

UNIVERSITY OF VERMONT MEDICAL CENTER GREEN BOND

FRAMEWORK OVERVIEW AND SECOND OPINION BY SUSTAINALYTICS

July 4, 2016



www.sustainalytics.com

Vikram Puppala (Toronto)
Associate Director, Advisory Services
vikram.puppala@sustainalytics.com
(+1) 647 317 3694

Charlotte Peyraud (New York)
Senior Advisor, Institutional Relations
Charlotte.peyraud@sustainalytics.com
(+1) 646 518 0184

TABLE OF CONTENTS

FRAMEWORK OVERVIEW AND SECOND OPINION BY SUSTAINALYTICS	1
1. Preface	3
2. Introduction	3
3. Framework Overview	3
3.1 Use of Proceeds	4
3.2 Project Evaluation and Selection Process	4
3.3 Management of Proceeds	5
3.4 Reporting	6
4. Sustainalytics' Opinion	7
Conclusion	8
Appendices	9
Appendix 1: Adherence to the Green Bond Principles 2016	9
Appendix 2: University of Vermont Medical Center Commitment to Practicing Environmental Stewardship	14
Appendix 2: LEED Score Card for Inpatient Facility	16
About Sustainalytics	18

1. PREFACE

The University of Vermont Medical Center (UVMMC) has engaged Sustainalytics to provide a second opinion on its green bond issuance and the bond's environmental credentials. As part of this engagement, Sustainalytics held conversations with various members of The UVM Medical Center's management team to understand the sustainability impact of their business processes and planned use of proceeds for the bond issuance. Sustainalytics also reviewed relevant public and internal documents. This document contains two sections: Framework Overview – summary of The UVMMC Green Bond framework; and Sustainalytics' Opinion – an opinion on the framework.

2. INTRODUCTION

The University of Vermont Medical Center is part of a five-hospital network that serves patients in Vermont and northern New York. It is the primary referral center for these regions, serving a population of more than 1 million people. Dating back to the 1800s, The UVM Medical Center is a non-profit organization based in Burlington, VT, that has a mission "to improve the health of the people in [served] communities by integrating patient care, education, and research in a caring environment."

UVMMC is a mission-driven organization and is striving to be the greenest healthcare organization in the country. UVMMC's environmental policy, as published in its signed commitment to the community, includes adherence to the following principles: Conservation and Sustainable Use of Natural Resources, Emissions Reductions, Waste Reduction, Energy Conservation, Product Stewardship, Sustainable Food Procurement, and Upstream Management System (education about root causes of environmental problems). In accordance with its commitment, the organization maintains a multi-year Sustainability Strategic Plan, and discloses performance on the plan in annual reports.

To achieve one of the objectives of its 2016-2020 Sustainability Strategic Plan, UVM Medical Center is planning to issue a green bond to finance the construction of a seven-level inpatient building sized at approximately 180,000 square feet. The seven-story building will host four floors of 32 single-occupancy, medical-surgical single rooms, and will have a total of 128 inpatient rooms. The inpatient facility is registered to achieve a Leadership in Energy and Environmental Design (LEED) Silver certification. UVMMC has also established energy and water conservation targets for the new building, namely a 25% reduction in water consumption and a 35% reduction in energy use as compared to existing inpatient facilities.

3. FRAMEWORK OVERVIEW

UVMMC is issuing a green bond that aims to fund the construction of a LEED-certified inpatient bed facility. This project aligns with UVMMC's 2016-2020 Sustainability Strategic Plan, and with the 'Energy Conservation' principle of its environmental policy. The following section summarizes UVMMC's green bond framework including the use of proceeds, process for project selection, the management of proceeds, and reporting.

3.1 Use of Proceeds

All proceeds of the bond will be allocated to the construction of a seven-level inpatient building sized at approximately 180,000 square feet. The seven-story building will host four floors of 32 single-occupancy, medical-surgical single rooms, and will have a total of 128 inpatient rooms. UVMMC is seeking a LEED certification for the inpatient facility, and is aiming to secure a LEED Silver certification.

