

# Innovation in Operations

1-4 points

**IN Credit 1.1-1.4****Innovation in Operations**

## Intent

Provide facilities' operations, management, and upgrade teams the opportunity to achieve points for achieving environmental and health benefits beyond those already addressed by the *Green Guide for Health Care Operations* section.

## Health Issues

The health care industry's responses to environmental stewardship are continuously evolving. Priorities such as evidence-based design, carbon neutrality, and a toxic-free health care sector drive innovations toward the goal of a high performance, healing environments. The health care sector's mission to provide healing uniquely positions it to evolve ever more powerful and innovative strategies to enhance building performance. The Innovation credits reward exemplary performance of existing credits and encourage implementation of innovative facility operations strategies.

## Credit Goals

Credit 1.1 (1 point)	Identify the intent of the proposed innovation credit, the proposed credit goals, the additional environmental benefits delivered and the performance metrics used to document the additional environmental benefits delivered over a minimum one-year period. Successful innovation credit proposals shall require and track continuous improvement.
Credit 1.2 (1 point)	Same as Credit 1.1.
Credit 1.3 (1 point)	Same as Credit 1.1.
Credit 1.4 (1 point)	Same as Credit 1.1.

## Suggested Documentation

- Prepare the innovation credit proposal(s) (including intent, credit goals, thresholds and/or calculations, documentation, and operations approach) and relevant evidence of performance achieved.
- Document achievement in accordance with credit goals, and annually review progress.

## IN Credit 1.1-1.4 continued

### Innovation in Operations

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#### Reference Standards

There is no reference standard for this credit.

#### Potential Technologies & Strategies

- Substantially exceed a *Green Guide* credit threshold such as for energy performance or waste management. Several credits in the *Operations* section provide guidance on related innovation points.
- Apply strategies or measures that are not covered by the *Green Guide for Health Care*.
- Consider establishing a program phasing in linen products meeting the requirements of the U.S. Department of Agriculture's National Organic Program. (See Resources for more information.) Organic cotton is available for products such as: newborn onesies, receiving blankets, personal care items (tampons, cotton balls, q-tips, etc.), hospital scrubs, patient gowns, lab coats, bed linens, and towels. Institute a laundry program minimizing chemical and water use.
- Consider running an audit of the facility quantifying how many and what kind of spaces maximize the use of space to their workload. Integrate an improvement plan into the Integrated Operations and Maintenance program outlined in IO Prerequisite 1.

#### Resources

BetterBricks, Hospitals & Healthcare,

<http://www.betterbricks.com/subHomePage.aspx?ID=1&PID=detailpage>

Global Health and Safety Initiative, <http://www.noharm.org>

Pharos Project, <http://www.pharosproject.net/>

Practice Greenhealth, <http://www.practicegreenhealth.org>

Savings By Design, Awards, <http://www.savingsbydesign.com>

U.S. Department of Agriculture's National Organic Program, <http://www.ams.usda.gov/nop/Consumers/Consumerhome.html>.

U.S. Department of Energy (DOE), Federal Energy Management Program, <http://www1.eere.energy.gov/femp/>

U.S. Department of Energy (DOE), High Performance Building Database, <http://www.eere.energy.gov/buildings/highperformance/>

U.S. Green Building Council, Credit Interpretation Rulings: Innovation credits, <http://www.usgbc.org>

U.S. Green Building Council, Innovation & Design Credit Catalog, <http://www.usgbc.org/ShowFile.aspx?DocumentID=3569>

Whole Building Design Guide, <http://www.wbdg.org/>

1 point

## IN Credit 2.1

### Documenting Sustainable Operations Cost Impacts: Overall Operating Costs

#### Intent

Document sustainable building operations cost impacts to increase awareness of the benefits of green facilities operations.

#### Health Issues

Executives from early adopter health systems have identified environmental stewardship as a defining facet of leadership, excellence, and quality in the health care industry. Increasingly, they are also moving beyond the question of whether to incorporate green principles into facility design, construction, and operations to how best to leverage their positions as health care providers, major players in the U.S. economy, and organizations with significant purchasing power to accelerate market transformation. The benefits of greening operations may be quantified in terms such as monetary savings, avoided pollution, and improved patient and staff safety. Making the business case reinforces the economic viability of adoption and implementation of sustainable operations policies and programs.

#### Credit Goals

- Document overall building operating costs for the previous five years (or length of building occupancy, if shorter), and track changes in overall building operating costs over a minimum one-year period.
- Compile building operating cost and financial impacts for a minimum of five implemented *Green Guide* credits on an ongoing basis.

OR

- Annually conduct a triple bottom line sustainability report.

## IN Credit 2.1 continued

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### Documenting Sustainable Operations Cost Impacts: Overall Operating Costs

#### Suggested Documentation

- Compile all building operating costs for the previous five years (or length of building occupancy, if shorter) and annually update.
- Track changes in overall costs for a minimum of five implemented credits over a minimum one-year period.
- Publish or otherwise publicly share performance data.

OR

- Annually document a triple bottom line sustainability report over a minimum one-year period.
- Publish or otherwise publicly share performance data.

#### Reference Standards

There is no reference standard for this credit.

#### Potential Technologies & Strategies

- A triple bottom line sustainability report takes into consideration environmental and social considerations in addition to economic considerations.
- Track building operating costs to identify positive impacts relative to sustainable performance improvements to building and operations.
- Consider tracking the facility's ecological footprint.

