EPA Partnership Programs: Sustainability Tools & Resources

Domenic Calabro

EPA Sustainable Lodging Workshop

May 6, 2015
Use ENERGY STAR to Communicate Energy Efficiency Achievements to Eco-Minded Guests

In a recent TripAdvisor survey, half of all respondents said they would spend more money to stay at an "eco-friendly" accommodation. However, 60% of these same travelers said they rarely felt informed about whether hotels are actually eco-friendly. So how do you make your hotel more sustainable while also ensuring that guests are aware of your environmentally responsible initiatives?

It's simple — by using the proven energy management tools, resources, and strategies that ENERGY STAR offers, such as Portfolio Manager and applying for certification as your properties become eligible. The ENERGY STAR brand is recognized by 85% of American households as the symbol for superior energy efficiency — providing a platform for you to credibly communicate your achievements to guests and other stakeholders.

For more information, go to energystar.gov or call 206.553.1810.
“Through its Energy Star program, EPA is proud to partner with TripAdvisor to help launch this breakthrough initiative to help foster greener travel across the country,” said Jean Lupinacci, chief of EPA’s Energy Star program for Commercial Buildings and Industrial Plants.

TripAdvisor®, the world’s largest travel site*, created a TripAdvisor GreenLeaders™ program, helping its community of more than 200 million travelers plan greener trips by highlighting U.S. accommodations engaging in environmentally-friendly practices. Developed in partnership with U.S. Environmental Protection Agency’s ENERGY STAR® program, the U.S. Green Building Council, and the United Nations Environment Programme, qualifying hotels and B&Bs are awarded TripAdvisor GreenLeaders status based on the green practices the property has in place.

How TripAdvisor GreenLeaders Works

The TripAdvisor GreenLeaders program considers a property's holistic approach to green practices and ranks them based on four levels of participation -- Bronze, Silver, Gold or Platinum -- which will be shown prominently on the property's listing on the TripAdvisor
Travelocity's New "Green Directory" Features ENERGY STAR Qualified Hotels

Travelocity has launched an eco-friendly directory to help travelers determine green hotels. In a recent Travelocity survey, 59 percent of respondents stated a "green" rating would have at least some influence in their hotel selection in 2009. The green travel directory highlights properties and destinations already offering meaningful sustainability initiatives and is a trusted resource for consumers looking for eco-friendly options.
EPA’s Food Recovery Challenge
Food is the **most** discarded material in our waste stream (21.3%) and the **least** recovered (1.6%).

**Total MSW Discards (by material), 2011**
- Food waste: 21.3%
- Plastics: 17.8%
- Wood: 8.4%
- Yard trimmings: 8.8%
- Metals: 8.8%
- Glass: 5.1%
- Paper and paperboard: 14.8%
- Other: 4.4%

**Total MSW Recovery (by material), 2011**
- Paper and paperboard: 52.8%
- Yard trimmings: 22.2%
- Food waste: 4.4%
- Wood: 2.7%
- Plastics: 3.1%
- Glass: 3.7%
- Other: 5.3%
Environmental Impacts of Food Waste

- Food waste decomposes in landfills, producing methane (21x more potent GHG than CO₂) for decades.
- Growing food accounts for 25% of all fresh water use in the U.S. annually, 16% of our energy consumption, and 14% of domestic GHG emissions.
- Increasing production levels on farms can lead to soil degradation, causing the soil to become less productive.
Every year, over 50 million Americans don’t have access to sufficient safe and healthy food (1 in 6 families)

- In 2011, 36 million tons of food waste was generated in the United States
- Diverting 30% of discarded edible food to hunger relief organizations could virtually eliminate this problem in the U.S.
Food Recovery Hierarchy

Source Reduction
Reduce the volume of surplus food generated

Feed Hungry People
Donate extra food to food banks, soup kitchens and shelters

Feed Animals
Divert food scraps to animal feed

Industrial Uses
Provide waste oils for rendering and fuel conversion and food scraps for digestion to recover energy

Composting
Create a nutrient-rich soil amendment

Landfill/Incineration
Last resort to disposal

EPA United States Environmental Protection Agency
Prevention is The Key to Both Cost Savings and Environmental Impacts

Every food item we throw away results in a large amount of invisible embedded energy and other resources being wasted.
EPA’s Food Recovery Challenge
www.epa.gov/smm/foodrecovery
Who has joined EPA’s Food Recovery Challenge? (Over 700 participants nationwide)
Joining EPA’s Food Recovery Challenge

