

Environmentally Responsible Travel Performance Index



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Environmentally Responsible Travel Performance Index
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Purpose The purpose of this Environmentally Responsible Travel Performance Index is to Support the Vision, Mission, and Goals for a Minnesota Green Travel Initiative. The Index will provide a foundation for adoption of Green measures for all sectors of the tourism industry. It will be the basis for an ongoing and continuously improving methodology, to enable industry participants to individually determine levels of their green measures being practiced.

How to Use Index This Index will be applied through a self-assessment approach to identify and discriminate which measures have been implemented. By completing this Index and scoring out in each category, an individual business will be able to determine the level of green performance appropriate to their circumstances. Results can be used to inform customers and other industry stakeholders, provide a basis to qualify for recognition under an environmentally responsible travel program, and enable participants to determine and compare green performance.

The list of measures are meant to be comprehensive and demonstrated to be viable. Each has to be examined based on individual circumstances and not all measures are appropriate for all circumstances. To implement green practices a business must consider; practical opportunities, internal resources, short and long-term costs/benefits, technology availability, and commitment to higher environmental performance. The Index is organized by categories; measures for each category are scored at three performance levels;

- Entry Level (one ♦ point) – Demonstrates a level of awareness and ability to implement practical, cost-effective, and mainstream measures.
- Early Adopter Level (two ♦♦ points) – Demonstrates a high level of commitment and ability to implement more complex measures beyond industry norms.
- Innovator Level (three ♦♦♦ points) – Demonstrates a high level of commitment, long-term thinking, and clear industry leadership.

The **Environmentally Responsible Travel Performance Index** can be completed by an individual organization. The scoring method is based on points achieved for each measure weighted for each performance level. Steps to apply the Index are: 1) Points are totaled for each category, 2) Totals from all categories are calculated to provide a cumulative score, and 3) The cumulative score determines which of three performance levels are demonstrated.

Since not all measures are applicable in all circumstances, the final performance levels are based on a ratio of implemented measures to all measures (total points from implemented measures divided by total available points all measures.) By using a ratio approach, the index can be modified – measures added or changed over time – based on participant experience, without varying the percent of measures implemented to those not implemented. The ranges of performance are:

- | | |
|-----------------------|---------------------------------|
| ➤ Entry Level | 25-50 percent available points |
| ➤ Early Adopter Level | 51-75 percent available points |
| ➤ Innovator Level | 76-100 percent available points |

* If any measure is not verifiably applicable, it can be excluded from calculating total score by eliminating the points for that measure from the total points available.

Category One

Commitment to Higher Environmental Performance

Environmental and Socially Responsible Policies Established

- Educate and train employees (◆)
- Monitor and evaluate progress (◆)
- Maintain a continuous improvement approach to go beyond regulatory compliance (◆◆)
- Strategies in-place to work with customers, suppliers, and stakeholders about environmental impacts and best green practices (◆◆)
- A transparent verification program for highest environmental performance in-place (◆◆◆)

Calculate, Track, and Verify Environmental Impacts

- Create a baseline and goals for environmental performance and identify opportunities for improvement (◆)
- Written policy for continuous tracking and improvement of performance in all areas (◆)
- Customer satisfaction feedback to track response to environmentally preferable efforts (◆)
- Employee satisfaction/morale surveys (◆)
- Determine facilities and operations environmental footprint (i.e. GHG emissions calculating, energy consumption tracking) (◆◆)
- Monitoring system in-place and progress reporting to employees, customers, public (◆◆)
- Obtain 3rd Part Verification of environmental and socially responsible performance (i.e. Ceres, Energy Star, Green Hotel Association, Global Reporting Initiative) (◆◆◆)

Employee Engagement

- Employee training includes awareness of environmental issues associated with travel (◆)
- Employees are trained in operation of resource conservation equipment and processes (◆)
- Employees are trained to report leaks and malfunctioning equipment (◆)
- Employees participate in assuring healthy, safe and fair working conditions (◆)
- Employees are encouraged to improve skills through formal education or training (◆)
- Environmental issues discussed at staff or departmental meetings (◆)
- Environmentally preferable opportunities/activities are presented to employees (◆◆)
- Green Team program in place (◆◆)
- Green Team supported with time and resources (◆◆)
- Incentives for participation as a Green Team member are in place (◆◆)
- Green performance expectations written into job descriptions (◆◆◆)
- Employees recognized and rewarded for best environmentally preferable practices (◆◆◆)

