Green Dealerships

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Green Dealerships

Agenda

Lobb: How to build a "green" dealership

Doak: How to get your "green" store certified

Greenhaus: How to retrofit existing dealerships

Questions and Answers
Green Dealerships

Pat Lobb
Owner
Pat Lobb Toyota

Toyota of McKinney, Texas

56,123 sq. ft., 14.08-acre dealership

1st Car dealership to achieve LEED certification from the U.S. Green Building Council
Pat Lobb

Pat Lobb Toyota and Scion of McKinney
McKinney, Texas
FACILITY ORIENTATION

Dealership Faces East
Allows hot sun to hit the rear of the building in the evening
‘GREEN WALL’ is in the back to absorb the sun
Key element to lowering energy consumption
GREEN WALL WITH JAPANESE CREEPING IVY

West and north panels covered in plants to absorb heat from the sun, keeps building cooler, and reduces energy use
Acts as a biofilter and serves as an aesthetic feature
Humidifies dry air and adds oxygen to building surroundings
Removes impurities from the air
ALUMINUM COMPOSITE MATERIAL (ACM) EXTERIOR PANELS
Made of 95% recycled aluminum
Part of Toyota Image USA II Standards

GLASS

‘LOW-E’ (low emissivity)  
High ‘UV’ Rating  
Designed to maximize use of natural light to reduce interior lighting requirement  
Helps to control and moderate internal temperature  
Creates comfortable working environment with natural lights and views  
Entry portal made from special ‘no-lead’ glass
WATER CISTERN

8660 Gallon Capacity

Captures water from condensation generated by 12 roof top A/C’S and 7 interior A/C’S and rain from the roof top collection system

Water is used to irrigate the landscape
The dealership uses landscaping that is native to North Texas such as Buffalo grass. This landscaping is low in maintenance and uses little water. The irrigation system uses the underground "bubbler" watering system so the groundcover roots are watered and less water evaporates into the air. It is the most efficient way to water any non-turf area, since the exact amount of water needed is delivered at or near plant roots. Benefits include design flexibility, healthier plants and the elimination of water run-off.
The dealership concentrated the highest lighting levels along property edges. A dual switching strategy allows lighting levels to be set back to security levels after reasonable marketing hours. 400W with a reflective backing versus 750W results in equal light with less wattage.
Efficiency and emotion creating elements were hallmarks of the dealership’s lighting design.

This included:

• T-5 fluorescent fixtures with electronic ballasts

• Metal Halide lighting simulates sunlight

• Light-Emitting Diode (LED) EXIT signs use 25% electricity
The car wash is a “closed loop recycled system” which recycles the water used in each wash. Also, a special system is being used to ionize the water in the car wash to eliminate having to blow dry each car. This system saves over 66% of the water normally lost in a traditional car wash and leaves a “spot-free” finish.
SERVICE AREA

RYTEC HIGH-SPEED overhead doors in the service area operate during the day to keep service department temperatures more consistent. After hours, a steel security door is closed over the high speed doors.

Heated in winter by burning waste oil collected from oil changes of customer’s vehicles.

Remaining waste oil is sold to recyclers who use it to make plastics.
Pat Lobb Toyota earned LEED innovation points for its educational activities. Throughout the dealership, placards specified the Eco-Elements of each area. Also, there is an Educational area displaying all of the “Green” elements used to build the dealership.
Pat Lobb McKinney became the nation’s first auto dealership to receive Leadership in Energy and Environmental Design (LEED) certification.

Initial First Cost Premium: 5% to 7%

ROI period: 3 to 5 years
Green Dealerships

Justin Doak

Sector Manager for LEED for Retail
U.S. Green Building Council

Manages the technical development for:
LEED for Retail-New Construction
LEED for Retail-Commercial Interiors

Over 80 retail pilot projects to gather market feedback on the applicability of draft modifications to the LEED for New Construction v2.2 and LEED for Commercial Interiors v2.0 prerequisites and credits to suite green retail projects.

