Institution Profile: The College of Menominee Nation
Keshena, WI
Tribal College
Enrollment: Approx. 1,240

Brief History

The College of Menominee Nation (CMN) is located on the Menominee Indian Reservation in the state of Wisconsin, and is one of the 36 tribally controlled community colleges in the United States. College of Menominee Nation, a land grant institution, was chartered by the Menominee Tribal Legislature as an institution of higher education in March 1993 and received full accreditation in August 1998. As one of the two tribal colleges in Wisconsin, the College of Menominee Nation has two campuses in the state, the main campus is located in Keshena and a satellite campus in Green Bay that opened in 2003.

This higher education institution’s mission is to offer excellent learning experience while training and educating its students for careers and advanced studies in a multi-cultural world. Principles of research, promotion, perpetuation and nurture of American Indian culture are well integrated in all facets of education at this institution.¹ Community service and regular educational workshops are also integral to the educational experience here.

The main campus consists of seven buildings including technology, chemistry and biology labs, a distance education center as well as the new library facility. Though most buildings on the campus have sustainable features incorporated in them, the library building is the first construction to implement features following a green building rating system, the Leadership in Energy and Environmental Design (LEED®) rating system developed by the United States Green Building Council (USGBC). Though not certified, the project is designed to the LEED® Silver criteria.

SUSTAINABILITY MISSION

Institution and Sustainability

The history of the Menominee tribe begins at the mouth of the Menominee River, a mere 60 miles east of the present Menominee Indian Reservation. This is where the five clans were created: Bear, Eagle, Wolf, Moose, and Crane. For over 10,000 years, the Menominee way of life has been derived from the natural environment. The Menominee have long been recognized for their achievements in sustainable forest management practice and understanding of the social, ecological, and ethical

practices and responsibilities in sustaining natural resources for future generations. Following this understanding, since inception the College of Menominee Nation has strove to align its vision with the sustainability principles.²

Principles of sustainability are central to the institution’s mission. To investigate sustainability principles from the Menominee perspective, in 1993 the Sustainable Development Institute was founded to promote the efforts to sustain nature, culture, traditions, values, society, and people. The Institute has the directive to guide the Menominee Nation in exploring and enhancing the relationship of the Menominee to sustainability, integrating sustainability into the curricular decisions and offering experiential, research and professional learning opportunities to its students.

**Green Initiatives on Campus**

College of Menominee Nation implements many sustainability efforts influencing not only the campus community but also the surrounding community and the Menominee tribe. Following are the steps taken by the institution that evidence its commitment to holistic sustainability.

- **The Sustainable Development Institute (SDI)**, in collaboration with the USDA Forest Service, promotes sustainability through education, research and community engagement. Two important academic focuses are Sustainable Development and Sustainable Forestry but the institute also offers professional development courses, workshops, trainings, and certifications in sustainability.³

- **Basic Education for Sustainable Development** general education mandatory course for all students.

- **Strategies for Environmental Education, Development and Sustainability (SEEDS)** sells a unique blend of fair trade, organic, shade-grown, and bird-friendly coffee to the CMN community.⁴ The coffee sales are used to support the farmers in Chiapas as well as the local SEEDS chapter as they undertake other environmentally based projects throughout the academic year.⁵

- CMN students have also participated in national sustainability competitions such as National Wildlife Federation’s National Chill Out and Recyclemania as well as Great Lakes Earth Day Challenge sponsored by the EPA.

- The institution also performs recycling, garbage stream, carbon footprint/concentration analysis as well as taking a close look at transportation effect on campus.

- The Sustainability Coordinator assembled a Campus Sustainability Advisory Group, composed of faculty, staff, students and community members, to serve as a support group to help gain commitments from the various departments and staff on the issues of sustainability.

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⁵ Association for the Advancement of Sustainability in Higher Education. “College of Menominee Nation 2008 Campus Sustainability Leadership Award Application.” Retrieved September 2, 2009.
Sustainability Commitment

Following the footsteps of the Menominee tribe, the institution fosters a great commitment in all aspects of sustainability living, forestation, capital improvement and development. College of Menominee Nation is one of the first signatories of the American College and University Presidents’ Climate Commitment (ACUPCC). It also retains a Sustainability Coordinator who monitors the college’s greenhouse gas emissions and is in the process of benchmarking the campus sustainability indicators in an effort to identify, prioritize, and improve the campus sustainability.