While UVMMC has successfully achieved LEED Gold certification in the past, LEED Silver was chosen as the designation for this inpatient facility keeping in mind two key considerations. The first is that the inpatient facility will be built on an existing site, and will use the energy infrastructure of the existing central plant. While the new facility itself will be energy efficient, and will qualify for LEED points based on its efficiency, UVMMC is not improving the efficiency of the existing central plant infrastructure as a part of this project. Additionally, UVMMC has also disclosed that this inpatient facility will be the first new building to be certified under the LEED for Healthcare (LEED-HC) construction rating system. Given this scope, and the scale of the project, UVMMC concluded that LEED Silver would be the most feasible designation.

3.2 Project Evaluation and Selection Process

The inpatient bed facility was selected as the recipient of green bond proceeds based on the facility's registration to achieve LEED Silver certification. LEED is an internationally recognized green building certification that provides a standardized measure of sustainability in building design and construction. LEED certification evaluates the sustainability of a building by assigning points for performance in the following key areas:

- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Innovation in Design
- Regional Priority

LEED Silver certification requires a building to achieve between 50 and 59 points to demonstrate performance in the areas outlined above. These points are tracked in a LEED scorecard. Given that UVMMC will not know the status of its application for LEED Silver certification until after the building's completion, they have hired an external sustainability consultant to track progress towards certification during the design and construction phase of the building. The external sustainability consultant- Thornton Tomasetti (TT) - has completed a LEED Silver risk assessment for UVMMC's inpatient facility. The risk assessment discloses that UVMMC is on track to achieve 55 points. Based on this assessment, UVMMC has disclosed to Sustainalytics that they feel comfortable meeting LEED Silver certification requirements.

Additionally, UVMMC has set performance targets in two of the abovementioned areas (Water Efficiency and Energy and Atmosphere), which also align with Green Project categories outlined by the International Capital Market Association's Green Bond Principles (GBP). These performance targets include a 25% reduction in water consumption and a 35% reduction in energy use as compared to existing inpatient facilities. UVMMC has also modelled the energy performance of its new inpatient facility using the metric of Energy Use Intensity (EUI). The EUI expresses a building's energy use as a function of its size or other characteristics by dividing the total energy consumed by the building in one year (kBtu) by the total gross floor area of the building (square feet). It is a metric developed by the U.S. Environmental Protection Agency's Energy Star program. UVMMC estimates that its new inpatient building will achieve an EUI that is 47% less than the EUI of existing buildings (estimated to be 143 kBtu/square foot/year). UVMMC's LEED registration certificate and LEED Project Checklist also reflect its commitment to its stated performance targets.

3.3 Management of Proceeds

The green bond will be issued by the Vermont Educational and Health Buildings Financing Agency (VEHBFA). However, the entity using the bond proceeds to implement the eligible project will be UVMMC. The total cost of the inpatient building is expected to be approximately \$190 million, and is being financed through a combination of working capital, fundraising, and short- and long-term debt. The value of UVMMC's green bond is expected to be lower than the value of the green asset being financed, i.e. the proceeds from the bond will only account for a part of the total cost of the building.

The proceeds from the green bond will be held in a liquid, money market account managed by UVMMC's finance department. Part of the bond proceeds will be used to reimburse UVMMC for building construction costs already incurred. The rest will be allocated directly to construction of the building.

A requisition process will be followed before bond proceeds are used to pay for construction costs. UVMMC will send a requisition to VEHBFA (the issuer of the bond), requesting the release of bond funds to pay for construction costs. The requisition details what the cost is for and to whom the cost should be paid. VEHBFA confirms that the requisition is for the construction of the building, approves the request, and sends the requisition to the bond trustee for payment utilizing bond proceeds. UVMMC has noted that requests to use bond proceeds for financing costs unrelated to the new inpatient facility would be declined in the requisition phase. UVMMC is confident that the requisition process described above provides sufficient assurance that bond proceeds are directed exclusively towards the building and construction of the inpatient facility.

