

Minutes

Meeting:	Brock University Sustainability Coordinating Committee	
Place:	Sankey Chamber	
Date:	March 28, 2013	
Time:	9:00 - 11:00 am	
Present		
Name	Representing	Initials
Tom Saint-Ivany (Chair)	Facilities Management	TS-I
Domenic Maniccia	Facilities Management, Custodial	DM
Larry Molnar	Facilities Management, CPDC	LM
Cassie Kelly	Facilities Management	CK
Chuck MacLean	Procurement Services	CM
Heather Hill	BUSU	HH
Jamie Fleming	Residences	JF
Andrew Prankevicius	HR/EH&S	AP
Scott Johnstone	Research Services	SJ
Ryan Plummer	Environmental Sustainability Research Centre (ESRC)	RP
Visitors		
Name	Representing	
Paul Korber	Third Planet Energy	
Brian Kennelly	Third Planet Energy	
Regrets		
Name	Representing	Initials
Karen McAllister-Kenny	Recreation Services	KM-K
Iain Glass	Hospitality Services	IG
Jeffrey Sinibaldi	Marketing & Communications	JS
Mandeep Mukkar-Ippolito	Faculty of Education	MM-I

Item #	Discussion	Action
1.0	Welcome (Tom Saint-Ivany)	
2.0	Confirmation of Agenda (Tom Saint-Ivany) No changes.	
3.0	Review of January 24, 2013 Minutes (Tom Saint-Ivany) Two revisions were noted in the minutes: 1. Item 6.3 - the title should be changed to “Ongoing Internal/External Media Coverage of Sustainability Initiatives and Research at Brock” 2. Item 7.1 - 4 th line from the bottom, 83% should be changed to “89%”. The minutes will be revised and reissued.	
4.0	Calendar of Sustainability Events <ul style="list-style-type: none"> • April 4-5, 2013 - Green Campus Summit - India • April 16-22, 2013 - Earth Week • April 18, 2013 - NSI’s <i>Blue Capital: Opportunities in Sustainable Water Solutions</i> - Stoney Creek • April 22, 2013 - Earth Day • May 6-7, 2013 - 2013 Energy Matters Summit - Toronto Congress Centre 	
5.0	Presentations <i>Presentation by Third Planet Energy</i> TS-I introduced Paul Kerber and Brian Kennelly from Third Planet Energy. Paul Kerber gave an overview of the company and what they do. Their core approach starts with the collection of data on energy consumption within your facility. Their energy coaches will combine the data gathered from monitoring solutions, utility bills, etc. and, with you, will prepare a plan that meets your business objectives. They are focused on the successful implementation of energy management plans, useful and easy to use technologies, education programs, program communications and sustainable practices. As your projects are successfully implemented, our monitoring solution will enable confirmation of the energy saved. Further, as targets are set, active tracking will ensure your objectives are met. In the collection stages they use several tools. The energy dashboard is one, with live consumption data indicating the peak load and energy consumption break out in any way, shape and form. Next is an HVAC Load Pattern indicating overnight consumption, daytime start and peak management; they try to smooth out the curves, energy use can differ day to day depending on the weather. Advanced Analytics aka measure and verify the data. Implementation of control; actual performance compared to budget performance. Return on Investment is critical and they look for opportunities that drive the best results with ROI in less than 2 years. Benefits of their approach are: flexible integrated solutions; comprehensive sustainable solutions; cost effective; turnkey offerings - we make it easy. We are flexible and work with clients and listen to their needs. 100% of our customers are benefiting from a minimum 10% reduction in energy costs. They	