USGBC Market Development team - a pilot program that enables retailers to build LEED into their standard operations and building portfolio.
LEED for Retail

Justin Doak
Manager, Retail Sector
U.S. Green Building Council
Consumers Think Sustainability is Here to Stay

Source: Natural Marketing Institute’s 2007 LOHAS Consumer Trends Database™
©Natural Marketing Institute (NMI), 2007
Trends in Consumer Actions to Protect the Environment

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of Population</th>
<th>% Growth 06-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conserve energy by turning off the lights</td>
<td>95%</td>
<td>+2%</td>
</tr>
<tr>
<td>Turn off electronics when not in use</td>
<td>90%</td>
<td>+4%</td>
</tr>
<tr>
<td>Control thermostat to conserve energy</td>
<td>86%</td>
<td>+2%</td>
</tr>
<tr>
<td>Make extra efforts to reduce heating and cooling costs</td>
<td>83%</td>
<td>+2%</td>
</tr>
<tr>
<td>Conserve water</td>
<td>79%</td>
<td>+5%</td>
</tr>
<tr>
<td>Recycle paper (e.g., newspaper)</td>
<td>67%</td>
<td>+1%</td>
</tr>
<tr>
<td>Boycott a brand or company that has practices I don’t like</td>
<td>30%</td>
<td>+10%</td>
</tr>
<tr>
<td>Participating in household hazardous waste collection days</td>
<td>28%</td>
<td>+51%</td>
</tr>
</tbody>
</table>

Source: Natural Marketing Institute’s 2007 LOHAS Consumer Trends Database™
©Natural Marketing Institute (NMI), 2008
What do buildings have to do with this?
U.S. Building Impacts:

12% water use
39% CO₂ emissions
65% waste output
71% electricity consumption
Leadership in Energy & Environmental Design
Green Labels Positively Impact Purchase Behavior

% General population indicating the impact of label/certifications on product/services

High level of purchase impact

- Energy Star
  - 66%
- Recycled logo
  - 54%
- USDA Certified Organic
  - 29%
  - 21%
- Fair Trade Certified
  - 15%
  - 9%

More likely to purchase

No impact

Source: Natural Marketing Institute’s 2007 LOHAS Consumer Trends Database™ © Natural Marketing Institute (NMI), 2008
Nutrition Facts
Serving Size: 8 crackers (23g)
Servings Per Container: About 2

Amount Per Serving
Calories: 120
Calories From Fat: 30

Total Fat: 3.5g (5%)
Saturated Fat: 1g (5%)
Trans Fat: 0g
Polyunsaturated Fat: 1.5g
Monounsaturated Fat: 0.5g

Cholesterol: 0mg (0%)
Sodium: 140mg (6%)

Total Carbohydrate: 22g (7%)
Dietary Fiber: Less than 1g (0%)
Sugars: 7g

Protein: 2g

Vitamin A: 0%

Calcium: 10%
Iron: 4%

*Percent Daily Values are based on a 2000 calorie diet.
Leadership in Energy and Environmental Design

A leading-edge system for certifying the greenest performing buildings in the world
JOE SERNA JR. CALIFORNIA EPA HEADQUARTERS BUILDING SACRAMENTO, CALIFORNIA

34% more energy efficient
200+ tons of waste diverted from landfill each year
$12 million increase in asset value

LEED® Facts
Cal/EPA
Sacramento, CA

LEED for Existing Buildings Certificate awarded November 1, 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>Platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Sites</td>
<td>13/16</td>
</tr>
<tr>
<td>Water Efficiency</td>
<td>3/5</td>
</tr>
<tr>
<td>Energy &amp; Atmosphere</td>
<td>20/22</td>
</tr>
<tr>
<td>Materials &amp; Resources</td>
<td>10/10</td>
</tr>
<tr>
<td>Indoor Environmental Quality</td>
<td>12/18</td>
</tr>
<tr>
<td>Innovation &amp; Design</td>
<td>2/5</td>
</tr>
</tbody>
</table>

*Out of a possible 78 points*
USGBC has four levels of LEED:
LEED addresses the complete lifecycle of buildings:

- **Homes**
- **Neighborhood Development (in pilot)**
- **Commercial Interiors**
- **Core & Shell**
- **New Construction**
- **Schools, Healthcare, Retail**
- **Existing Buildings Operations & Maintenance**

The lifecycle spans from design to construction to operations.
Why build a sustainable portfolio?
PERCEIVED ADVANTAGES OF BUILDING GREEN

8-9% decrease in operating costs
7.5% increase in building values
6.6% improvement in ROI
3.5% increase in occupancy
3% rent increase
Average Savings of Green Buildings

- Energy Use: 30-50%
- Carbon Emissions: 35%
- Water Use: 40%
- Solid Waste: 70%
The next generation’s perspective will increase green building:

- 89% choose brands aligned with social cause
- 74% listen to brands aligned with social cause
- 69% shop for brands aligned with social cause
- 66% recommend brands aligned with social cause
Retailers typically have the following drivers behind the use of LEED:

