Environmental Sustainability Reflection Guide

Statistics:

- Grand Rapids is featured on the Earth Day Network website (<u>http://www.earthday.org/grandrapids</u>) for its efforts towards climate mitigation and carbon reduction. Read some of the facts below from Grand Rapids Sustainability Plan First Year Progress Report:
 - Get The Lead Out campaign for lead abatement. In 2003 there were 279 cases of lead poisoning. Seven years later, in 2010, this number was reduced 77% to only 64 cases. (Year1 Progress Report)
 - \$1.9million ARRA Energy Efficiency and Conservation Block Grant (EECBG) and other grant funding provided through the U.S. Department of Energy
 - In 2006, the city's Strategic Plan was replaced by a Sustainability Plan. Then in 2010, specific targets and outcomes were determined, including:
 - Reducing greenhouse gas emissions, energy demand, and fossil fuel consumption;
 - Improving the quality of the Grand River and tributaries;
 - Protecting and maintaining healthy ecosystems and habitats;
 - Ensuring quality design and construction of the built environment in accordance with the City's Master Plan and Zoning Ordinance.
- According to a report entitled "Conserving Energy and Preserving the Environment: The Role of Public Transportation" published in 2002:
 - For every passenger mile traveled, public transportation produces only a fraction of the harmful pollution of private vehicles; only 5 percent as much carbon monoxide, less than 8 percent as many volatile organic compounds, and nearly half as much carbon dioxide and nitrogen oxides.
 - Public transportation is reducing emissions of carbon monoxide (CO) by nearly 745,000 tons annually. This equals nearly 75 percent of the CO emissions by all U.S. chemical manufacturers.
 - The report concludes that greater use of public transportation offers the most effective strategy available for achieving significant energy savings and environmental gains without imposing new government mandates or regulations on industry or consumers.

Resources:

 Take a look at the Grand Rapids Sustainability Plan progress report, <u>http://grcity.us/enterprise-</u> <u>services/officeofenergyandsustainability/Documents/Year1ProgressReport.pub.pdf</u>

- What do you think of the efforts made by the city of Grand Rapids to meet these goals?
- Have you seen these things happening in the city?
- In what ways could we improve the work being done?
- Is there a plan similar to this in your hometown?
 - If yes, what type of work is being done?
 - If no, is this something you believe your home should be doing? How could you help to implement such a plan?
- Watch this poetry slam on energy use: <u>http://vimeo.com/25924551</u>
 - What is your reaction to this poem?
 - Do you agree with what is being said? Why or why not?
 - At one point it is said, "We won't give up on comforts unless we have to", is this true in your life?
 - What are some comforts in your life that you have given up? What could you give up? What might it take to give these comforts up?
- Grand Rapids' Rapid Bus System contains 26 routes spanning the downtown and metro
 regions and is looking at expanding these routes in the next 10 to 20 years. With this in
 mind and thinking back to the statistics mentioned earlier, reflect on these things. Rapid
 Central Station is the first Leadership in Energy and Environmental Design (LEED) certified
 transit facility in the country. This contributes to Grand Rapids ranking #1 nationwide for
 LEED buildings per capita as measured by the U.S. Green Buildings Council, 2010.
 - Reflect on public transportation in Grand Rapids or your home town.
 - Have you used it before? Why do or don't you?
 - What benefits do you think public transportation carries?
 - What burdens or negatives do you view attached to public transportation?
- Read this description of LEED (Leadership in Energy and Environmental Design), <u>http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988</u>
 - Here is a way that Grand Rapids businesses and agencies are working to become LEED certified and implement sustainable practices, <u>http://www.fastcompany.com/1007062/americas-greenest-city</u>
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 - Many Grand Rapids businesses and agencies are working to become more environmentally sustainable, are there businesses in your hometown working towards these goals?
 - What else could these businesses and agencies do?

- > What is Calvin College doing to be more sustainable? What else could we do?
- Check out this article on Grand Rapids' plan for increasing bike lanes throughout the city, <u>http://www.mlive.com/news/grand-</u>
 rapids/index.ssf/2012/04/see.wby, grand, rapids, wants, to html

rapids/index.ssf/2012/04/see why grand rapids wants to.html

- Do you/would you take advantage of existing bike lanes and those coming in the future? Why or why not?
- In 2011 Calvin College initiated its community bike program. This allows students to rent road bikes for 24-hours or whole semesters. Is this something you will take advantage of?
- Learn about the Plaster Creek watershed through this short slideshow, <u>http://www.calvin.edu/admin/provost/pcw/learn/status</u>
 - What thoughts run through your head as you view this slideshow?
 - What do think needs to be done about the Plaster Creek watershed?

What Now: Resources for Further Engagement

- Those interested can explore the complete list of goals along with their action steps and point of progress in the First Year Progress Report released through the Grand Rapids Office of Energy and Sustainability (<u>http://grcity.us/enterprise-</u> services/officeofenergyandsustainability/Pages/default.aspx/)
- Interested in what you can do while at Calvin? Check out the Environmental Stewardship Coalition (ESC), a student organization here at Calvin
- Get involved with the Plaster Creek Stewards and help protect the Plaster Creek watershed, <u>http://www.calvin.edu/admin/provost/pcw/</u>

If you have any suggestions or comments on what we can improve, please contact us at <u>slc@calvin.edu</u> or 616-526-6455.





