

**Internship:** Lead a project focused on water conservation and energy efficiency.

**Company:** Ever-Green Energy – St. Paul, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on energy efficiency and water conservation with Ever-Green Energy. The intern will work with MnTAP and Ever-Green Energy staff to reduce energy and water use in a district heating and cooling plant. The intern will quantify opportunities and develop suggestions to reduce water use and conserve energy as well as outline plans for implementation.

### JOB DUTIES:

As part of this project, you will be asked to complete the following tasks:

1. Investigate the value and feasibility of variable frequency drives (VFDs) in the plant with a focus on chiller and boiler blower fans.
2. Explore floating head pressure controls for the chillers, and assess barriers to increasing cycles of concentration in the cooling towers.
3. Determine the most efficient operating strategy for seasonal backup boilers.
4. Document chiller and boiler equipment capacities.
5. As time allows, analyze water use throughout the facility, quantify the value of an upgraded metering system, and document distribution system maps and building connections.
6. Make recommendations for specific improvements based on research, testing, and calculation that will result in energy efficiency and water conservation.
7. Estimate waste, energy, and water reduction potential from implementation of provided recommendations, then prioritize suggested changes using simple payback methods for financial justification.
8. As appropriate, support implementation of approved process changes or outline plans for future implementation.
9. Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
10. Present findings to the company and at MnTAP-hosted public presentation events.

As an intern, you will work at the company and report back to MnTAP. The position is full-time, 40 hours per week, for three months to start after the conclusion of spring semester or quarter. Pay is \$19/hour, with a lump sum stipend of \$1,500 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$22.00/hour when averaged over the project. Candidates must pass a background check.

### QUALIFICATIONS:

- U.S. work authorization
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Self-motivated
- Excel and other software skills
- Cumulative GPA of at least 3.0
- Preferred majors: *Engineering, environmental or physical sciences and others as applicable*

### TO APPLY:

Apply online at:

[www.mntap.umn.edu/interns/student/apply/](http://www.mntap.umn.edu/interns/student/apply/)

Remember to submit your application form, cover letter, resume, and unofficial transcript.

Applications can be addressed to:

Matt Domski, Intern Program Manager

200 Oak Street SE, Suite 350-1

Minneapolis, MN 55455 • [mdomski@umn.edu](mailto:mdomski@umn.edu)

**MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY**