www.epa.gov/epp](http://www.epa.gov/epp)

### NERC Green Purchasing Resources:

[www.nerc.org/topic\\_areas/environmentally\\_preferable\\_green\\_purchasing](http://www.nerc.org/topic_areas/environmentally_preferable_green_purchasing)



### FOOD

**Berkshire Grown:** Farm to table organization: [www.BerkshireGrown.org](http://www.BerkshireGrown.org)

**Mass Grown:** Lists local food sources: [www.mass.gov/agr/massgrown/](http://www.mass.gov/agr/massgrown/)

**MIT’s Guide to Sustainable Catering:**

[web.mit.edu/workinggreen/docs/sustainable\\_catering\\_guide.pdf](http://web.mit.edu/workinggreen/docs/sustainable_catering_guide.pdf)

**Putting Food to Good Use:**

[www.epa.gov/wastes/conservematerials/organics/pubs/food-guide.pdf](http://www.epa.gov/wastes/conservematerials/organics/pubs/food-guide.pdf)



### WASTE / RECYCLING

**HospitalityGreen LLC:** Resource Tracking Tool (RTT) tracks waste and recycling

[www.hospitalitygreen.com](http://www.hospitalitygreen.com)

**Environmental Protection Agency’s** voluntary program for businesses:

[www.epa.gov/wastewise](http://www.epa.gov/wastewise)

**MA DEP Waste & Recycling program:** [www.mass.gov/dep/recycle/](http://www.mass.gov/dep/recycle/)

**Recycling Works MA:** [www.recyclingworksma.com/](http://www.recyclingworksma.com/)



### WATER

**National Restaurant Association** Environmental initiative: [conserve.restaurant.org/](http://conserve.restaurant.org/)

**Environmental Protection Agency’s Water Sense** Program for businesses:

[www.epa.gov/WaterSense](http://www.epa.gov/WaterSense)

**Massachusetts Water Resources Authority Water Efficiency and Management for Restaurants:**

[www.mwra.state.ma.us/04water/html/bullet3.htm](http://www.mwra.state.ma.us/04water/html/bullet3.htm)

### LOCAL, STATE AND NATIONAL RESOURCES

**MA Department of Environmental Protection:** [www.mass.gov/dep](http://www.mass.gov/dep)

**US EPA Region 1:** [www.epa.gov/aboutepa/region1.html](http://www.epa.gov/aboutepa/region1.html)

**US EPA Pollution Prevention in the Hospitality Industry:** [www.epa.gov/region2/p2/hospitality](http://www.epa.gov/region2/p2/hospitality)

**HospitalityGreen LLC:** [www.hospitalitygreen.com](http://www.hospitalitygreen.com)

**IFMA Foundation:** [www.ifmafoundation.org](http://www.ifmafoundation.org)

## OKAY! Have you got 10 minutes?

- Check your monthly energy and water usage.
- Let customers and municipal inspectors know what you are doing by clearly stating the real actions you are taking to 'Green' your operations.
- Include information on your 'Green' practices on all communication material.

Once you see results and financial returns, you will want to do more and tell your customers. There are numerous certification programs, at varying costs, that are now available to the food service industry. Consider one of these programs. Remember, true competitive advantage can be realized through gaining recognition by your customers. As you gain new business, your new customers will help you in continuing to 'Green' your food services. Whether your health department publicly grades you or not; you, your staff and your customers can reap the satisfaction of knowing your establishment instituted "green" practices and met the high standards of food service safety.

### *10 minutes is up!*

Get started. Enjoy 'going green' and saving money!

*"Change is hardest at the beginning, messiest in the middle and best at the end." —Robin Sharma*

The purpose of this K.I.\$ Guide is to show you how to start with some basic "green" practices to help prevent food service violations. And, you will save money not only in reduced fines but on your utility bills too! So take 10 minutes to flip through the guide, and you will see how easy it is to 'Go Green' and save money. With little or no added expense, the guide will give you "What you need to know" to get started. We didn't call it "K.I.S." and not mean it.

If you think, "The green thing is not for me," please, just take a minute and think about it:

- What if you could start right away?
- What if it didn't cost you anything?
- What if you could save money and aggravation?
- What if we showed you how it helps you meet food service safety standards?
- What if we provided you with a few tools to get you started?
- What if we told you, if you don't start now, you are missing a huge opportunity?
- What if we told you, that many of your peers are already 'Going Green?' ...And
- What would your kids say if you told them, you didn't care about their world?