3.4 Reporting

Allocation Reporting

The proceeds of the Bonds expended on the inpatient building will be tracked by UVMMC. UVMMC has disclosed that their external auditor will provide additional assurance on allocation of bond proceeds by performing testing on payments made using the proceeds, and confirming adherence to the requisition process.

Additionally, UVMMC has confirmed that they will annually disclose the amount of the proceeds of the Series 2016B Bonds that have been expended to date on the inpatient building to the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System (EMMA). This disclosure will continue until such time as the proceeds of the Bonds are fully expended. Once all the net proceeds of the Bonds to be expended on the inpatient building have been spent, no further updates on the use of such proceeds will be provided.

Impact Reporting

UVMMC maintains consistent documentation that tracks progress towards LEED Silver certification. One such document is the LEED status report, published quarterly by UVMMC on its website. This report details the status of the LEED scorecard, i.e. the current number of points UVMMC's inpatient facility has achieved under each of the six key areas tracked by LEED certification. In addition, UVMMC will report on its success in achieving LEED silver certification to the Municipal Securities Rulemaking Board's EMMA.

Additionally, UVMMC has established energy and water conservation targets for the new inpatient bed facility. More specifically, UVMMC is targeting a 25% reduction in water consumption and a 35% reduction in energy use as compared to existing inpatient facilities. UVMMC has committed to reporting on these established targets after one year of occupancy of the inpatient facility (currently, the building is scheduled to be complete and ready for occupancy in July 2019). UVMMC has confirmed that after twelve months of occupancy, they will complete a measurement and verification process to determine whether the energy and water efficiency targets set for the inpatient facility have been met. Measurement of energy and water use will be accomplished through metering capability that will be installed as a part of the project, and the measured results will be benchmarked against UVMMC's peers (i.e. existing inpatient facilities across the country or New England). UVMMC will then disclose the performance of the inpatient facility against the established efficiency targets on their website.

4. SUSTAINALYTICS' OPINION

A strong environmental commitment: UVMMC is an organization with a strong environmental commitment, as seen by its policy and its 2016-2020 Sustainability Program Strategic Plan. UVMMC's policy includes a commitment not only to improve its own environmental performance through the sustainable use of resources and the reductions of emissions and waste, but also to promote greater environmental responsibility in the community and educate its workforce on environmental issues. Additionally, UVMMC has a strong five-year sustainability strategic plan that outlines specific objectives against its environmental commitments. The plan also lays out measurable targets for its objectives, and assigns responsibility for each of these targets to the relevant department leaders. Senior management is responsible for monitoring the overall progress towards the broader environmental commitments.

In issuing a green bond to construct its new inpatient facilities as a LEED-certified energy efficient building, UVMMC is realizing the environmental commitment outlined in its 2016-2020 Sustainability Strategic Plan. UVMMC has also has a track record of constructing green buildings; it has achieved LEED Gold certification for The Glen and Rosemarie Wright Mother-Baby Unit and the Hinesburg Family Medicine Building. Given its strong environmental policy, integration of the policy in organizational actions through its Sustainability Strategic Plan, and past performance, Sustainalytics is of the opinion that UVMMC regularly considers the environmental impact of its operations, and is well positioned to issue a green bond.

Impact of LEED certification on Climate Change

Energy efficient buildings are explicitly recognized by the ICMA Green Bond Principles as offering clear environmental benefits. Buildings are a significant contributor to Green House Gas (GHG) and carbon emissions. For example, in the US, buildings account for 38% of all carbon dioxide emissions, 73% of all national electricity consumption, and 13.6% of all potable water consumption. Improving their energy efficiency is a robust way to mitigate the effects of climate change. LEED certification is an independent verification of a building's energy and resource efficiency; for example, LEED Gold certified buildings can generate up to 34% less GHG emissions than the average commercial building.