In addition to the role the Sustainable Development Institute (SDI) plays in campus sustainability and promoting sustainability through education, research, and community engagement, other initiatives such as the Sustainable Building and the Sustainable Trades Programs also offer new avenues for learning.

Campus Green Building

The College of Menominee Nation has made stellar progress in the last few years at becoming a sustainable campus. The main campus consists of seven buildings including technology, chemistry and biology labs, a distance education center as well as the new library facility. Improvements are constantly being made to these 7 buildings on the campus to increase their efficiency and living quality and to decrease their environmental impact. “We are gradually raising the bar on other buildings,” says Mr. Joel Kroenke, the director of facilities at the college. Improvement projects include increasing heat efficiency, adding occupancy sensors and retrofitting the facilities with energy efficient lighting as well as incorporating water conservation features.

The college represents its commitment to sustainability by the design of its new library. In spite of the challenges, the institution decided to build its library building to the equivalent of the US Green Building Council’s LEED® Silver rating, designed to be 29% more efficient than Wisconsin’s Uniform Building Code minimum standards. Also, the Cultural Learning Center, which was built in 2000 and was tripled in size after the renovations and expansion in 2008, includes green features such as updated basement insulation and HVAC and heat recovery ventilation system upgrades.

Challenges in regards to Building Green on Campus

1. Dependence on Federal Grants requires rigorous prioritization

   The primary challenge encountered by the institution was in regards to the available financial resources. College of Menominee Nation already fosters an ethic of sustainability, therefore opting for green building was a natural step. However, funding was limited for this project. And with a tight budget for capital improvements and severe dependence on federal grants, many of the features, including LEED® certification and documentation, had to be forgone.

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2. **Dependence on grant writing campaigns renders projects with unpredictability**
   Since the institution does not have the benefit of a large endowment, it greatly depends on aggressive grants writing campaigns for its capital projects. This dependence brings certain inherent unpredictability to the process of retrofitting or constructing campus facilities, since there isn’t any certainty regarding which proposals would be funded.

3. **Budget restrictions make any building related process incremental**
   Because of the financial limitations and dependence on external entities, most of the brick and mortar projects need to be planned and executed incrementally, making capital improvements a long-term and slow process.

**Identifying and Assessing Opportunities to Build Green**

At the College of Menominee Nation, the internal institutional processes are quite conducive to the planning and implementation of sustainability projects on campus. In regards to identifying potentials of integrating sustainability into the facilities, there are various levels of oversight to assist the process. As far as the committee structure is concerned, the president, the boards of directors, the upper level management team, as well as the internal and external facilities committee evaluate the capacity of and the need for building green on the campus.

The internal facilities team consists of in-house senior managers, whereas the external facilities team, which functions at an arm’s length from the internal one, consists of the head of the community development, tribal experts and other facilities experts. This body reviews facilities project proposals, bids on architects and building contracts, and reports directly to the board of directors. Typically, from the beginning of any bricks and mortar project, the internal facilities team would pick additional people based on the project type and function. For example, if a project pertains to a nursing facility, then the dean of the nursing department would be involved in the evaluation and planning process from the very start of the project.

Following such thorough assessment, the institution realized that the previous campus library with its 2,200 square-feet of space wasn’t adequate to meet the growing needs of the campus community. Based on this, the institution decided to provide a better facility for research, study and gathering to its faculty, staff and students. Also, the institution wanted to create a place where Menominee tribe literature, art and history could be archived and preserved. And, since the principles of sustainability are ingrained in the Menominee tradition, the institution decided to address the new library project by pursuing sustainable design and construction methodologies.

**Green Building Protocols**

College of Menominee Nation follows the teaching of Menominee tribe and aligns the campus’ mission tightly with its values. Green building was a decision resulting from the inherent culture of the campus since inception. The College of Menominee Nation’s Library is the most prominent green building on campus, built to LEED® Silver requirements, with the second and third phases of construction to take place over the next few years.

College of Menominee Nation is committed to sustainable practices and principles. Among other sustainability measures practiced at the institution, following are a few that captures the institution’s multifaceted yet committed approach to building and managing green facilities.
1. The institution trains its housekeeping staff to ascertain efficient management of its facilities.

2. Recently the institution re-negotiated its energy contract to accommodate its changing needs and commitment to renewable.

