

# **Sustainability Tour WMU; the Green Walkthrough**

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## **Executive Summary**

The topic of concern which I chose to address this semester is a lack of transparency regarding sustainable campus initiatives. There is a gap between ecological projects done on campus and student awareness of these practices. This is unfortunate because we have not effectively advertised what we are doing on campus to cut consumption and model sustainability. This is a significant issue when considering the thirty percent increase in environmental studies students from the 2008 to 2009 academic year, as well as the 'go green' mantra which saturates our sociopolitical climate. We need outreach, especially since this is such a time critical issue. WMU's administrators need to implement a perspicuous and legitimate presentation for the patchwork of sustainable practices on campus. Striking while the iron is hot, to use the pedestrian adage, is the only way to implement this proposal. When prospective enrollees, new students, or freshman come to our institution, we need to have an interactive, educational experience for them if we are to emerge as a leader in sustainable collegiate practices.

The idea here is that of a campus tour, or 'walk-through' that will highlight the projects and policies implemented at WMU, and how that relates to making our campus more energy efficient, water efficient and self sufficient in a holistic sense. Each project mentioned in the walk through shows our campus commitment to sustainability. This will not necessarily be a guide detailing what people can do in order to reform their lives in a more ecologically responsible way (because we are already bombarded with a plethora of options), but simply an informational, guided tour.

This will benefit the campus for many reasons. First, it will legitimize our institutionalized efforts. Second, this is an easily updated stencil so that future projects can be easily described, shared and highlighted. Third, it will allow us to market and aggressively advertise our campus as a nationwide sustainable leader, a place where real change is happening. Finally, if we are viewed as a campus which cares deeply about reducing our ecocultural impact by the students themselves, tangible change can be made. We can make headway in combating apathy and transforming the current unsustainable and consumptive choices of the student body into a more eco-culturally sustainable form of decision making.

### **Introduction**

When I first came to WMU, I took a campus tour, like most prospective students will do. When on the tour, I finally asked about what was being done on campus to be sustainable, since it was not mentioned during the tour. The student ambassador couldn't answer my simple question – “what is being done on campus to keep a commitment to sustainability?” I do not fault the tour guide, because after thinking about it for a while, I figured sustainability was not her expertise and it's not her job to know every nuance of the university's policies and projects.

We don't have a sustainability tour or a campus walkthrough that highlights any sustainability points here at WMU. Because it is an easy enough idea to integrate into the campus tour itself, this project represents an easily accomplishable goal. Due to the current upsurge of sustainable advertisements in the media, we have to act quickly for

our campus walkthrough to be a cutting edge, WMU specific thing. If we are the trendsetters, other sustainability tours will be cliché.

This will have innumerable benefits for our campus. First, we have yet another topic to add to the list of reasons to become a student here. When giving a campus tour, these can definitely influence prospective students to enroll. Second, if we are a cutting edge university as it relates to sustainability, this is a new, exciting thing that will make us a unique or standout option for enrollees. Finally, why not highlight the sustainable efforts we engage in as a university? We as an academic institution have a commitment to teach our pupils how to live an ecologically responsible life.

Since the media has been giving an increased amount of attention to sustainability, a myriad of collegiate sustainability initiatives have gushed forth; forged in the crucible of academia's higher purpose. To what end these matters are realized remains to be seen. It is symbiotically beneficial to inform the campus populace what is being done rather than silently complete projects, doomed forever to remain opaque. We as an entity of higher learning must be mindful of ecologically intelligent decisions being made on campus. These decisions, when advertised, marketed and allowed to ferment in the minds of our pupils, prospective or present, provide positive prognostications. Ideas come to fruition when they find a forum for advertisement. People want to know what we are doing to be sustainable, and right now, we are doing a lot, we just do not have enough advertisement to instill an environmental ethic. With a little more transparency, this shows that our campus keeps a commitment to sustainability, that our environmental ethic is real: we want to create an institutional culture of sustainability, and advertise our sustainable practices.

## **Methodology and Data**

In order to materialize the green walkthrough, it was vital to contact staff members within the admissions office, since they are the bureaucratic arm charged with rolling out the red carpet for potential pupils. I was urged to contact Scott Hennessy, assistant director of admissions here at WMU. After a lengthy collaboration, we would decide the most realistic avenue to pursue is an educational presentation for the people who actually take the students on the tours. Teaching these people allows for incorporation of sustainable education into the regular campus tours. This took the place of the idea of a separate tour, which was repudiated due to disinterest. Those who conduct the training for the campus walkthrough will be given an intensive informational presentation about campus sustainability, and an informative packet will be handed out to each of them so there will be ample talking points throughout the ambulatory data session.

My goal was to provide a general picture of what we are doing at this university and how we lead the way with technological innovation, policy and fresh ideas. It is presented in an easy to understand, conversational and concise format. By sifting through online information, personal interviews, word of mouth, and any published papers available, I was able to develop the outline for the tour. Once the requisite information was synthesized, a tape recorded presentation would be given to the campus tour directors. I am most excited about making this project because it can be an

easily updated stencil or outline for future students to carry the torch and update as further developments continue.

It is my hypothesis that this will definitely leverage future campus greening. If a person is interested in doing a sustainable project on campus, they naturally want their peers, educators and staff to know about it. If they know that every person taking a campus tour (every freshman, transfer student or prospective student) will potentially be informed about their project and accomplishments, a strong incentive to work hard and implement change is cultivated in the minds of students. In addition, it separates us from other campuses because we are integrating sustainability as a key feature to be presented, something to be proud of and spoke of when bringing in people for tours.