## WHAT IS “GREENING?”

*No, its not all solar panels and windmills, at least not now... Let's think about 'Greening' by looking at a diagram of 'Green.'*



Let's **START** with your **OPERATIONS** first. This is where you can apply **green practices** and realize the highest financial return and in the least amount of time. **FOOD...** Always...We are going to look at best practices for storage and handling. So that's it for now. Soon you will see how you can "Go Green," save money and prevent food service safety violations.

## NEXT STEPS

Often times, plagued with the challenges of handling day to day operations, we forget some of the fundamentals of good business. Below is a short list to help you stay on track.

- After you complete the checklists and talk with your 'Go To' Green employee, develop a simple plan of what you want to accomplish in the next 3 months.
- Take care of easy no-cost maintenance and system fixes first.
- Hold a short staff meeting so everyone knows what's going on. You might be surprised by new volunteers.
- Include a 'Green Update' in your regularly scheduled staff meetings.
- Check in weekly with your 'Go To' Green employee to see what's been accomplished.
- Make adjustments to the plan as needed.
- Evaluate employee suggestions to add or modify the plan.
- Make sure the 'Go To' Green employee keeps records and tracks waste and recycling.
- Track your savings and record violations (if any).

## 7.

### Storage and Purchasing Decisions

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“A recent study by the Food and Agriculture Organization (Gustavsson, et al., 2011) reported that one-third of all food produced for human consumption is lost or wasted globally, amounting to as much as 1.2 billion metric tonnes annually. Food waste is a global problem of staggering proportions, but the underlying reasons differ between countries. While food waste in industrialized countries is dominated by retail and consumer waste, developing countries have high losses at the post-harvest and processing stages due to spoilage in warm and humid climates resulting from the lack of modern transport and storage infrastructures.”

Improper purchasing and handling of produce, damp storage areas and sloppy inventory controls all contribute to food and financial waste. First before making purchases at all, determine if you really need it. Single serve condiments, individually packaged utensils and styro-foam containers should be evaluated. Perhaps portions are too large. Condiments can be served in closed sanitary containers and carafes. Consider using locally made condiments like syrup and honey.

Purchasing locally can provide a means to acquire fresher produce and in quantities suitable to the scale of your needs. Decisions to purchase locally sourced products have multiple benefits, including support of local economies, reduced delivery time, substantially reduced delivery costs, reduced environmental impact due to vehicle emissions during transport and reduced spoilage or damage during transportation. Buying paper goods in bulk and from sustainable resources that use recycled fibers can save transportation expenses and valuable resources. No one needs a napkin made from harvested trees.

After success has been achieved with a few small steps, you can expand your options. Choose wisely and you will find that it is best to keep it simple, ‘Don’t bite off more than you can chew.’

### *Customers and Employees*

Often times in the food service environment, cafeterias, catered meals, restaurants and concession stands, one of our greatest concerns is running an operation compliant with health, safety and municipal codes. This difficult task seems to go unnoticed by our customers. But, with our customers’ growing concerns with food safety and “green/sustainable” practices, our customers are more careful and their attitudes and perceptions have changed. In New York City in July 2010, the Health Department started grading restaurants and began requiring restaurants in all five boroughs to post letter grades summarizing their sanitary inspection scores to help achieve three goals: **1. To inform the public** about a restaurant’s inspection results in a simple, accessible way; **2. To improve sanitary conditions and food safety practices** in restaurants; and **3. To reduce illnesses associated with dining out.** Also, in July 2010, Ohio State University, in association with Queensland University, conducted a study of attitude and behavioral intentions of 455 restaurant customers across five casual dining restaurants in Ohio. Seven out of ten customers believe that restaurants should minimize their impact on the environment. Eight out of ten customers are willing to pay more to offset costs associated with ‘green’ practices. 48% believe that it is healthier to eat at a ‘green’ restaurant, yet they do not want to compromise comfort or quality for ‘green.’

The study clearly identified the lack of information available to potential customers regarding restaurants and the ‘green’ practices they engage in. Consequently, food service providers can use their ‘green’ practices as a competitive edge.

Younger employees are much savvier to real green/sustainable practices. Fellow restaurateurs have stated that they are attracting more reliable employees once they promoted their green practices. Let your staff make suggestions, take pride and get engaged. You need their involvement.

**PICK YOUR ‘GO TO’ GREEN EMPLOYEE.**



## WALK IT! CHECK IT! PLAN IT!

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When it comes to making changes, we understand money is a prime motivator.