Adherence to the Green Bond Principles 2016

UVMMC's green bond follows the guidance provided by the Green Bond Principles 2016, and is in alignment with its four pillars. Please see Appendix 1 for more details.

Conclusion

By issuing a green bond to finance the construction of its new, LEED Silver certified, inpatient building, UVMMC is acting in accordance with its environmental policy, and objectives in its 2016-2020 Sustainability Strategic Plan. It is aiming to reduce GHG emissions through energy efficiency, and sustainably use resources through reducing water consumption.

UVMMC is selecting this project as the recipient of green bond proceeds as it is registered to achieve LEED Silver certification. It has also established clear energy and resource efficiency targets for the building. Given that the LEED process requires consistent documentation to track progress towards certification, UVMMC has committed to transparently reporting on its efficiency targets, on its progress towards certification, and on its achievement of LEED certification. UVMMC's green bond follows the guidance provided by the Green Bond Principles 2016 (see Appendix 1), and is in alignment with its four pillars, which address the use of proceeds, process of project evaluation and selection, management of proceeds, and reporting. Based on the above considerations, Sustainalytics is of the view that UVMMC's green bond is robust and credible.

APPENDICES

Appendix 1: Adherence to the Green Bond Principles 2016

Green Bond / Green Bond Programme External Review Form

Section 1. Basic Information

Issuer name: Vermont Educational and Health Buildings Financing Agency (VEHBFA)

Review provider's name: Sustainalytics

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (please specify): | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The University of Vermont Medical Center (UVMHC) is the entity using the bond proceeds to implement the eligible project- an inpatient facility registered to achieve LEED Silver certification. UVMHC has confirmed to Sustainalytics that the bond offering document will state that the proceeds of this bond will be used exclusively for the construction of the LEED Silver certified inpatient building. The LEED Silver certified building will help to mitigate the impacts of climate change through resource conservation and GHG emissions reduction.

Use of proceeds categories as per GBP:

- | | |
|--|---|
| <input type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Sustainable management of living natural resources |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input type="checkbox"/> Clean transportation |
| <input checked="" type="checkbox"/> Sustainable water management | <input type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient products, production technologies and processes | <input type="checkbox"/> Other (please specify): |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | |

If applicable please specify the environmental taxonomy, if other than GBPs: N/A

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The project was selected due its registration to obtain a LEED silver certification. Through a risk assessment conducted by UVMCM and its external sustainability consultant, UVMCM has confirmed to Sustainalytics that the new inpatient building is on track to achieve LEED Silver certification. Sustainalytics is of the opinion that the process to select this building for use of green bond proceeds is robust.

Evaluation and selection

- | | |
|--|---|
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (please specify): |

Information on Responsibilities and Accountability

- | | |
|--|--|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

The UVM Finance department has sufficient oversight over the management of proceeds, and there is a formal and detailed requisition process that ensures the proceeds are used for the purposes of the LEED Inpatient facility.

Tracking of proceeds:

- | |
|--|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in a systematic manner |
| <input type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (please specify): |

Additional disclosure:

- | | |
|--|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (<i>please specify</i>): |

4. REPORTING

Overall comment on section (*if applicable*):

UVMMC will annually disclose the amount of proceeds that have been expended to date on the inpatient facility to EMMA. They will also report on verification of allocation of proceeds conducted by an external auditor. UVMMC will also report impact of the bond. This is in line with industry norms.

