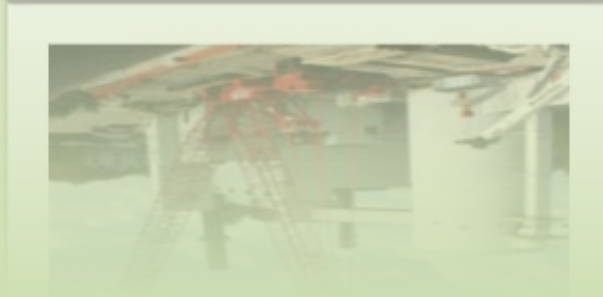


Final Report

Central Heating Plant Media Relations, Spring
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I. Introduction

Student engagement is one of the principal aims of campus sustainability initiatives. However, in the case of operations-side activities that are far removed from the essential activities of the university, it is particularly difficult to connect with the student body. Such is the case with the IU Central Heating Plant. Many students are unaware that of where their heat and hot water come from, and those that are generally have little idea that the CHP is involved in sustainability initiatives, and in improving the efficiency and environmental friendliness of its operation.

However, those interested in “greening” IU often notice the cloud of smoke hovering over the building on Fee Lane. Each year, the CHP typically receives about 100 inquiries from students about what the university is doing to clean up its energy production. Although the CHP does burn coal, which is often viewed as an environmental anathema, it has a long history of struggling to remain in compliance with federal and state emissions regulations, and of looking for innovative ways to reduce its environmental impact.

This internship was intended to publicize efforts by the IU Utilities Department - particularly the Central Heating Plant - in conservation and sustainability practices. In doing so, I developed a two-part communication strategy. First, because the CHP wanted to forge a stronger connection with the local community, I worked to establish relationships with local news outlets, distributing press releases, and composing editorials for publication. The second goal of this internship was to enhance communication with

the student body by providing easy access for students looking to find out more information on energy use on campus and what they can do to improve on it.

II. Methods

In order to accomplish the goals stated above, I worked mainly to create deliverables that would bridge the gap between the CHP and the community. In addition, I interacted with campus and community members in furtherance of the same objectives. The main focuses of my work are described below:

A) Deliverables Produced:

- Media database: A compilation of newspaper clippings and TV and radio transcripts that make reference to the CHP. This database will eventually be available on the plant's Web site, so that both students and external stakeholders can easily see what the CHP has been doing, in terms of sustainability and conservation work.
- Algae project materials: Currently, the CHP is working with Dr. Richard Wagner, who runs a company that researches natural algal oils and biofuels, to test the viability of using algae colonies to uptake carbon dioxide in spent flue gases. This effort was publicized via:
 - A press release, distributed by IU Media Relations in mid-March
 - An editorial in IU Media Relations' "Discoveries" newsletter
- FAQ poster: A brief overview of the Central Heating Plant's history, purpose, and operating capacity

- Historical overview: In terms of deliverables, this will be available both as a whitepaper, and a synopsis will be made into a poster for the CHP conference room. The overview gives a brief summary of the plant's early years, but it focuses on the years since Central Heating Plant #5 has been in operation (approximately the last 50 years). The subjects covered in this document include local perceptions of and reactions to the CHP, compliance and legal issues, and the environmental and efficiency improvements made over the years.
- CHP tour: Because not everyone who is interested in the CHP can make it over to Walnut Grove to tour the plant, I developed a virtual tour to give students a glimpse of how the plant operates. This Power Point tour covers the boilers, coal silos, chemical treatment station, and more. Hopefully, once the next intern updates the CHP Web site, this will be available to visitors. Again, the new intern may be interested in writing and distributing a press release to publicize it.
- Emissions control technology fact sheet/poster: I have completed a simple reference guide to be distributed to student groups and printed as a poster, which explains the operation and purpose of the various emissions control devices the CHP uses.
- Guide to relevant measurements and metric prefixes
- Breakdown of relevant legislation and permitting procedures
- Renovation materials: The current renovations at the CHP are a "hot topic" around campus, and the source of many student inquiries. I have generated the following items to publicize the effort:
 - A white paper/fact sheet (primarily for interested students)

- A press release, which was recently distributed through IU Media Relations

B) Additional Responsibilities:

- Answering e-mail inquiries from students looking for information concerning the sustainability-oriented activities of the Central Heating Plant. These inquiries generally fell into two categories: students conducting research for class papers and projects, and students satisfying personal curiosity about what the Central Heating Plant is doing to “clean up” its act. I read each inquiry carefully, and then answered by sending them relevant written materials that pertained to their questions.
- Responding to media feedback from press releases. After distributing press releases to media outlets, we would often get phone calls and written responses from reporters. In particular, many times, writers from the Bloomington Herald-Times were interested in picking up our stories. I fielded any initial questions and directed respondents toward the most appropriate sources for their articles.

III. Conclusions/Recommendations

Unfortunately, I was not able to complete all of the projects I had originally planned for this semester. For example, ideally, many of the above materials will ultimately be available via the Central Heating Plant Web site as links or stand-alone pages. As it stands, the plant’s Web site is a bit scant, outdated, and in a state of ill-repair. Because my primary task was to generate written materials, and since I’m relatively inexperienced at working with computers, I saved the Web site until toward the end of

my internship. Unfortunately, I was not able to make these changes before the end of the semester, and I strongly suggest that the next Central Heating Plant regard the Web site as high priority. Even if he or she is not able to post the changes, I would suggest he or she compile text edits and suggestions, and that the CHP locate someone to assist with the actual Web design.

Clearly, there is a significant student interest in the sustainability activities of the Central Heating Plant, as well as a desire on the part of the staff members to share what they have been working on and to reach out to the student body. Further efforts at collaboration will hopefully have the effect of strengthening the case for ramping up both financial and popular forces behind enhancing sustainability initiatives at the CHP. In addition, documenting and publicizing current efforts may open doors for outside grant and funding opportunities. As with any other new initiative or program, public recognition is key to its success and future continuation.

Appendix A: Sample Press Release

FOR IMMEDIATE RELEASE

Algae Project at IU Central Heating Plant Searches for New Ways to Curb Carbon Dioxide Emissions

BLOOMINGTON, Ind., Monday, March 11, 2009 – When it comes to cutting its carbon footprint, the Indiana University Central Heating Plant is not afraid to step outside the bounds of traditional methods. While currently the plant has used mechanical means to limit emissions of particulate matter, sulfur dioxide, and mercury, research at the Central Heating Plant is now exploring ways to algae to absorb excess the carbon dioxide emitted in flue gases.

For the past year, Dr. Richard Wagner, Director and CEO of Phylein, a natural oil and biofuels production firm with operations in Indiana and Florida, has been conducting



research at the Central Heating Plant to determine the viability of recycling carbon dioxide with algae. Burning fossil fuels such as coal releases large amounts of CO₂, but algae may be able to reduce the emissions.

“Algae are photosynthetic organisms that naturally absorb CO₂,” says Wagner. “In simple terms, through photosynthesis light energy from the sun is converted to chemical energy in the algae. Our goal is to recycle this gas through the algae to produce useful products.”

Over the coming months, Dr. Wagner will be growing vats of algae, pumping different concentrations of carbon dioxide through them, and then measuring their response. Primarily, his research will focus on issues of efficiency and viability – that is, how well the algae stand up to such a heavy influx of carbon dioxide and other contaminants in flue gas.

“We must learn how to produce energy in the country in a sustainable manner,” says Mark Menefee, Assistant Director for Utilities. “Hopefully this research will provide a valuable contribution to future energy generation processes here at IU and industry-wide.”

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