How to cut costs in operations can sometimes be overwhelming, and we often don't even know where the costs are coming from! Certainly our utility bills over the past few years have put us all in a state of 'shock and awe.' Utilities use to be 3% of your gross. They are now 10% and more. But there is more to costs than just energy. Granted, energy is easiest to understand and will reap you the fastest financial returns. But don't underestimate the potential cost savings in modifying water usage, purchasing green chemicals, purchasing local products, paying attention to your waste handling and ratcheting up your recycling.

As seasons change, you should evaluate where and how you can take advantage of local produce. Lettuce can fluctuate in price from \$17 to \$40. Are there local vendors who can supply you both produce and products to help offset the costs of transportation?

So by now, you probably turned the pages and looked at the other pages in this guide. If you didn't; that's okay.

So here is how we **"KEEP IT SIMPLE."**

**EVALUATE YOUR RECYCLING PROGRAM.** At the least you should be recycling cardboard, plastic, glass and aluminum containers. Ask your hauler if single stream recycling is available, which will allow you to put all your recyclables in the same bin. If you generate enough cardboard, ask for a separate dumpster. *Be sure your trash and recycling containers close securely and do not leak so as not to attract pests.* 



**OVER 76% OF THE WASTE FROM FOOD SERVICE** establishments is organic and could be used for composting. Some municipalities and cities are developing food/organic waste collection infrastructures. Inquire in your area if there is a hauler that will handle food/organic waste.



It is possible to compost prep vegetable and fruit waste in enclosed composters out your back door, *without* attracting pests! Many institutions use closed containers like the Earth Machine and are able to make compost in less than 10 weeks. For further information: contact [HospitalityGreen](http://HospitalityGreen.com) for "Turning Kitchen Scraps to Tasty Treats: A Restaurant Guide to Back Door Composting."

### PROPER STORAGE AND HANDLING OF WASTE IS KEY TO BETTER PEST MANAGEMENT.



**Yikes!**

## 6. WASTE, RECYCLING, & COMPOSTING

**FOLLOW THE 6 C'S OF WASTE AND RECYCLING**  
to avoid problems with rodent and insect pests.

6 C's of WASTE AND RECYCLING



**REDUCE YOUR CAPACITY** by assessing the contents of your dumpster and asking: **CAN YOU DO WITHOUT IT?** Is there a more efficient way to deliver the same service and or product without the waste? Try to eliminate wax coated produce boxes and Styrofoam containers, which aren't recyclable. Avoid excessive packaging. Review your waste **CONTRACT** and ask your hauler about potential savings of reducing your trash output and increasing your recycling efforts. Well-handled, recyclable materials are a valuable **COMMODITY** that will save you money on disposal costs. You'll want to have the right kind of recycling **CONTAINER** so that storage for you and handling for your hauler is easy and efficient. All this boils down to effective **CONTROL** of your waste stream.



### #1. ✓ TAKE A WALK WITH THE NEWLY APPOINTED 'GO TO' GREEN EMPLOYEE.

The first step to implementing 'green' practices is really looking at what's going on right now in your operations. On the following pages are a series of easy to follow check lists. The check lists are comprised of a series of questions which you will be able to answer when you walk your facility or look at your bills or a product,. We have placed next to the question a recommendation that can be implemented at no cost or a low cost. All of our recommendations should be able to save you money and in some cases dramatically reduce your current expenses.

### #2. ✓ CHECK IT.

Now be honest, really look at it. This check list is designed to help you figure out where you are right now. You will have time to decide what you want to do about it. It will be important to prioritize the next steps. So for now, just look at your current operations.

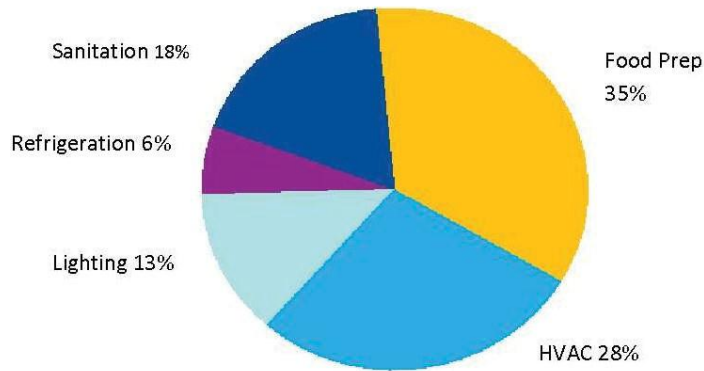
### #3. WHAT'S NEXT?