Use of proceeds reporting:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Project-by-project | <input type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (<i>please specify</i>): |

Information reported:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Allocated amounts | <input type="checkbox"/> GB financed share of total investment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Frequency:

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Impact reporting:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Project-by-project | <input type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Frequency: TBD

- | | |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
|---------------------------------|--------------------------------------|

☒ Other (please specify): LEED status reports will be published quarterly; performance of the inpatient facility in relation to the established water and energy efficiency targets will be disclosed on the UVMHC website after one year of occupancy of the building

Information reported (expected or ex-post):

- | | |
|--|--|
| <input type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings |
| <input checked="" type="checkbox"/> Other ESG indicators (please specify):
Water savings; LEED status reports; receipt of LEED Silver certification | |

Means of Disclosure

- | | |
|---|--|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input checked="" type="checkbox"/> Other (please specify): Allocation reporting will be published on EMMA; Energy and Water savings achieved will be published on the UVMHC website; LEED status reports will be published on website; receipt of LEED Silver certification will be disclosed to EMMA |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): | |

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

UVMHC website: <https://www.uvmhealth.org/medcenter/Pages/default.aspx>
Emma website: <http://emma.msrb.org/>

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (please specify): | |

Review provider(s): N/A

Date:

Appendix 2: University of Vermont Medical Center Commitment to Practicing Environmental Stewardship



Commitment to Practicing Environmental Stewardship

The University of Vermont Medical Center's mission is to improve the health of the people in the communities we serve by integrating patient care, education and research in a caring environment. Our vision is to be a national model for the delivery of high-quality academic health care for a rural region.

As a mission-driven non-profit with deep roots in the community, both our mission and vision are built on a foundation of values that includes a longstanding commitment to being *prudent stewards of limited natural resources*.

The University of Vermont Medical Center recognizes that the health of the community is linked to the health of the environment. The University of Vermont Medical Center therefore, will strive to ensure that the day to day operations are founded in sound environmental policies in all aspects of care delivery. The University of Vermont Medical Center will also strive to minimize its environmental footprint in the community through adherence to the following principles:

Conservation of Natural Resources

The University of Vermont Medical Center recognizes that there is a finite quantity of natural resources such as clean air, water, and land, and will conserve, recycle and re-use those resources where appropriate, as part of our commitment to the community.

Emissions Reductions

The University of Vermont Medical Center will make efforts to achieve an ongoing performance record of emissions reductions. This may include, air, water, and other waste emissions, which could have an adverse effect on the environment.

Waste Reduction

Ongoing monitoring of all categories of waste generation will continue, with associated analyses of waste volumes as related to healthcare delivery services. The University of Vermont Medical Center has already made tremendous strides in this area by reducing the volume of wastes requiring special treatment, recycling and re-using products where appropriate. The challenge will be to continue to achieve waste volume reductions in light of simultaneous and aggressive evolution and development of health care goods and services in an economically tight business environment.

Energy Conservation

The University of Vermont Medical Center will continue to identify opportunities for energy conservation in all aspects of operations, to build on the successful track record of energy conservation over the past decade.

Product Stewardship

The University of Vermont Medical Center will collaborate with its suppliers to ensure that selected health care products afford efficacy in care delivery, as well as economic and environmental performance. The University of Vermont Medical Center will continue to actively phase out the use of mercury and mercury containing products; The University of Vermont Medical Center will take the long term approach in evaluating reusable versus disposable products. Environmental impacts and resource utilization will be a factor in these decisions. A preference will be developed for products that support the principles listed herein.

111 Colchester Avenue, Burlington, VT 05401 | UVMHealth.org/MedCenter

Sustainable Food

The University of Vermont Medical Center is committed to offering where feasible, locally produced, minimally processed, unrefined foods. We will adopt a sustainable approach to food procurement which is environmentally sound, farmer-safe and ecologically protective. The University of Vermont Medical Center is also committed to minimizing and beneficially reusing food waste and supporting the use of food packaging and products that are ecologically sound.

Upstream" Management System

Through the Environmental Management System The University of Vermont Medical Center will focus on the root cause of situations which lead to potential environmental problems. Root cause allows problems to be solved "upstream". In particular, The University of Vermont Medical Center will continue to educate its workforce on environmental issues, pollution prevention, and waste management. Educational efforts will promote conservation and ultimately help to minimize the environmental impact of health care byproducts. Environmental stewardship also includes educating the community we serve and promoting opportunities.