1. Verify CSR efforts to shareholders

2. Improve Performance: Reduce operational and maintenance costs

3. Respond to changing consumer expectations and demographics
LEED for Retail: The Platform
Why LEED for Retail was Developed

To account for broad Spectrum of Retail Projects: Defined by product line

- Big Box
- Boutique
- Apparel
- Banks
- Restaurants
- Pharmacy
- Grocery

Coldwater Creek
The Pilot Program

– 95 individual retail project teams registered
– Increases the transparency of the process
– Projects provide input and feedback
  • Modified credits
  • New credit requirements
  • Developing LEED Submittal Templates
– Opportunity for project teams to ask questions and communicate with other pilot projects
– Expected to be complete by Fall 2008 and ready for market first to 2009
LEED for Retail

Two Certification Paths:

Path 1:
A New Construction-type project that certifies a single building.

Path 2:
A Commercial Interiors-type project that certifies a single tenant space.
LEED for Retail: New Construction Credit Categories

There are 7 prerequisites and 34 credits, with 70 points total.

26 Credits needed to certify

LEED for Retail - New Construction has the same structure as the LEED for New Construction Rating System, with slight variance in the point distribution.
LEED for Retail: Commercial Interiors
Credit Categories

There are 6 prerequisites and 26 credits, with 59 points total.

21 Credits needed to certify

<table>
<thead>
<tr>
<th>Credit Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Sites (SS)</td>
<td>8</td>
</tr>
<tr>
<td>Water Efficiency (WE)</td>
<td>2</td>
</tr>
<tr>
<td>Energy &amp; Atmosphere (EA)</td>
<td>14</td>
</tr>
<tr>
<td>Materials &amp; Resources (MR)</td>
<td>14</td>
</tr>
<tr>
<td>Indoor Environ. Quality (EQ)</td>
<td>16</td>
</tr>
<tr>
<td>Innovation &amp; Design (ID)</td>
<td>5</td>
</tr>
</tbody>
</table>

LEED for Retail-Commercial Interiors has the same structure as the LEED for Commercial Interiors Rating System, with slight variance in the point distribution.
The Future of LEED for Retail: LEED 2009 Alignment and Portfolio Program
Green Dealerships

Douglas Greenhaus
Director of Environment, Health & Safety
Legal and Regulatory Affairs Group
National Automobile Dealers Association

Actively practices before such federal agencies as
Environmental Protection Agency
Department of Transportation
Department of Labor

Advises and counsels association members on
federal regulatory matters

Has authored numerous trade publication articles
and association educational guides
NADA Energy Stewardship Initiative: NADA-Energy Star Partnership

Douglas I. Greenhaus
National Automobile Dealers Association

Automotive News Green Dealership Webinar
June 24, 2008
Introduction

Who is NADA?

- Represents over 19,000 dealers with 43,000 automobile and truck dealerships employing 1,200,000 people; 53 employees/store
- 700 billion in sales; 20% of all retail sales

Why Energy Efficiency?

- Energy efficiency support a valuable member service
- Verifiable “green” public recognition for industry

Typical dealership has office space, showrooms, shops, warehouses, outdoor lighting, body shops, etc.

- Average auto dealer energy intensity 110 kBTU/sq.ft.
- Typical prime office space is 93 kBTU/sq.ft.
Goal

- To encourage dealerships to improve the energy efficiency of their facilities and operations.

- It is estimated that by reducing energy consumption by 10 percent, dealerships could save nearly $193 million and prevent more than one million tons of carbon dioxide (CO2) emissions annually.
Guide and Launch

- **Putting Energy into Profits** (2006), dealership educational guide

- **Energy Stewardship Initiative** launched at 2007 Washington Auto Show
How does it work?

- Demonstrate commitment
  - Join the Energy Star Small Business Network
  - Over 500 dealerships signed up in 2007; over 300 dealerships signed up in 2008 to date

- Take the Energy Star Challenge
  - Commit to improve energy efficiency of dealership facilities/operations by at least 10 %
Two Main Steps

- Determine how much energy dealership facilities use
  - Energy Star’s online tool, Portfolio Manager
- Select from options available for existing or new facilities
- Make improvements to dealership facilities/operations
# Sure Energy Savers