Item #	Discussion	Action
	<p>are averaging 24% for their customers.</p> <p>They are always on the lookout for new products which can help their clients and brought along a sample of next generation LED lighting. Costs are coming down but the challenge with LEDs is that they require transformers and also generate heat with 60w light power. This particular unit has no transformers and does not create heat; it uses 8 watts of power. It is in CSA right now.</p> <p>TS-I mentioned that we have satellite locations and BUSU operate as a separate unit. FM provides the overall, it's a very complicated environment but CK has been a key person on energy management.</p> <p>CM asked about their fee structure. Paul said the fee is performance based and it depends on what it is that they are doing. A typical offering is to combine metering and services or coaching, obtain the data and suggest opportunities for savings. They use their own meters to gather the data and have the technology to sub-meter. CM asked whether the software becomes the clients. Paul said yes, it's cloud based, the hardware has a licensing fee. Data is in the cloud.</p> <p>SJ said it's difficult when you get different stakeholders, you can't turn off lights due to H&S, it's risk vs. rewards. It doesn't always work. Paul said it's up to the owner to make the decision, they just suggest options. Lighting control solutions are out there, motion sensor, dim during daytime use; we need to apply them to different solutions, even outside.</p> <p>TS-I asked whether they can integrate with JCI; they said yes they can. They are currently working with the UOT who have metering on all their systems and are ready to do the analysis. If they see a savings, they will research the problem areas and perhaps install additional meters to track down problems.</p> <p>TS-I had one final question - what differentiates Third Planet from its competitors? Paul said we listen first, we believe in data century city and will integrate where required. DM: is there any accreditation, certified energy managers; they said they use qualified engineers. LM asked how many employees they have - Paul said they have 8 on staff with a network of skills. LM asked if any are professional engineers and Paul said no.</p>	
<p>6.0</p> <p>6.1</p>	<p>Old Business</p> <p>Niagara Sustainability Initiative Update (Cassie Kelly)</p> <p>CK: Our goal is to reduce our greenhouse gas emissions by 20% in ten years. We are using 2012 as our baseline year and are in the process of getting the rest of our data into the system. We have had a few challenges with Quarryview and the Village, but approximately 90% of the consumption data is in. We are also looking for feedback from Horizon and Enbridge. Once all the data has been entered we will be able to calculate our baseline.</p>	
<p>6.2</p>	<p>Ongoing Internal/External Media Coverage of Sustainable Initiatives and Research at Brock (Jeff Sinibaldi)</p> <p>JS was unable to attend and will report at the next meeting.</p>	
<p>6.3</p>	<p>Energy Conservation and Demand Management Plan (Cassie Kelly)</p>	

Item #	Discussion	Action
	<p>CK: A copy of a draft plan was circulated to the Committee about a year ago. She received some feedback and marketing has helped put together a brochure. We are currently using the 2011 data and are working on the 2012 data. The plan must be submitted by July of 2014 and we have to publish our 2011 data by July 2013; we have received the forms. We will be well ahead of the deadline and will proceed with implementation.</p> <p>CK: since the departure of James Federico, we have completed two smaller projects in the Cogen plant but one of our largest projects has been the lighting retrofit. We have changed 5,849 fixtures from T12s to T8s and will receive a rebate of \$17 per fixture from Horizon (just under \$100,000). The total cost without the incentive would have been \$44 per unit. Payback will be just a little over a year after the rebate. As the incentives may expire within the next year and T12s will not be manufactured for much longer, we must work to replace all of our lights. SJ indicated the T8s will save approximately \$150,000 per year in energy costs. We have not installed a T12 ballast since 2007. There are PCBs in the old ballasts which have to be disposed of as hazardous waste. AP noted that we are now getting a better incentive on the PCBs.</p> <p>Some corridors in Hamilton have been changed but no classrooms. Rodman Hall has not been done, neither have the residences. TS-I asked whether Third Energy could do an audit of Hamilton and Rodman Hall to see what the savings would be in order to get funding from the University. SJ said we need long lasting products. TS-I asked whether BUSU had done lighting upgrades. HH was not sure but CK said that some T8s were installed during the renovations last year. CK said there are still a number of opportunities. Light fixtures in the parking lots are also being changed from high pressure sodium to LED - there will be less maintenance involved. SJ indicated one advantage with LEDs is that the lighting can be turned down.</p>	
6.4	<p>Annual National Pollutant Release Inventory (NPRI) Results Reporting (Cassie Kelly)</p> <p>CK: We are required to do two sets of reporting: one to the NPRI, which is a federal reporting system and one to Ontario on our greenhouse gases. The same information is gathered for both reporting requirements. We were just slightly below 25,000 tons per year, but this needs to be verified by a consultant. The NRPI numbers should be available in June.</p>	
6.5	<p>2012 Survey of Green Initiatives at Ontario Universities (Tom Saint-Ivany)</p> <p>TSI had nothing new to report on the COU survey.</p>	
6.6	<p>2012 Annual Waste Audit Update (Domenic Maniccia)</p> <p>DM distributed a copy of the report on the 2012 Annual Waste Audit. We used a new consultant who has experience with other Universities. The audit was previously done by building but this year it was done in more depth; divided by whether it was a washroom, cafeteria, etc. This approach recognized problem areas much better.</p> <p>Our waste reduction division rate was down, from 73% in 2011 to 60% in 2012. There are two rates to consider, the total waste divided by the total amount captured. When you think of all our programs, bottle, battery,</p>	