Sustainable Use of Natural Resources

The University of Vermont Medical Center will continue to develop capacity to make decisions, which are reflective of a sustainable use of natural resources. In particular, energy, water, land, and fuel use.

The University of Vermont Medical Center will strive to ensure full compliance with regulatory requirements including, but not limited to:

- All applicable U.S. EPA Regulations
- Chittenden Solid Waste District Recycling Requirements
- State and Local Requirements
- Joint Commission for the Accreditation of Healthcare Organizations Standards

The University of Vermont Medical Center will continue to demonstrate improvement in environmental performance. This will be determined by a number of indicators. These may include ongoing waste audits/assessments, ongoing monitoring of recycling and re-use programs, hazardous materials use, energy, water and gas use, fuel consumption, emissions, etc.

The University of Vermont Medical Center makes this commitment to the community as part of our ongoing mission to improve the health of the communities we serve. The University of Vermont Medical Center believes that by practicing environmental stewardship, we can provide corporate leadership in our community while protecting the environment.


Signed in Support of:



Eileen Whalen, MHA, RN
President and Chief Operating Officer

12/11/15
Date

Appendix 2: LEED Score Card for Inpatient Facility

 LEED 2009 for Healthcare: New Construction and Major Renovations		Fletcher Allen Health Care	
Project Checklist - Fletcher Allen Health Care - Inpatient Bed Tower		Prepared by Thornton Tomasetti	
20-May-16			
12	1 1 4	Sustainable Sites Possible Points: 18	
Y	G 7 N		
Y		Prereq 1 Construction Activity Pollution Prevention	
Y		Prereq 2 Environmental Site Assessment	
1		Credit 1 Site Selection 1	
1		Credit 2 Development Density and Community Connectivity 1	
1		Credit 3 Brownfield Redevelopment 1	
3		Credit 4.1 Alternative Transportation—Public Transportation Access 3	
1		Credit 4.2 Alternative Transportation—Bicycle Storage and Changing Rooms 1	
1 0 0		Credit 4.3 Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles 1	
1		Credit 4.4 Alternative Transportation—Parking Capacity 1	
1		Credit 5.1 Site Development—Protect or Restore Habitat 1	
1		Credit 5.2 Site Development—Maximize Open Space 1	
1		Credit 6.1 Stormwater Design—Quantity Control Regional Priority 1	
1		Credit 6.2 Stormwater Design—Quality Control 1	
1		Credit 7.1 Heat Island Effect—Non-roof Regional Priority 1	
1		Credit 7.2 Heat Island Effect—Roof 1	
1 0		Credit 8 Light Pollution Reduction 1	
1		Credit 9.1 Connection to the Natural World—Places of Respite 1	
1		Credit 9.2 Connection to the Natural World—Direct Exterior Access for Patients 1	
1 0 3 5		Water Efficiency Possible Points: 9	
Y		Prereq 1 Water Use Reduction—20% Reduction	
Y		Prereq 2 Minimize Potable Water Use for Medical Equipment Cooling	
1		Credit 1 Water Efficient Landscaping—No Potable Water Use or No Irrigation 1	
1		Credit 2 Water Use Reduction: Measurement & Verification Regional Priority 1 to 2	
1 2		Credit 3 Water Use Reduction 1 to 3	
1		Credit 4.1 Water Use Reduction—Building Equipment 1	
1		Credit 4.2 Water Use Reduction—Cooling Towers 1	
1		Credit 4.3 Water Use Reduction—Food Waste Systems 1	
18 0 3 18		Energy and Atmosphere Possible Points: 39	