## II. Sure Energy Savers

<table>
<thead>
<tr>
<th>Energy STAR Qualified Products Available</th>
<th>New Construction or Major Renovation</th>
<th>Simple Upgrade to Existing Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Electrical receptacle seals</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>High-efficiency heating and cooling equipment</td>
<td>Yes</td>
<td>✓</td>
</tr>
<tr>
<td>Cool roofing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Multiple pane, low-e windows with inert gas fill</td>
<td>Yes</td>
<td>✓</td>
</tr>
<tr>
<td>Engage in heating and cooling equipment maintenance contracts and seasonal tune-ups</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>T8 fluorescent lamps and electronic ballasts and investigate the potential for T5 lamps for all low-bay applications</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Metal halide or even more efficient T8HO lamps for exterior, security, and high-bay lighting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Compact fluorescent fixtures in place of all recessed can fixtures</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Photocell sunrise/sunset controls on exterior light</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Efficient exit signs</td>
<td>Yes</td>
<td>✓</td>
</tr>
<tr>
<td>Occupancy sensors for all storage, conference, and restrooms</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NEMA premium motors and variable speed drives</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Automatic door closers on all exterior bays and pedestrian doors</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Compact fluorescent light bulbs</td>
<td>Yes</td>
<td>✓</td>
</tr>
<tr>
<td>Efficient office equipment, electronic, and appliances</td>
<td>Yes</td>
<td>✓</td>
</tr>
<tr>
<td>Low-flow faucets in all lavatories</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The following graphics identify dealership energy efficiency opportunities. The equipment and facility features highlighted are coded to the Section V subheading (A, B, C, etc.) that...
Portfolio Manager

- Dealerships track utilities
  - May share data with NADA
  - Energy/water use; savings
  - Dollars savings
  - CO₂ emissions reductions

---

<table>
<thead>
<tr>
<th>Portfolio Manager Login</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username:</td>
</tr>
<tr>
<td>Forgot your username?</td>
</tr>
<tr>
<td>Password:</td>
</tr>
<tr>
<td>Forgot Your Password?</td>
</tr>
<tr>
<td>New User? Register</td>
</tr>
<tr>
<td>Login</td>
</tr>
</tbody>
</table>

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Selected Resources

- Learn How The Rating System Works
- Take the Portfolio Manager Tour
- Review Eligibility Requirements

---

Portfolio Manager Overview

Assess and Track Building Performance

Take control of your energy and water consumption by managing your entire portfolio of buildings in a secure online environment. Whether you own, manage, or hold properties for investment, Portfolio Manager can help you make smart choices.

Manage Energy and Water Consumption for All Buildings

Efficient management of resources requires effective data management. Portfolio Manager helps you streamline your portfolio’s energy and water data, and track key consumption, performance, and cost information portfolio-wide. For example, you can:

- Track multiple energy and water meters for each facility
- Customize meter names and key information
- Benchmark your facilities relative to their past performance
- View percent improvement in weather-normalized source energy
- Monitor energy and water costs
- Share your building data with others inside or outside of your organization
NADA + Energy Star

- Websites
  - www.nada.org/energystar
  - www.energystar.gov/autodealers

- Seminars
  - “Energy Savings 101”, “Portfolio Manager”
  - “Energy Efficient Lighting”: Thursday, June 26 @ 11:30 am EDT (To register, visit nada.org/energystar)
Awards & Recognition

- NADA received 2007 Energy Star Award for Excellence in Energy Efficiency

- NADA and Energy Star to recognize dealerships that meet or exceed Energy Star Challenge by improving energy efficiency by at least 10 percent.

- NADA to provide such dealerships with a certificate, a press release distributed to the local media, coverage on NADA’s Website, and recognition at NADA’s annual Washington Conference in September.
Awards & Recognition

- Energy Star Small Business Awards
- In 2007, three dealerships (out of eight small businesses) won EPA awards recognizing them as “great examples of financial and environmental stewardship” for success at achieving greater energy efficiency at their facilities.
- E.g. Planet Subaru, Hanover, MA: programmable thermostats, recycled car wash water, block wall construction for added insulation, and river rock roofing to minimize solar absorption and reduce cooling loads.
- June 30, 2008 award deadline: See: nada.org/energystar
Awards & Recognition

- USA Today Dealer Innovation (DIA) Award
- The 2007 and 2008 DIAs recognized dealers who have implemented effective initiatives to save energy, reduce utility costs, and help protect the environment.
- 2008 Winner: Hand Motors, Manchester, VT: heats new 11,200 sq. ft. service shop w/100 percent waste motor and vegetable oil at no cost; saves more than $15,000 per year by not having to buy standard heating oil. Also, micro hydro facility.
Contacts

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Jerry Lawson, National Manager
ENERGY STAR Small Business & Congregations Network
U.S. Environmental Protection Agency
Lawson.Jerry@epamail.epa.gov
Going Green: It’s no longer an option.

November 13, 2008  To learn more visit  autonews.com/green
Question & Answer

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Thank You