3. In its effort to use more renewable energy on the campus, the institution plans on expending geo thermal wells.

4. The institution is planning HVAC upgrades with 9 furnaces to Glenn Miller Hall.

5. The institution is adding geothermal wells to the infrastructure, and as a part of this project some of the parking lot space will be converted into sustainable landscape for the campus community. This step will help make campus into more pedestrian friendly development.

6. In addition, capital improvement projects on campus are also yielding to the removal of black top surfaces on campus grounds to be replaced by useable green spaces, infiltration surfaces and landscaping.

7. And, last but not the least, the institution involves students in campus research on issues such as energy efficiency and optimal building requirements.

GREEN BUILDING PROJECT PROFILE

Project Introduction

College of Menominee Nation (CMN) Library

Functions: Library, Archive and Study Space
Completion: Phase I: Fall 2008; Phases II & III: In Progress and Planning
LEED® Rating Version: LEED® NC 2.1
Rating: Built to LEED® Silver Criteria
Approximate Built-up Area: 18,600 sq.ft.

Constructed to replace the previous library (approximately 2,200 sq-ft), the new College of Menominee Nation’s library building is a wood-frame multi-level structure with a full basement. Proposed in 2007, phase I of the project was completed in the Fall of 2008 and occupied in early 2009. The new library also includes a few functional classroom space, a conference room, quiet study rooms, document archives and a small computer access space. Phase I consisted of finishing the first floor level and the entire building shell. Phase II, which is currently underway, involves the design and completion of the upper and lower levels of the library. The project focused on features that improve air quality, ventilation and natural light to positively affect the holistic wellbeing of its occupants. Also to address energy efficiency and operational optimization, the following features were introduced in this new facility:
- Geothermal wells for heating and cooling
- High efficiency ventilation and HVAC systems
- Insulated roof panels and heat recovery systems
- Bioswale stormwater retention
- Automatic lighting control and occupancy exchange systems

Though not LEED® certified, the institution opted to implement a “LEED® Shadowing” process by building the new library to LEED® Silver equivalent requirements. LEED® certification and documentation were not pursued due to the added cost of commissioning, documentation and the certification processes. The institution opted to achieve the maximum payback on their investment by focusing on incorporating best sustainable practices for the planning, design, construction and operation and maintenance stages of the project.

Project Process

*Pre-design*

The College of Menominee Nation, though established on a relatively young campus, is continuously making improvement to increase efficiency and minimize maintenance needs of its facilities. Also the institution’s dependence on the federal grants puts severe restrictions on capital investments in facilities. For this reason, the institution emphasizes the importance of planning and pre-design process to streamline and optimally utilize available financial and other resources. The administration found it beneficial to institute an internal team of experts to evaluate the need for the new library building and investigate available grants that the institution could apply for in raising funds for the project.

- The first step in the pre-design process involved the preparation and submission of a Request for Proposal (RFP) to a number of local experienced firms. According to the institution’s investigation these firms met the criteria and their methodology and mission aligned with College of Menominee Nation’s commitment to sustainability.

- The select architecture firms met with the administration team to determine an optimal design program.

- Martenson & Eisele, Inc. was retained as the project architects based on their commitment to and experience with green building projects. Also their proposal best met the requirements set forth by the institution during the selection process.

- Most importantly, the architectural proposal prepared by the firm would make it possible for the institution to plan construction over a few years, allowing the institution to research financial opportunities and eventually replenish the funds for future phases of the project.
• The Martensen & Eisele’s program focused greatly on the strategies related to incremental construction and project budgeting that fit the institution’s needs. This cohesive and in-depth understanding of the constraints on resources and specific requirements of this higher education institution helped the firm present the winning proposal.

Design

• A basic design was developed and presented to the College of Menominee Nation. This design served as the foundation for add-ons of features and specifications that satisfied the institution’s requirements and fit within the given budget.

• Multiple meetings followed the primary one to determine the functions that need to be incorporated to make the library an efficient and helpful resource to the institution. Also, more meetings were convened to discuss the processes involved in integrating the additional sustainability functions and features into the project.

• During schematic design, the architects determined what type of guidelines and criteria that could be employed to make the facility LEED® Silver certifiable while considering the stringent funding and other limitation on the institutional resources.

• The institution and the design professionals determined that there needed to be 3 phases of the project. This would help the institution complete this project with incremental construction. Additionally this process would allow the building occupants to use the space while offering more time to the administration to make provisions for additional project funds.