Y		Prereq 1 Fundamental Commissioning of Building Energy Systems	
Y		Prereq 2 Minimum Energy Performance	
Y		Prereq 3 Fundamental Refrigerant Management	
14		Credit 1 Optimize Energy Performance 1 to 24	
8		Credit 2 On-Site Renewable Energy Regional Priority 1 to 8	
2		Credit 3 Enhanced Commissioning 1 to 2	
1		Credit 4 Enhanced Refrigerant Management 1	
1 1		Credit 5 Measurement and Verification 2	
1		Credit 6 Green Power 1	
1		Credit 7 Community Contaminant Prevention—Airborne Releases 1	
8 3 1 4		Materials and Resources Possible Points: 16	
Y		Prereq 1 Storage and Collection of Recyclables	
Y		Prereq 2 PBT Source Reduction—Mercury	
3		Credit 1.1 Building Reuse—Maintain Existing Walls, Floors, and Roof 1 to 3	
1		Credit 1.2 Building Reuse—Maintain Interior Non-Structural Elements 1	
2		Credit 2 Construction Waste Management 1 to 2	
2 1 1		Credit 3 Sustainably Sourced Materials and Products 1 to 4	
1		Credit 4.1 PBT Source Reduction—Mercury in Lamps 1	
2		Credit 4.2 PBT Source Reduction—Lead, Cadmium, and Copper 2	
1 1 0		Credit 5 Furniture and Medical Furnishings 1 to 2	
1 0		Credit 6 Resource Use—Design for Flexibility 1	
9 1 1 6		Indoor Environmental Quality Possible Points: 18	
Y		Prereq 1 Minimum Indoor Air Quality Performance	
Y		Prereq 2 Environmental Tobacco Smoke (ETS) Control	
Y		Prereq 3 Hazardous Material Removal or Encapsulation	
1		Credit 1 Outdoor Air Delivery Monitoring 1	
1		Credit 2 Acoustic Environment 1 to 2	
1		Credit 3.1 Construction IAQ Management Plan—During Construction 1	
1		Credit 3.2 Construction IAQ Management Plan—Before Occupancy 1	
4		Credit 4 Low-Emitting Materials 1 to 4	
1		Credit 5 Indoor Chemical and Pollutant Source Control 1	
1		Credit 6.1 Controllability of Systems—Lighting 1	
1		Credit 6.2 Controllability of Systems—Thermal Comfort 1	
1		Credit 7 Thermal Comfort—Design and Verification 1	
1		Credit 8.1 Daylight and Views—Daylight 2	
3		Credit 8.2 Daylight and Views—Views 1 to 3	
6 0 0 0		Innovation in Design Possible Points: 6	
Y		Prereq 1 Integrated Project Planning and Design	
1		Credit 1.1 Innovation in Design: PILOT - Medical and process equipment efficiency 1	
1		Credit 1.2 Innovation in Design: Green Education 1	
1		Credit 1.3 Innovation in Design: PILOT - Ergonomics Strategy 1	
1		Credit 1.4 Innovation in Design: EAc6 Green Power 100% 1	
1		Credit 2 LEED Accredited Professional 1	
1		Credit 3 Integrated Project Planning and Design 1	
1 0 2 1		Regional Priority Credits Possible Points: 4	
1		Credit 1.1 Regional Priority: SSC6.1 Storm water Design Quantity 1	
1		Credit 1.2 Regional Priority: SSC7.1 Heat Island Effect Nonroof 1	
1		Credit 1.3 Regional Priority: WEC2 Water Use Reduction M&V 1	
1		Credit 1.4 Regional Priority: EAc2, MR1, SS3 1	
55 5 11 38		Total Possible Points: 110	
Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110			

Disclaimer

All rights reserved. No part of this second party opinion (the “Opinion”) may be reproduced, transmitted or published in any form or by any means without the prior written permission of Sustainalytics.

The Opinion was drawn up with the aim to explain why the analyzed bond is considered sustainable and responsible. Consequently, this Opinion is for information purposes only and Sustainalytics will not accept any form of liability for the substance of the opinion and/or any liability for damage arising from the use of this Opinion and/or the information provided in it.