1. Conduct a baseline assessment within 90 days
2. Set a three-year goal, committing to increase food source reduction, donation and/or recycling by 5% in the first year
3. Undertake food waste reduction and recovery activities and track them
4. Report annually using Re-TRAC Connect (produces reports, graphs, climate profile)
Re-TRAC Climate Profile
(Free FRC Reporting Tool)

- Instant access to data reports
- Individualized climate profile
- EPA assistance to input data

These GHG reductions are equivalent to one of the following:

- Acres of standing forest (based on CO2 sequestration per tree)
  - 9
  - 0
  - 29

- Annual emissions from the energy consumption of this many households (based on annual emissions per household)
  - 117
  - 0
  - 378

- The annual GHG emissions from this many passenger vehicles
  - 236
  - 0
  - 762

- Tons of waste recycled instead of landfilled (based on CO2 emissions per ton of waste landfilled)
  - 445
  - 0
  - 1,434

- Number of propane cylinders used for home barbeques (based on CO2 emissions per pound of propane)
  - 53,863
  - 0
  - 173,374

- This many gallons of gasoline (based on CO2 emissions per gallon)
  - 146,734
  - 0
  - 472,303
Additional Resources

• **Food Waste Assessment Guidebook:** Helps assess what is being thrown away.

• **Toolkit for Reducing Wasted Food and Packaging:** Excel spreadsheet; tracks daily amount, type of, and reason for wasted food and packaging. Automatically creates graphs and data summaries to help identify patterns of waste generation.

• **Food Waste Management Cost Calculator:** Estimates cost competitiveness of alternatives to food waste disposal, including source reduction, donation, composting, and recycling of yellow grease.

  [www.epa.gov/foodrecovery/tools/](http://www.epa.gov/foodrecovery/tools/)
EPA’s Food Recovery Challenge

www.epa.gov/foodrecovery

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WaterSense®

H₂Otel Challenge

Sustainable Lodging Workshop

May 6, 2015
Water Use in Hotels

- Restrooms and guest bathrooms are highest users
- Laundries use large amounts of water and energy
- Landscaping can benefit from more water-smart plants and technologies
- More efficient kitchen fixtures and appliances are available
- Large volumes of water are needed to cool spaces
Why Save Water in Hotels?

• Reduce risk by minimizing impacts of future uncertainty
  – Water and sewer rates have risen well above inflation
  – Changing utility rates create variations in costs
  – Water shortages and droughts may cause problems with availability

• Save operational costs to maximize profit margins
  – Saving water, saves energy which maximizes savings and efficiency
  – Efficiencies can offset increases due to expansions or changes in facility usage/occupancy rates
  – Improving plumbing fixtures can reduce maintenance calls
  – Changes to Standard Operating Procedures can reduce water use without incurring renovation or retrofit costs
WaterSense H₂Otel Challenge

WaterSense asks hotels to “ACT”: assess, change, track

<table>
<thead>
<tr>
<th>Three Steps</th>
<th>Hotels Will “ACT”</th>
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<tbody>
<tr>
<td>Assess</td>
<td>Conduct a simple water assessment to evaluate water use and identify opportunities to reduce water consumption.</td>
</tr>
<tr>
<td>Change</td>
<td>Implement water efficiency best management practices to save water in your hotel.</td>
</tr>
<tr>
<td>Track</td>
<td>Track your hotel’s progress in water efficiency before and after implementing best management practices in Portfolio Manager.</td>
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[www.epa.gov/watersense/commercial/challenge.html](http://www.epa.gov/watersense/commercial/challenge.html)
Recognition and Outreach Tools

- WaterSense also developed a suite of tools to help hotels promote their participation in the H₂Otel Challenge:
  - Participant logo
  - Signed certificate of participation
  - Sample press release
  - Sample website and in-room language
- WaterSense also regularly posts an updated list of participating hotels on its website – more than 800 hotels so far!

- Each hotel/facility must sign up online with WaterSense
- June 2015: Four-part live webinar series starts
Technical Resources

• WaterSense provides tools to help hotels reduce water use:
  – Water Assessment Worksheets
  – WaterUSE Tool to evaluate projects with ROI and payback
  – *WaterSense at Work* Best Management Practices Guidebook
  – Technical and outreach webinar series – recorded and live
  – Hotel case studies
  – Saving Water in Hotels fact sheet
  – Monthly email with tips and examples on how to save water

• Partner webpage so you can look up your local utility at
  http://www.epa.gov/watersense/meet_our_partners.html
H₂Otel Challenge website:
www.epa.gov/watersense/commercial/challenge.html

Contact Us
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