Since our goal is to reduce costs, we need to v develop an action plan that prioritizes reducing operational costs first. Energy and water are good starting points. Do not underestimate the employee and customer benefits of implementing green chemical purchasing and improving your waste practices. They can also significantly affect your bottom line.

The action plan will need to designate people and actions that need to be taken. The resources in the back of the guide will help you find and get good information in the least amount of time.

# ENERGY — ALL YOU NEED TO KNOW TO START SAVING NOW!

Here's an example of the Average Energy Consumption in a Full-service Restaurant (IFMA 2009)



Restaurants with commercial kitchens consume about 2.5 times more energy than other commercial buildings. (ENERGY STAR 2009)

Significant potential exists to improve the energy efficiency and save money with the current practices in the food service industry.

REDUCE your energy consumption and **SAVE MONEY** by evaluating operational daily practices, changing out bulbs and purchasing Energy Star qualified appliances.

WATER CHECK LIST	v DONE	to do	COMMENTS
<b>KITCHEN WATER FIXTURES — INEXPENSIVE UPGRADES</b>			
<b>DISHWASHER</b> Replace pre-rinse spray nozzle with a low flow of 1.6 gallons per minute(GPM)			Saving up to 66,000 gallons per year or a cost savings of \$1,000.annually depending on usage
<b>SINKS</b> Spray Nozzle: Replace 2.8 GPM with 2.0 GPM			A potential savings of 12,000 gallons of water and approx. \$84.00 per year
<b>SINKS</b> Utility and Hand Sinks: Install faucet aerators reducing water flow to as little as 0.25 GPM			A standard faucet uses 4 to 7 GPM
<b>BATHROOM WATER FIXTURES</b>			
To start - Install faucet aerators in bathroom sinks reducing water usage			Installing aerators does not necessarily require installing a new faucet.
If possible - replace toilets and urinals with low flow models. Refer to EPA's WaterSense website for a full list of products.			<a href="http://www.epa.gov/WaterSense/index.html">http://www.epa.gov/WaterSense/index.html</a>
<b>MAINTENANCE</b>			
<b>FIX LEAKS!!!</b>			Rodents are attracted to water, so check faucets, toilets and pipes.
Read water meters monthly			Check the pressure on the water to the building. It should not be more than 60 psi. If yes, install pressure reducing valves
Shut off water-cooled air conditioning units when not needed, or if possible, replace with air-cooled systems			Purchase EnergyStar qualified equipment <a href="http://www.energystar.gov">www.energystar.gov</a>
<b>STAFF HABITS AND OPERATIONAL MODIFICATIONS</b>			
Turn off water faucets when not in use!			Make it kitchen water policy.
Turn off the continuous water flow used to wash drain trays of the beverage island.			Clean thoroughly as needed.
Reduce the flow to dipper wells for ice cream and butter scoops.			An easy adjustment
Adjust ice machines to dispense less ice if ice is being wasted.			Also consider making ice at night to save energy.
Do not use running water to melt ice in bar sinks.			If possible, dispense with spent ice outside.
Turn off food preparation faucets when not in use. Consider installing foot triggers.			A worthwhile investment for large kitchens.
Run the dishwasher only when full.			Make it kitchen water policy.
Turn the dishwasher off when not in use.			Shut off all appliances not in use.
Defrost food in the bottom of the refrigerator and NOT under running water.			With care full planning, use the bottom shelf of the refrigerator for defrosting daily. FDA approved if defrosting is stored on a tray below prepared food.
Serve water to customers only upon request.			



## 5 WATER — ADJUSTING FIXTURES & HABITS

Restaurants use an average of 5,800 gallons per day of water. About half of the water is used in the kitchen areas. There are many ways to reduce water usage. Most of them require educating your staff to make minor behavior and/or operational modifications.

### TO GET STARTED...

#### Step 1

Do a visual assessment of your kitchen staffs' water practices. Follow the items on the checklist. The list will help you identify easy modifications that can be made to save water and money.