Score for Higher Environmental Commitment

Total Points (◆) Available 40

Category Two

Community and Customer Education

Communication and Education

- Promotional materials for green practices available (signs, brochures, websites) (◆)
- Interpretive programs to educate customers on local culture, environment, history, sense of place, geography, geology, etc. (◆◆)
- Education campaign to increase the awareness of customers, employees, and public about actions to reduce environmental impacts. (◆◆◆)

Community Support Programs

- Written policy supporting community (◆)
- Employees encouraged to participate in local organizations or activities (◆)
- Information for green services available on-site or in other materials (◆◆)
- Business is locally owned and/or is substantially vested in the local community (◆◆◆)

Community Investment Programs

- Written policy supporting involvement in activities that benefit the local community (◆)
- Management and employees are encouraged to participate in community initiatives (◆)
- Financial and/or in-kind support for local organizations (◆◆)
- Financial and/or in-kind support for local programs and cultural activities (◆◆)
- Exceeds employee requirements for livable wages and benefits, safe and healthy workplace, and other benefits such as health care (◆◆◆)

Score for Community and Customer Education

Total Points (◆) Available 22

Category Three Supply-Chain Management

Environmental and Socially Responsible Criteria Established

- Criteria established (◆)
- Criteria enforced throughout supply chain (◆◆)
- Life cycle assessment methods employed (◆◆)
- Materials acquisition is based on highest environmental performance available (◆◆◆)
- Products are chain-of-custody certified (◆◆◆)

Environmentally Preferable Purchasing Practices in Place

- Green purchasing policy (◆)
- Biodegradable, non-toxic products (cleaners, insect control, herbicides, etc) (◆◆)
- Goods with recycled content (◆◆)
- Bulk packaged products (◆◆)
- Certified Organic products (◆◆)
- Products designed for reuse and recycling (◆◆)
- Utilize a high percentage of locally produced goods and services (◆◆◆)
- Environmentally preferable purchases documented (◆◆◆)

In-bound and out-bound Logistics and Packaging

- Transport packaging minimized (◆)
- Warehousing minimized (◆◆)
- Optimized goods and services delivery systems in place (◆◆◆)

Score for Supply Chain Management

Total Points (◆) Available 34

Category Four

Facility Design, Sites, and Land Use

Low Impact Development (LID) Practices Implemented

- Identify surface and ground water protection strategies (◆)
- Use natural landscaping that improves hydrology and erosion (◆)
- Capture and use of storm water on site (◆◆)
- Program to actively reduce pollutants into environment (◆◆)
- Pervious surface areas are significantly reduced (◆◆◆)
- Use integrated storm water management practices to reduce and clean runoff (◆◆◆)

Conservation Design Practices Implemented

- Developed portion of site is concentrated on suitable areas to maximize open space (◆)
- Landscaping for energy efficiency in place (◆◆)
- Site and facilities design provides maximum protection of ecologically or culturally significant areas. (◆◆◆)
- Restore ecological functions such as habitat for biodiversity and water quality (◆◆◆)

* Ecological or culturally significant areas include: wetlands, forest land, agricultural land/buildings, historical or archeological resources, riparian zones, wildlife habitat, and scenic viewsheds.

Landscaping and Conservation Operations

- Minimize the use of herbicides, fungicides, fertilizers (◆)
- Minimize use of preservative (CCA)-treated wood (◆)
- Use non-toxic pest and weed controls (◆◆)
- Use landscaping materials such as groundcover mulch and compost for fertilizer (◆◆)
- Use native vegetation in character of surrounding natural environment (◆◆)
- Elimination of invasive species (◆◆◆)
- Onsite food gardens (◆◆◆)