As the Opinion is based on information made available by the client, Sustainalytics does not warrant that the information presented in this Opinion is complete, accurate or up to date.

Nothing contained in this Opinion shall be construed as to make a representation or warranty, express or implied, regarding the advisability to invest in or include companies in investable universes and/or portfolios. Furthermore, this Opinion shall in no event be interpreted and construed as an assessment of the economic performance and credit worthiness of the bond, nor to have focused on the effective allocation of the funds’ use of proceeds.

The client is fully responsible for certifying and ensuring its commitments’ compliance, implementation and monitoring.

ABOUT SUSTAINALYTICS

Sustainalytics is the largest independent provider of sustainability research, analysis, and services to investors. We serve over 250 institutional investors which include some of the world's largest asset owners and asset managers. Through over 20 years of experience serving the responsible investment (RI) market, we have gained a reputation for providing high-quality ESG research solutions and excellent client service.

Sustainalytics is headed by seasoned professionals in the field of business, finance, and sustainability, with a wealth of experience in the Responsible Investment area. After more than 20 years of local experience and expertise in the Responsible Investment (RI) market Sustainalytics has developed a comprehensive understanding of trends and best practices and a solid process to assist organisations in integrating ESG considerations into their policies and strategies. We have worked with some of the world's financial institutions including pension plans, investment managers and banks providing customised support to help them achieve their RI objectives. Clients include ABN AMRO, APG, BBVA, BNP Paribas, Deutsche Bank, ING Bank, Lombard Odier, Lloyds Bank, Triodos Bank, UBS and over 250 other financial institutions and organisations.

Sustainalytics now has a staff of 250 employees globally, including over 120 analysts, with operations in Amsterdam, Boston, Bucharest, Frankfurt, New York, Paris, London, Singapore, Sydney, Timisoara, and Toronto, and representation in Brussels and Washington DC.



In 2015, Sustainalytics was named the Best SRI or Green Bond Research Firm by GlobalCapital. In December 2014, for the third year in a row, Sustainalytics was named best sustainable and responsible investment research firm in the Independent Research in Responsible Investment (IRRI) Survey, conducted by Thomson Reuters and SRI-CONNECT.

The infographic is titled 'SUSTAINALYTICS At a Glance' and features a world map composed of small squares. It lists various research areas and their respective issuer counts, followed by information about the team, shareholders, board members, offices, and clients.

Our Coverage

- Company ESG Research
4,500 Issuers
- Corporate Governance Research
4,000 Issuers
- Global Compact Research
20,000+ Issuers
- Product Involvement
40,000 Issuers
- Controversial Weapons Radar
40,000 Issuers
- Sector Research
42 Peer Groups

Our Team

Michael Jantzi, CEO

More than 250 staff members, including over 120 analysts with multidisciplinary and industry expertise

Shareholders: ABN AMRO MeesPierson, Michael Jantzi and senior staff, Mooncrest Holdings Limited, PGGM, Renewal Partners, Silver Box Holdings Limited and Triodos

Board Members:

Elsie Bos, CEO, PGGM

Alan Broadbent, CEO, Avana Capital Corporation

Melissa Brown, Partner, Daobridge Capital

Mike Musuraca, Managing Director, Blue Wolf Capital Partners LLC

Glen Saunders, Former board member and current senior adviser, Principles for Responsible Investment (PRI)

Georg Schürmann, Managing Director of Triodos Bank Germany

Our Offices

Offices in Amsterdam (Headquarters), Boston, Bucharest, Frankfurt, London, New York City, Paris, Singapore, Sydney, Timisoara, and Toronto. Representative offices in Brussels and Washington D.C.

Our Clients

Our 300+ clients worldwide include financial institutions, asset managers, mutual funds, pension funds, banks, insurance companies, international organizations and academic networks