• A process similar to the bidding process for the architectural firms was employed to select the building contractors for the project. A three-week bidding period followed during which the contractor selection was conducted based on a point value system. A similar evaluation system was also used during the selection of the project architects.

Operation and Maintenance

Following the construction process, the contractors trained the maintenance staff. The staff received the training regarding the operation and maintenance protocols for the new equipment and controls. This education is helping the facility staff efficiently manage the updated energy efficient systems to their optimal capacity, and it has also provided a comprehensive model to streamline the operation and maintenance processes of other campus facilities. Additionally, this training is assisting the facilities department to monitor and gauge the performance and the energy usage of these new systems.
Documentation of the new equipment and the training manuals for operation and maintenance were developed by the project team and eventually handed over to the institution for training the facility personnel on an ongoing basis.

**Project Finance**

**Funding Plan**

An award from the U.S. Department of Education, Title III, funded the Phase I construction, including the shell of the building and the first floor in time for the fall 2008 semester. Since a new library has long been a priority for the College of Menominee Nation, but due to lack of capital funding, the college could not move forward until recently. Still facing tight budget realities, the new library project will be completed in phases. Additional funding is being sought for completing the upper and lower levels of the building. US title III program, US housing and urban development – Office of Native American Programs, USDA, National Science Foundation, US department of Defense, US department of Labor, US department of Health are a few of the organization that the College of Menominee taps into for its funding needs for capital improvement projects.

To plan the funding and budgeting processes, an internal and external facilities committees were put in place. Both these committees were also responsible for reviewing the feasibility and the need of the new library. These committees also researched available grants that could be tapped into and considered for this building project. Aligning the planning, design and construction practices employed during the project with the mission of the college was also the responsibility of these committees. The internal facilities committee, constituted of faculty and administration members with construction expertise, was assigned the task of interviewing the architects and contracts, reviewing and evaluating their proposals and reporting the results to the board of directors.

Payback analysis and energy efficiency analysis for the College of Menominee Nation Library was performed through the Wisconsin Department of Commerce.

Code compliance analysis was conducted for the library project using COMCheck software provided by the U.S. Department of Energy. In its current state, with only the first phase completed, the building is estimated to meet 29% higher efficiency compared to its counterpart with traditional construction practices.
Project Features

Planning for the College of Menominee Nation Library began in 2007. The phase I of the project completed in late 2008. The following phases will address the basement and the upper levels of the building and will take place over the next few years. The institution has taken its commitment to sustainability seriously in designing this new library building. This “flagship” building is built to the equivalent of a U.S. Green Building Council’s LEED® Silver rating and is designed to be 29% more efficient than Wisconsin’s Uniform Building Code minimum standards. Following are a few salient green features of this new LEED® Silver certifiable building that elucidate the strategic understanding of the functionality and usability of the spaces while integrating sustainability in all possible aspect of the built environment:

- Earth-friendly features include 36 geothermal wells that heat and cool the main and upper floors of the building, eliminating the need for equipment room and allowing for construction of landscaped green spaces over the well locations.
- Structural insulating roof panels are installed to minimize the heating and cooling load.
- Heat recovery ventilation system is also installed in the building for energy efficiency. And also, efficient heating and cooling systems were installed with thermal controls.
- Locally produced building materials, including white pine paneling from the Menominee Indian Tribe’s sustainably managed forests, were used at many places throughout the project.
- The building also has low volatile organic compounds (an indoor air contaminant found in various building materials).
- Since one of the primary functions of this building is to preserve Menominee traditions, literatures and artifact, the document preservation rooms in the building have separate humidity controls and separate rooms for storage and reading spaces.
- Also to maximize the usability of all the spaces, the project team has designed a fully functional basement. This would also optimize the building footprint and attribute function to all its occupied land area. Lightning and windows in the basement are designed in a manner that will make this space usable for occupancy.
- Built with utmost respect for the environment and the existing fauna and flora, during the site preparation the project team took into considerations various site ecology and other environmental features of the landscape.
- Most of the outdoor spaces are paved with pervious surfaces to reduce water runoff and increase infiltration.
- Landscape features also include a bioswale stormwater retention area featuring native plants as well as a public plaza area and a campus green.
- The library also provides meeting space in the lobby with a coffee shop area and outdoor plaza for its student and staff to convene addressing the equally important issues of social and community sustainability.
- Over 60 sizable pine trees were saved and moved from the building site to other locations on campus as part of the project, and a local “Wild Ones” chapter moved native wildflowers and low maintenance plants that would also have fallen victim to the construction.
• New walking trail improvements are planned with lots of potential “hands-on” opportunities for native plantings to follow.
• The new construction also makes great use of natural light through the orientation and design of the indoor spaces.
• Occupancy sensors are also installed throughout the building to save energy while spaces are not in use.
• Adhering to the overall sustainable operations and maintenance protocols of the facility, green housekeeping products and practices employed throughout the building.