Building Architecture

- Minimal or no disturbance to cultural heritage, artifacts, etc. (◆)
- Compatible with local traditional architecture (styles, colors, materials, design) (◆)
- Height of building and structures compatible with community norms (◆)
- Roads and parking are screened by vegetation or landscape elements (◆)
- Color and form are compatible with the landscape where appropriate (◆)
- Building complies with local green building program or codes (◆◆)
- Green building processes/materials used for renovations and new buildings (◆◆)
- Lighting meets Dark Skies standards (◆◆)
- Buildings certified by a green building program (i.e. LEED) (◆◆)

Score for Facility, Design, Sites, and Land-Use
Total Points (◆) Available 48

Category Five

Energy Efficiency, Conservation, Management

Energy Management Systems

- Conduct Energy Audits (◆)
- Adopt Energy Management Systems (◆◆)

Site Design and Building Orientation

- Buildings are oriented for maximum access to solar (◆◆)

Mechanical Systems

- Set up a preventative maintenance plan (◆)
- Monitor boilers and cooling towers to insure optimal efficiency of the systems (◆)
- Use a blow down meter in the cooling tower (◆◆)
- Install Energy Efficient Pumps and motors (◆◆◆)

Water Heating In combination with water conservation measures, measures to reduce water heating and decrease energy consumption:

- Check for and repair hot water leaks (◆)
- Operate laundry equipment with full loads only (◆)
- Lower water heater temperatures (◆)
- Insulate hot water heater tanks (◆)
- Drain water heat recovery systems save energy by using the heat in drains to preheat water coming into the water heater (◆)
- Reduce water temperature for hand washing to 110°F from 140°F (◆)
- Install low-flow showerheads to reduce the volume of hot water needed (◆)
- Install or upgrade insulation on water lines and ducts (◆◆)
- Replace inefficient water heating systems (tank less water heaters save energy by eliminating the standby energy losses suffered by tank water heaters) (◆◆)
- Use water-saving, horizontal-axis washing machines, also called front-loading washing machines, save energy, water, and money (◆◆◆)

Lighting Systems Lighting is a significant source of lodging energy expenditures. Upgrading lighting offers a high-return, low-risk investment. Measures for reduced energy consumption from lighting:

- Maximize natural lighting when available (◆)
- Establish O&M procedures for cleaning and bulb replacement (◆)
- Replace standard incandescent bulbs with compact fluorescents or other high energy efficient lighting (◆)
- Use the lowest wattage lamp necessary (◆)
- Use energy-saving fluorescent T8 lamps over old-style T12 lamps (◆)
- Use dimmer controls in meeting rooms (◆)
- Use an energy-efficient light-emitting diode (LED) night lights (◆)
- Replace incandescent lamps in exit signs with light-emitting diode exit signs. (◆)
- Eliminate or reduce external lighting not needed for safety or security (◆)

- Utilize light colored walls and ceilings (◆)
- Conduct a lighting audit (◆◆)
- Use occupancy sensors to detect the presence or absence of people and turn lights on and off accordingly (◆◆)
- Install energy efficient lights and fixtures throughout facilities (◆◆◆)

Energy Efficient Appliances and Equipment

- Upgrade to Energy Star® appliances (◆◆◆)
- Replace inefficient equipment with high-efficiency equipment (high efficiency equipment may be more expensive than average efficiency units, but the higher initial outlay can be recovered through increased energy savings) (◆◆◆)

Heating, Ventilation and Air Conditioning (HVAC) The following conservation measures decrease HVAC energy consumption:

- Set Thermostat - recommend 78 to 85 degrees in cooling season; 65 to 55 degrees in heating season in unoccupied public spaces and vacant rooms (◆)
- Enclose and lock thermostats in public areas (◆)
- Turn off heating and cooling in unoccupied guest rooms (◆)
- Connect bathroom fans to light switches to reduce excessive operation (◆◆)
- Install timers on bathroom heat lamps so they turn off when not needed. (◆◆)
- Close off sections of facilities during periods of low occupancy (◆◆)
- Install an Energy Management System (EMS) to monitor the building's energy load (◆◆◆)
- Consider purchasing new equipment (◆◆◆)

Building Envelope Heating and cooling loss, as well as solar heat gain, through building envelope can contribute to an increase in energy consumption. To reduce energy loss:

- Keep doors and windows closed when not in use (◆)
- Add window film to windows to reduce energy loss and solar heat emissions (◆)
- Replace damaged weather-stripping on doors and windows (◆)
- Use shading to reduce solar heat through windows (◆◆)
- Evaluate insulation in ceilings and add insulation as needed (◆◆)
- Install energy efficient windows (◆◆◆)
- Installing white or reflective roofing (◆◆◆)
- Install a green roof system on buildings (◆◆◆)

Establish an Energy Efficiency Operations and Maintenance (O&M) Procedures

O & M procedures provide a cost-effective way to increase equipment efficiency, reliability and safety. Measures to increase efficiency and decrease energy consumption:

- Turn off or reset heating and cooling systems in unoccupied rooms (◆)
- Turn off electronics and lighting in unoccupied rooms (◆)
- Regularly check and clean condenser coils on icemakers and vending machines (◆)
- Regularly service cooking equipment for greater efficiency (◆)
- Clean grills and grease filters in restaurants daily (◆)
- Perform scheduled maintenance on HVAC equipment (◆)
- Clean condenser and evaporator coils (◆)
- Locate outside icemakers and vending machines under cover and in shaded areas (◆)

- Regularly inspect and clean icemakers and vending machine condenser coils (◆)
- Operate refrigeration equipment efficiently (◆)
- Install air curtains or air blowers over the doors of walk-in refrigeration. (◆)
- Turn off or set back HVAC when the restaurant is closed (◆)
- Turn off any equipment not in use (◆)
- Use exhaust fans only when necessary and at speeds no higher than necessary (◆)
- Do not preheat steam tables, grills, broilers, etc. (◆)
- Schedule food preparation - cook some items in off-peak periods. (◆)
- Stagger times to turn on heavy-duty electrical equipment to lower the peak demand (◆)
- Avoid using the range top if possible. (◆)
- Operate the griddles, ovens, and fryers efficiently (◆)
- Use steam cooking whenever possible (◆)
- Operate dishwasher efficiently (◆)
- Perform scheduled equipment maintenance and make necessary repairs on equipment and appliances and replace any inefficient equipment or appliances (◆◆)
- Capture and reuse waste heat from laundry and other equipment operations (◆◆◆)
- Use automated energy conservation systems such as EnergyTrac or Automated Logic (◆◆◆)

**Score for Energy Efficiency, Conservation,
and Management**

Total Points (◆) Available 109

Category Six Renewable Energy Strategies

Energy Choices and Purchasing

- Offer Carbon Offsetting Opportunities to offset environmental impact of travel (◆◆)
- Purchase of Renewable Energy Credits (RECs) (◆◆)

On-Site Distributed Generation of Renewable Energy - Install Energy Systems

- Photovoltaic solar (◆◆◆)
- Solar thermal (◆◆◆)
- Wind generation (◆◆◆)
- Low-head hydro (◆◆◆)
- Geothermal (◆◆◆)
- Biomass digestion(◆◆◆)

Combined Heat and Power

- Cogeneration – capture and reuse energy (◆◆)

Adopt Integrated Climatic Design

- Passive solar heating design package (includes orientation, south glazing/floor area ratio, orientation specific low-e tuning, summer shading, and thermal mass design) (◆◆◆)
- Passive cooling design package (includes orientation, summer shading, thermal mass, attic ventilation, additional ceiling fans, heat recovery ventilation and natural ventilation design) (◆◆◆)

Solar Water Heating System

- Install solar water heating systems for preheating swimming pools and spas (◆◆)
- Install solar for domestic hot water (◆◆◆)

Score for Renewable Energy Strategies

Total Points (◆) Available 35

Category Seven

Water Quality, Conservation, and Reclamation

Establish Water Management Practices

- Adopted water conservation operations and maintenance protocol (◆◆)
- Maintain and monitor water quality (◆◆)

Reduce Level of Water Consumption

- Limit the amount of hot water used for cleaning (◆)
- Preventative maintenance to all water systems (◆)
- Water-efficient equipment, such as fixtures, laundry, coolers, ice machines, etc (◆)
- Water conservation signage (◆)
- Ultra-low flush (less than 1.5 gal) or dual flush toilets (◆◆)
- Ultra-low flow showerheads (less than 2 gal/min) (◆◆)
- Sink motion sensors (◆◆)
- Waterless urinals (◆◆)
- Install water conserving appliances and technologies (◆◆◆)
- Efficient irrigation systems (◆◆◆)