Item #	Discussion	Action
	<p>etc., the capture rate on each program was the same as in the previous year, the main difference was the calculations on how much the University collects each year. They used data based on the density of our waste bins compared to what the industry standards are. In 2011 we generated 400 metric tons of garbage and in 2012 we generated 800 metric tons based on the industry standard method which has been adopted.</p> <p>One thing we can do is to determine the density of our waste (the weight of the garbage). Organic matter will increase the density as it's wet. TSI asked whether JF would have the information on the residences; does each department have their own results? DM indicated the highest percentage of waste in public areas was organic waste. In washrooms, the highest percentage was paper towels; we are trying to remove them for this reason. In the residences the highest percentage was organic matter, and mixed containers were high. We can work with residences on this; perhaps change the physical location of the bins. JF said the organic issue has been tossed around a lot, we are very reluctant to get into this because of pest control but we can work on other recyclables.</p> <p>TSI indicated that the Board of Trustees had commented on the mini audits.</p>	
6.7	<p>Electric Vehicle Parking & Charging Station (Larry Molnar)</p> <p>LM was happy to announce that the actual installation is starting today; Stolk Construction Limited is installing the base for the unit. We have paid for the upgrade to the 90 amp model and also purchased the smart phone application. We have an electrical contractor involved and also IT services with the interface of the smart phone app. It should be fully operational in about 2 weeks. There have been a number of queries from people at Brock and outside Brock so we will be putting out a press release. JS will prepare something for the Brock News. Al Ross in Parking Services and a student in Business currently have electric vehicles. Tom Arkell said Parking Services will have something on their website.</p> <p>LM has met with Tom Arkell who would like to see more units on the campus; we have to determine the rate and also locations, which will need electrical outlets. The provider has told LM that electric vehicle users are very courteous and don't tend to leave the vehicle in the spot longer than needed, to allow someone else to use it. The current parking spot is located at the International Centre which already had conduits installed. We are only putting in for one spot at the moment but have the capability to use an adjacent spot.</p> <p>TSI thanked LM for his leadership on this. AP asked who else is using the charging units. TSI said he had originally noticed one at White Oaks. LM added that if anyone is interested you can start on the east coast and drive to the west coast absolutely free, Sun Country have installed units along the entire Trans-Canada Highway.</p>	
6.8	<p>Earth Hour (March 23, 2013) Planned Activities (Tom Saint-Ivany)</p> <p>TSI mentioned that due to several activities on Campus they were unable to turn off lights for safety reasons, but SJ managed to dim the lights in the Cairns Building.</p>	
6.9	<p>Totally Green Organic Composter and Sheraton Centre Site Visit</p>	

Item #	Discussion	Action
	<p>(Domenic Maniccia)</p> <p>http://www.totallygreen.com/orca</p> <p>IG and DM visited The Sheraton Centre to see their Orca station. They were using an older model which was located at the bottom of the food area; there wasn't much of an odor even when the lid was open. Most of the material going in was fruit and organic matter; no fruit flies were noticed. The enzymes were at the bottom of the unit and last for about a year. They just feed the machine and it churns. It's hooked up to the sewer system with a 4" pipe, with filters, which complies with the City Standards. There is a hook up for cold water and every once and a while the sides of the unit can be hosed down. The unit should be fed four to six times a day. There are three different sizes (L x W x H): 48"x34"x50", 75"x34"x50" and 116"x34"x50". The estimated monthly operation costs would be \$70 for water and \$150 for hydro.</p> <p>BUSU are interested but are still looking into where one could be placed as the footprint is the main issue. It should be located in the food prep area or central area where possible. The Sheraton used trays which were emptied into the unit as they were full.</p> <p>AP expressed concern as to whether the waste water would contain any hazardous material and if it would comply with the Region's by-laws. CK asked about the cost of the enzymes. DM said the equipment would be leased and we would pay an all-inclusive monthly fee. The package is a hands-on approach and our account manager would come in on a monthly basis to top it up. As we operate on an 8 month basis we have asked for different rates as we may only need only one unit at some times during the year, with the other units being inactive. TS-I questioned this with the new Summer courses.</p>	
6.10	<p>Sustainability Policy Development (Tom Saint-Ivany)</p> <p>TS-I circulated a draft policy which is based on a core document from the ERSC and the terms of our participation in Sustainable Niagara and the NSI; someone pointed out that Brock is not a member of UNESCO but the key is Sustainable Niagara and their 18 based goals. There is wording from the Integrated Strategic Plan of the University. TS-I asked that if anyone has any comments to let him know now, or in the next couple of weeks.</p> <p>RP thanked TS-I for asking for their input - "it's nice to be involved in the committee and to see it going forward." TS-I thanked RP for the core information statement.</p> <p>JF asked if the University has a core policy statement. The University has a template which incorporates UNESCO, Integrated Strategic Plan, etc. RP said that most universities do have a Sustainability Policy. What RP liked was getting everyone's input. DM indicated that when we received Green Certification there was a comment that Brock did not have a Sustainability Policy. TS-I mentioned that in order to move up our participation in Sustainable Niagara, we have to have a policy.</p> <p>TS-I will put the policy forward at the Senate and IT&T Committee Meetings next week. It will then go to the Senior Administrative Council (SAC) and</p>	<p>All</p> <p>TS-I</p>