Lessons Learned
Educational

The College of Menominee Nation aims to use the new campus green building as a tool to educate the building occupants, and the larger campus community about the reverence for the environment while teaching them about the tribe’s knowledge and history of sustainability practices. While integrating a feel of community within the building, the new library has evolved as a gathering place for students and faculty. Since the building imbibes sustainability in various aspects of function and design, the visual display of these features, as well as the art of the Menominee tribe echo the core principles of teaching and practicing sustainability. There are other initiatives within the institution through which the college addresses education for sustainability.

• The administration and the Sustainable Development Institute (SDI) are implementing and building courses to teach students about sustainable development. However, the institution is working toward providing further emphasis to the integration of green building principles into the curriculum.
• Also, the institution plans to introduce training sessions for the staff and the management to learn about monitoring efficiency of the building while operating and managing the building systems more sustainably.
• As other capital improvement projects follow the library project, the institution is also working toward emphasizing the importance and impact of sustainable construction by making its efforts more visibility on the campus and across the community. The institution might explore the venues to display the best practices employed during the project by capturing them in the form of kiosks or sharing them with the community via interactive sessions.
• The facilities department also learned that there is an adjustment period for the staff to learn and use the new system. The department has started the task of teaching the staff and the building occupants about the updated energy efficient systems within-house training sessions. This training period demands patience and perseverance from the facilities staff. However, the training would result in optimum performance of the high efficiency systems saving energy while reducing institutional GHG emissions.
Financial

The majority of the capital improvement funding is generated through federal grants provided by the agencies such as the U.S. Department of Education and the U.S. Department of Agriculture. In the past, the National Science Foundation and the U.S. Department of Defense have also awarded funds to the college for a few laboratory projects.

- The institution found that bringing together individuals on campus that are familiar with investigating funding opportunities and those with construction experience was an excellent strategy to surmount the initial obstacles presented by limited financial resources.

- Before proceeding with the library project, the administration considered the long-term benefits of building green versus its alternative. Building with energy efficiency and sustainability standards was a natural option in-line with the Menominee practice and guiding principles. It also proved to be the most cost effective option in the long run, considering the life-cycle of the building, estimated growth of the campus community and evolution of the overall institutional needs.

- Observing the lack of funding as a large impediment to capital improvement at the institution, the administration realized that incremental progress on major projects is the most effective strategy to employ available resources with the best results. In the case of the library, subdividing construction into three phases allowed the administration raise more funds and find new sources for financing the project while parts of the building were fully operational.

- College of Menominee Nation is committed to a long-term evaluation of life cycle of buildings and their payback for the campus. This continuous assessment assists the administration in making decisions regarding the building and energy systems that are the most apposite for the programmatic needs.

- By utilizing “LEED® Shadowing,” the institution was able to design in a way that fit the needs of the campus infrastructure and the community. The administration also experienced the benefits of the prioritization process, since many features could be strategically included or forgone based on the functional needs and concurrent financial situation. It would have been challenging for the administration to implement all the essential features with the limited resources, had it decided to pursue the LEED® certification.

Social

- This addition to the campus is quite crucial to the Menominee tribe as it reflects Menominee traditions and commitment to sustainability, and provides an opportunity to raise awareness about the American Indian culture among the students while teaching social implications of integrating sustainability into the built environment.

- The library will house an archive of the Menominee literature, art and other materials donated by various entities. The Menominee nation went through termination and eventually through restoration in the 1970s. Because of their history and faith, conservation is a great part of the day-to-day teaching at the institution. This green building on the campus further enhances and reinforces institution’s teaching philosophy and educational outcomes.
The library at the College of Menominee Nation is open to the public through the Wisconsin library network. This offers the neighboring communities and other higher education institutions a chance to learn from Menominee’s practice of sustainability and the college’s success stories regarding building green.