### **Examples of Best Practice on Campus**

This was definitely the most exciting part of my research. Finding out what is being done on campus was refreshing because it not only opened my eyes to a variety of programs on campus, but it also showed the need for some endorsement. Listed below I will highlight a mélange of campus protocols as they relate to sustainability.

- WMU avoided spending \$149,845 on electricity during the 2007-2008 winter closure period by using the Building Automation System (BAS).
- WMU avoided spending \$312,943 in steam energy expenses by using the BAS method of energy conservation during the 2007-2008 winter closure period.
- Between July 1, 1995 and July 1, 2006, WMU has invested \$4.5 million in energy conservation measures. The total savings, or cost avoidance from this expenditure has been \$16.9 million. The return on investment on average for energy saving procedures is averaging 25-40%.
- Incandescent lighting is being phased out by the physical plant. Standards for construction are being changed so that incandescent lamps will no longer be allowed unless absolutely necessary. In some buildings, such as the Student Recreation Center, metal halide lighting is being converted to fluorescent lighting for better energy efficiency.

- Part of the BAS designed by the physical plant is the set-point policy, setting the heating maximum at 69 degrees Fahrenheit and a 75 degrees Fahrenheit maximum for cooling.
- The building automation systems in place automatically sense occupancy and adjust the lighting and temperature accordingly.
- The excess heat expended from the ice making machine at Lawson Arena is recovered to heat the pool in Gabel Natatorium.
- An automatic sensor detects sufficient outdoor light coming in through windows and turns off lights when daylight is sufficient to illuminate an area.
- In the WMU Facility Life Cycle Design Guidelines, the university has pledged to use materials with post consumer or post industrial content where feasible, such as structural steel, aluminum windows, gypsum board, acoustical ceiling tiles, rubber floor tiles, carpeting and toilet partitions. This is in addition to their pledge to use long lasting, renewable, local if possible materials and that a 50% minimum of construction waste is to be “salvaged, recycled or otherwise diverted from landfill or incineration”.
- The biodiesel cooperative on campus provides fuel made from vegetable oils or animal fats, and can power any diesel engine with similar miles per gallon and torque, with a much lower environmental impact.
- At the end of the spring semester, the heat in the dorms is turned down to 62 degrees Fahrenheit and all the lights are turned off, windows closed, and drapes drawn to save energy. The classroom temperature is set to 55 degrees Fahrenheit for heating and does not receive cooling unless the automatic sensor goes above 85 degrees Fahrenheit.
- Around watersheds, the Landscape Services staff does not use fertilizer, pesticides or dump soils/leaves/debris in areas up to 20 feet away from bodies of water.
- The solar panels above Wood Hall help in making the Environmental Studies department here at WMU essentially carbon neutral.
- The Landscape Services staff uses integrated pest management programs to control pests before the use of pesticides.
- In the winter, when it comes time to plow, beet juice is used as a biodegradable, nontoxic pre wetting agent alternative for the rock salt used. This gives better melting performance while cutting down on salt use.
- Non phosphorous fertilizer is used on all lawns. In addition, only 2 pounds of nitrogen is used per season, preventing eutrophication of nearby lakes and groundwater contamination.
- All yard waste is recycled for composting by the Landscape Services staff.
- As of 10/10/2000, WMU has been an energy star partner. This means that “all products, appliances, and equipment purchased by WMU shall be energy star qualified wherever practical and/or possible.”
- Automated irrigation saves incredible amounts of water with a new system that incorporates soil and weather conditions into the irrigation process.
- New laundry machines throughout campus have reduced water consumption by approximately 60%, and amount to a water savings of 1,637,856 gallons per year.



It is plain to see that there are a lot of things being done on campus in order to promote sustainability. One problem is that I had to research in order to know about them. Another is that I represent a person on the fringe. I am person who is enrolled in environmental studies, and participate in various student groups and extracurricular activities with a green agenda, and yet I still didn't know about many of these policies. As stated previously, we need transparency.

### **Examples of Best Practice on Other Campuses**

Speaking only about green campus tours, the only one I came across in my research was the University of Connecticut's online green campus tour. This is an interactive map where various sustainability initiatives, sustainably built buildings and other ecologically centered campus activities are placed on a numbered map. With each area there is a hyperlink which takes you to a separate page explaining what the specific green area is. As far as I know, if we were to develop a separate sustainability tour that prospective students could take other than the regular tour, we would be the first in the nation.

### **Discussion**

The sustainability tour as it stands right now is a "teach the teachers" kind of project. Those who take the students on the tour have to watch an educational video about sustainable practices on campus, and are presented with a packet detailing sustainable initiatives here on campus that they can mention freely throughout the walkthrough. This has laid the groundwork for an easily updateable template for any

person who wants to pick this project up and run with it in the future. Scott Hennessy has proved to be an excellent resource and if anyone considers further updating in the future, he is definitely the person to talk to. One thing that I would like to see in the future, as mentioned in the best practices session, is a separate tour altogether where prospective students interested in sustainability here at WMU could learn about our research and projects.

### **Limitations**

The idea of a separate tour dissolved due to a feeling of uncertainty emanating from those who decide whether or not to change the walkthrough policies. There were very little limitations other than a lack of information about sustainable projects on campus. I will, however, point out that the WMU sustainability website proved to be an inestimably powerful research tool. Without this, there would be relatively little to no campus pellucidity relating to our initiatives.

### **Conclusions and Recommendations**

In conclusion, this will be a great way to make apparent the assortment of things being done on campus. People will know about them and have the opportunity to further peruse the actions of others, creating a network between students and the projects. I recommend that in the future, this be updated, since it is nowhere near comprehensive. It is a stencil that should be updated as time goes on.

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## Appendix

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