#### Resources

Canadian Sustainability Reporting Toolkit, <http://www.sustainabilityreporting.ca/>

Global Health and Safety Initiative, <http://www.noharm.org>

Global Reporting Initiative, <http://www.globalreporting.org/>

The Sustainability Report, <http://www.sustreport.org/>

Sustainability Reports, <http://www.enviroreporting.com/service/>

1 point

**IN Credit 2.2****Documenting Sustainable Operations Cost Impacts:  
Absenteeism & Health Care Cost Impacts****Intent**

Document absenteeism, staff retention, health care costs and other impacts of sustainable building performance improvements.

**Health Issues**

Evidence-based design research indicates that access to daylight and views and healthy indoor air quality increases staff productivity and reduces patient stays. Many green operations strategies increase productivity by reducing exposure to hazardous substances and the associated regulations around their storage, use, and disposal. Health care is uniquely positioned to make use of the records gathered on staff retention, absenteeism, slips and falls, patient satisfaction, patient length of stay, etc., to correlate changes in trends over time to environmental improvements to facility operations.

**Credit Goals**

- Document the history of absenteeism, staff retention and health care costs for full-time equivalent (FTE) staff for the previous five years (or length of building occupancy with a minimum of 12 months).
- Track changes in absenteeism, staff retention and health care costs (claim costs and any reductions in premium costs should be provided if available) for full-time equivalent (FTE) staff relative to the pursuit of minimum five *Green Guide for Health Care* credits and set annual goals for improvement.

## IN Credit 2.2 continued

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### Documenting Sustainable Operations Cost Impacts: Absenteeism & Health Care Cost Impacts

#### Suggested Documentation

- Document and annually update the history of absenteeism, staff turnover and health care costs for full-time equivalent (FTE) staff in accordance with the credit goals.
- Document and annually update changes over a minimum twelve-month period in absenteeism and health care costs for full-time equivalent (FTE) staff relative to sustainable building performance improvements in accordance with the credit goals.
- Publish or otherwise publicly share performance data.

#### Reference Standards

There is no reference standard for this credit.

#### Potential Technologies & Strategies

- Study possible correlations between changes in absenteeism, staff turnover and health care costs for full-time equivalent staff and sustainable performance improvements associated with achievement of prerequisites and credits in the *Green Guide for Health Care Operations* section.
- Track the difference between “before” and “after” operational costs and environmental and safety metrics associated with implementation of *Green Guide for Health Care* credits. Examples of environmental and safety metrics include:
  - Medical errors
  - Chemical spills
  - Waste diversion rate
  - Waste removal fees
  - Incidents of exposure to chemicals and biologicals
  - Use of wax strippers on flooring
  - Air quality complaints
  - Air levels exceeding OSHA or NIOSH levels
  - Disruption of staff circadian rhythm
  - Success of acoustic control measures in reducing staff and patient stress level and distractions
  - Quality of the staff work environment
  - Quality of sleep
  - Slips and falls

#### Resources

Center for Health Design, <http://www.healthdesign.org>

The Joint Commission, <http://www.jointcommission.org/>

Practice Greenhealth, <http://www.practicegreenhealth.org>

1 point

**IN Credit 3****Research Initiatives****Intent**

Expand the body of knowledge around the long-term impact of sustainable operations initiatives by participating in third party research projects.

**Health Issues**

Evidence-based research on the health and financial benefits related to sustainable buildings in health care has been spearheaded by organizations such as the Center for Health Design, Health Care Without Harm, and the Healthy Building Network. While additional research is needed, current data indicates a correlation between healthy, sustainable health care facilities operations and improved patient healing rates, reduced need for pain medication, increased patient satisfaction, reduced instances of medical errors, and increased staff retention.

**Credit Goals**

- Engage in public, third party research initiatives to help discover the impact that sustainable building performance improvements have on building occupants, the local community, and/or the global environment. Correlate research metrics with *Green Guide for Health Care* credits or equivalent green operations strategies.

## IN Credit 3 continued

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### Research Initiatives

#### Suggested Documentation

- Demonstrate involvement in a third-party research initiative in accordance with the Credit Goals over a minimum one-year period.
- Publish or otherwise publicly share performance data and research results.

#### Reference Standards

There is no reference standard for this credit.

#### Potential Technologies & Strategies

- Parameters for research may include indicators such as: staff recruitment, satisfaction, retention or clinical performance measures (i.e., medical errors, staff satisfaction, or patient outcome) or efficacy or product substitutes (i.e. development of safe, sustainable and efficacious cleaners and disinfectants approved and registered by federal agencies such as the FDA, EPA. etc.).
- Engage in sustainable health care research initiatives, surveys, or white papers sponsored by institutions such as:
  - Professional associations
  - Universities
  - Leap Frog
  - Center for Health Design
  - Health Care Without Harm
  - Practice Greenhealth
  - Global Health and Safety Initiative
- Use process mapping and other process based methodologies to identify changes and improvements in performance measures such as medical errors and patient outcomes. Track results of the implemented improvements for a minimum one-year period.
- Research projects should begin with a search of peer-reviewed studies on their topic.

#### Resources

Center for Health Design, <http://www.healthdesign.org>

Global Health and Safety Initiative, <http://www.noharm.org>

Practice Greenhealth, <http://www.practicegreenhealth.org>