Interior Water Conservation

- Linen reuse policy and program (◆)
- Fix leaks in the toilets and fix sticking toilet handles (◆)
- Replace toilets with low-flow toilets (◆)
- Use a displacement bag in toilets (◆)
- Install variable-buoyancy flappers (◆)
- Install low-flow showerheads (◆)
- Maintain optimal system pressure (◆)
- Check for leaky faucets (◆)
- Install aerators to reduce faucet water usage (◆)

Exterior Water Conservation

- Check and repair leaks on a regular basis. (◆)
- Use automatic shut-off nozzles to control flow and prevent water left running (◆◆)
- Low water use landscaping - Xeriscape (◆◆◆)

On-site Grey Water Reclamation and Waste Water Treatment

- Reuse grey water - rinse water not contaminated with chemicals - to water plants (water from steam tables and used ice are especially good for reuse) (◆◆)
- Grey water irrigation (◆◆)
- Apply water cascading technology (◆◆◆)
- Establish Innovative Waste Water Treatment Technologies (i.e. constructed wetland) (◆◆◆)

Score for Water Quality, Conservation, & Reclamation
Total Points (◆) Available 47

Category Eight

Waste Reduction, Reuse, Recycling and Disposal

Solid Waste Management

- Maintain a operations plan to maximize reuse and closed-loop materials recovery (◆)
- Develop a waste reducing maintenance policy (◆)
- Conduct facilities waste audits (◆◆)
- Create reuse and recycling transport packaging procedures (◆◆◆)
- Low-waste generating procurement (◆◆◆)

Establish Onsite Composting Program

- Landscape organic waste materials composting system (◆)
- Food waste materials composting system (◆◆◆)

Battery and Household Hazardous Waste Disposal Plan

- Establish Plan (◆)

Construction Waste Management

- Recycle or reuse construction waste (◆)
- Deconstruct and recovery building materials (◆◆)
- Adoptive reuse of older buildings (◆◆◆)

Establish Onsite Reuse and Recycling Program

- Recycle oil and grease (◆)
- Donate or reuse discarded or leftover materials (◆)
- Designate recycling containers in guest rooms (◆)
- Place recycling bins in vending areas (◆)
- Use reusable glassware instead of disposables (◆◆)
- Use refillable dispensers instead of small bottles and use brand name soap and shampoos (◆◆)

**Score for Waste Reduction, Reuse,
Recycling and Disposal**
Total Points (◆) Available 29

Category Nine Transportation and Air Quality

Provide Options for Lowest Impact Commuter Transportation

- Offer customers program to offset travel impacts (◆◆)

Provide Low-impact Transportation Options

- Alternative Fueled Vehicles (AFVs) (◆)
- Fuel-efficient vehicles (hybrid/electric/biofuels) (◆)
- Incentives for alternative transport options (ride sharing, bicycle, walking) (◆◆)

Improve Indoor and Local Air Quality

- 100% smoke-free indoor environment (◆)
- No emissions from incineration (◆)
- No emissions from wood-burning fireplaces (◆◆)
- Indoor air quality management system in use (◆◆)
- Low emission products, equipment (◆◆◆)
- Low emission vehicles in use for all of fleet (◆◆◆)
- Zero emission vehicles for 1/2 or more of fleet (◆◆◆)
- Purchase of carbon offsets (◆◆◆)

Score for Transportation and Air Quality
Total Points (◆) Available 24

Commitment to Higher Environmental Performance	40	<input type="text"/>
Community and Customer Education	22	<input type="text"/>
Supply-Chain Management	34	<input type="text"/>
Facility Design, Sites, and Land Use	48	<input type="text"/>
Energy Efficiency, Conservation, Management	109	<input type="text"/>
Renewable Energy Strategies	35	<input type="text"/>
Water Quality, Conservation, and Reclamation	47	<input type="text"/>
Waste Reduction, Reuse, Recycling and Disposal	29	<input type="text"/>
Transportation and Air Quality	24	<input type="text"/>
Environmentally Responsible Travel Performance Index Total Score	388	<input type="text"/>