**WATER ATTRACTS RODENTS and  
\*\*A DRIPPING FAUCET CAN WASTE UP TO  
1,000 GALLON\$ A WEEK\*\*  
THAT'S MONEY OUT OF YOUR POCKET!**

ENERGY CHECK LIST	v Done	TO DO	COMMENTS
Do you have a policy for future purchasing of Energy Star qualified lighting and equipment?			<a href="http://www.energystar.gov/index.cfm?c=products.pr_find_es_products">http://www.energystar.gov/index.cfm?c=products.pr_find_es_products</a>
<b>LIGHTS — USE DAYLIGHT WISELY</b>			
Replace all incandescent lamps in back of house and exterior fixtures (at minimum) with compact fluorescent lamps (CFLs).			Potential savings 75% - Payback in less than a year.
Consider changing linear fluorescent lighting to T8's or T5's.			Research utility incentives in your area.
Replace all Exit Signs with LED lamps.			No brainer / 80% savings
Consider reflector hoods with LED's for table top lamps.			A reflector hood adds a nice quality to the light, and the pay-back is less than a year.
Replace incandescent bulbs in refrigerators and freezers.			Reduces heat output by 75%
<b>LIGHTING MAINTENANCE - TURN OFF LIGHTS WHEN NOT NEEDED</b>			
Clean light fixtures regularly.			Monthly
Set outdoor lighting controls using an on/off schedule.			Don't forget to change the schedule as daylight hours change
Install "Turn Off Lights" signs where needed.			Bathrooms, closets, utility areas
Turn on lights in active areas only.			Especially for early and late shift employees
Install occupancy sensors in utility closets...			...So these lights aren't on all day
<b>REFRIGERATION SYSTEMS AND ICE MACHINES</b>			
Check age of equipment - Consider replacing if over 15 yrs old.			Research utility incentives in your area.
Is there a strip curtain on the walk in?			Cuts outside air filtration by 75%
Is there an automatic door closure?			Make sure it is working.
<b>MAINTENANCE</b>			
Ice Machine - Keep the lid closed and Adjust the purge water timer / Can you make ice at night?			Make a sign if necessary to keep the lid closed
Make sure that free standing units have room for air circulation on all sides.			Always
Check refrigerant charge.			Bi-monthly
Repair and realign doors.			As needed
Clean evaporator and condenser coils.			As needed
<b>HVAC - MAINTENANCE - STEP 1 — MAXIMIZE EQUIPMENT EFFICIENCY</b>			
Turn off exhaust hoods and hood lights when appliances are not in use.			
Install an Energy Star qualified programmable thermostat.			
Use ceiling fans to promote air circulation.			
Turn off equipment when not in use.			
Cut idle time on all equipment / Use timers.			
Maintain & Repair all kitchen equipment.			

# GREEN CLEANING & PURCHASING

## Choosing and Substituting Green Products

Choosing products, evaluating performance quality and moving staff to accept the changes can be a daunting process. Familiarize yourself with the following symbols of green product certification, and follow the steps outlined in the chart to overcome the obstacles of change. You *can* switch to non-toxic, “green” cleaning products and still comply with food service safety standards in the areas of *employee health, protection from contamination, and protection from chemicals*, particularly because you’ll be improving indoor air quality by swapping out bleach and ammonia for non-toxic substitutes.



*Green Seal* is a non-profit organization that provides science-based environmental certification standards that are credible, transparent, and are not tied to commercial interests. Products are certified based on effectiveness.



*EcoLogo* is a 3rd party certification of products ranging from construction materials to janitorial supplies to paper products and more.



*FSC Forest Stewardship Council* is a non-profit agency which certifies whether paper fibers come from sustainable sources.



*Recycled content* means the product is made with post-consumer recycled content. Aim for a minimum of 30%, which will be indicated next to the symbol on the package.



*Sustainable Forestry Initiative* certifies the product was made with paper fiber from responsibly managed forests, and/contains post-consumer recycled fiber.



*Processed Chlorine Free* means chlorine was significantly reduced or eliminated from the manufacturing of the paper product in question.

PURCHASING CHECKLIST	✓ Done	To Do	Comments
<b>STEP 1.</b> Take inventory of all your current cleaning and paper products.			
<b>STEP 2.</b> Check the labels of your products for the symbols listed above.			
<b>STEP 3.</b> If you don't see any of these symbols on your products, at least change out your all-purpose cleaner and paper towels.			
<b>STEP 4.</b> Call your distributor and explain that you are looking to change your all-purpose cleaner to a Green Seal or Eco Logo product, and your paper towels to a product with a minimum of 30% recycled content.			What products do they carry that carry these certifications? Ask. Remember that the product must have the symbol on its package.
<b>STEP 5.</b> Request samples for trial and ask the distributor to arrange for demo and training of your staff on how to use the cleaning product.			Green cleaning products are extremely cost effective, as they are often sold in concentrate form, requiring dilution with water.