**Technical**

- In working on new projects, the institution finds it essential to invite architects and building professionals that have worked on other green projects in the region, as well as those known for their commitment to sustainability. This process allows the staff and administration to learn about their practice and the firms’ work philosophy prior to the actual bidding process.

- Also, in all the capital improvement projects, including this library project, the institution uses a point value system/checklist to set criteria for evaluating the architects and the contractors. This process enables the institution to sift through the proposals and identify the appropriate consultants for the project, and helps the bidding parties understand the project requirements and the mission of the institution.

**GREEN BUILDING RESOURCES**

**Recommendations**

*What would you recommend other institutions do if they want to build green - where should they begin?*

Mr. Joel Kroenke, Campus Planner at the College of Menominee Nation, emphasizes: “Upgrade and use what you have.” Keeping efficiency and sustainability in the foreground, using the resources you already have, performing upgrades and retrofits, are a few of the initial steps that should be considered before starting any new building-related project on the campus. The recently constructed institution consists of many suitable buildings to which small-scale upgrades could be made to increase their efficiency and decrease their environmental impact. Implementing features such as efficient lighting, HVAC systems, and water efficiency controls could transform a building into a building that is greener, healthier and more cost-effective. Following are a few more suggestions from the project team that could help an institution plan a green building project and exercise strategic planning for the success of this project:

- It is important to gather feedback from particular users and stakeholders of the project during the planning stages.

- It is helpful for the institution to perform enough legwork prior to the actual initiation of the project. This strategic planning helps streamline the project needs and analyze the available resources.
• Defining programmatic needs of a particular project well in advance helps architect hit the deck running as soon as the architect is brought onboard and also saves money for the institution.

• The institution also saves money by answering some of the project-related questions upfront rather than addressing these issues at later stages of design and construction.

• Significant groundwork should be undertaken to determine the buildable area, upgrades to utilities, setbacks and square footage requirement of the project.

• Since there is certain amount of expertise available within the ranks, the project team should utilize it from the beginning of the project.

• The project team strongly recommends that smaller institutions that don’t have enough in-house expertise and extensive funds should outsource the project-related tasks and build a team of knowledgeable consultants.

• Two-tier system of internal and external evaluation and assessment also helps streamline the project.

• Long-term view of the mission of the institution and an in-depth understanding of what grant opportunities fit this mission are essential tasks to be performed before pouring resources into any project or initiative on campus.

• When funds are limited and the institution’s location is not central for gathering expertise from the region, a well-calibrated strategy needs to be adopted in order to prevent rushed decisions. In this respect, during the planning and construction of the library, College of Menominee Nation knew that there would be a need to rely on their local and regional expertise and design professionals. However, it also found that having a team of internal experts was the key to getting the project started on the right path. This internal team of experts consisted of staff and administration members with building and technical experience as well as thorough understanding of the needs of the institutions. This team helped the project starting from the research of the available grants to the review and final collaboration with the contractors and other design professionals.

• As previously mentioned, well-planned incremental building process allows for progress to take place on campus within the available budget. It also allows for the time and resources needed to replenish the finances to implement various phases of a particular project. Dividing construction of the library into various phases gave the institution the advantage of using the new facilities while work could continue on other parts of the building.

The architect on this project, Mr. Scott Tyler, from Martenson & Eisele, Inc., offered sound advice to other institutions that wish to build green on their campus. Mr. Tyler indicated that working with a client who is educated about the basic green building principles and who understands what “building green” entails and means is a key to a fine client-consultant relationship. This understanding encompasses the issues such as what is feasible on the project, what makes the building truly sustainable, what the budget can offer and what is involved in maintaining the green facilities. Also, an upfront cost is inherent to any green project, but the client must know and understand that this cost
can be recuperated over the life cycle of the building. Mr. Tyler also emphasizes that building green is not for the impatient, nor it is for those who wish to see instantaneous returns. It is challenging to apply green building features to a fast-track project, especially when there are constraints on financial resources. Enough time needs to be given to the professionals to design efficiently and ensure that the requirements and functions are being met with best possible solutions. Finally, Mr. Tyler reiterates what we have often heard from other institutions and professionals: “Think about sustainability at the start of the project.” Whether or not there is a hope to seek certification from an established rating system, integrating green features into the design in the planning stages of a project makes for a more cost efficient and energy efficient building.