Item #	Discussion	Action
	<p>hopes to have it all in place by the end of June.</p> <p>AP mentioned that we have at least two people at the University who are doing a lot of green chemistry, is there a way of integrating this into the policy; it will make it more of a University Policy.</p>	
6.11	<p>Sustainability Website Update (Tom Saint-Ivany)</p> <p>This item should be moved to “Parked” Old Business.</p>	
6.12	<p>“Parked” Old Business</p> <p>6.12.1 Sustainability Policy Development (Tom Saint-Ivany)</p> <p>6.12.2 Sustainability Coordinator (Tom Saint-Ivany)</p>	
7.0 7.1	<p>New Business</p> <p>2013 Waste Reduction Work Plan (Domenic Maniccia)</p> <p>DM distributed a copy of the report for the 2013 Waste Reduction Work Plan. The audit indicated we were week in two categories: organics and coffee cups. We need to do something a little different than in the past couple of years, we should look at placing additional bins in key areas and ensure they are properly labeled. There are new coffee cup shaped bins which can be stacked. We are looking at things like this.</p> <p>SJ said there is a lot of research that is not inherently “green”, is our hazardous waste captured somewhere so that we can track it. We are getting chemistry dishwashers that cost \$12,000 each. AP will pass on some information to SJ. CK asked whether we are required to report it. AP said yes, it goes to the government and the manifests tell them what is leaving, what the receivers are getting, etc. We have to make sure that as much as possible is treated in Ontario.</p> <p>TS-I: how do we communicate the work plan to the University, most people will never see it. Monitoring, measurement, compliance, SAC meets twice a month. Tom would like DM to prepare a presentation for the next meeting.</p> <p>DM: To sum up, we do not have a lab glass recycler; the consultant we use is looking into what they are doing at the U of T. You have to have an end user to take your recycled material or it doesn’t go to the right place. TS-I asked whether it would be considered hazardous waste. AP said it could be if it’s not washed or gets broken. If there’s a spill, or spill with broken glass, someone has to determine whether the glass is hazardous or non-hazardous. DM should work with AP or SJ on this.</p>	<p>AP</p> <p>DM</p> <p>DM/AP/SJ</p>
7.2	<p>Horizon Utilities: Energy Excellence Award</p> <p>CK: We recently received an award from Horizon in connection with our lighting replacement program. It will be installed at the CUB.</p>	

<p>8.0</p> <p>8.1</p>	<p>Once-Around-the-Table</p> <p>Sharing of updates of Sustainability Practices, Activities, and Initiatives (All)</p> <p>AP suggested having a bulletin board for the awards.</p> <p>RP extended an invitation to the Committee to attend their public lecture coming up on Earth Day (Pursuing Sustainability in a Complex World: Governance Strategies for Social-Ecological Systems).</p> <p>JF indicated arrangements are being made for the collection of electronic waste during move out. Bins will be available from noon the day following the last exam; this year we have about two-thirds with an exam near the end. JF was asked to email DM, CK and TS-I with the dates so that FM can make sure the bins are emptied and are not overflowing. The challenge we have is with the off-site people coming into the Village and dumping their garbage.</p> <p><i>Discussion on Electronic Waste:</i></p> <p>CM saw a presentation on electronic collection, but how do we know we are giving it to the right people; and now there are dollars in it people want to be our collectors. We can expect around \$200 per ton of revenue, it's now time to take a look at this and establish who they are and where the waste ends up - we want some assurance. AP said we should ask for a Certificate of Approval which will tell you what they are allowed to do - pick it up and send to China or collect the parts for recycling. We could also be a collection site. AP would like to sit down with CM and decide on a company, we could use the funds for other things. AP said any company will have a Certificate of Approval, which will give you all the information you need.</p> <p>DM indicated that over time the price drops, when we first started out with cardboard it was selling for \$120 a ton, now it's around \$30 a ton. The prices do go up and down but at least it's going to the right place.</p> <p>CM is trying to get something in place in the next few weeks. The revenues should go back to us. DM asked whether this should this go into our waste reduction plan - CM said yes.</p>	<p>JF</p> <p>AP & CM</p> <p>CM</p>
<p>9.0</p>	<p>Next Meeting (Tom Saint-Ivany)</p> <p>The next meeting will take place on May 23, 2013 from 9:00 a.m. to 11:00 a.m. in Sankey Chamber.</p>	
<p>10.0</p>	<p>Adjournment (Tom Saint-Ivany)</p>	