Introduction

UMD has signed on to the Second Nature Carbon Commitment with nearly 700 other schools. This project will assist the University in the progress of this goal.

Project Overview

- Who: UMD Solar University Network Delegation: Team of 11 students from across three colleges of the UMD campus
- What: We aim to place a visible, accessible, student-focused solar pavilion project on campus that nearly doubles solar electricity production
- Where: The Solar Pavilion will be located near the Malosky Stadium, in the green space near the proposed M-2 parking lot expansion
- When: We hope to break ground in Spring 2017
- How: This project is UMD student-funded
        - In-hand: $100,000 in Student Service Fee funding secured
        - In-process: Green Revolving Fund request for $50,000
    - *Note: This project is separate from parking lot expansion and medicine wheel garden, but compliments and fits with those projects.*

How this project fits the UMD Master Plan

- A solar pavilion meets the goal to "Visually manifest sustainability" at UMD
    - Students voted at the Solar Summit (April 2016) to have a solar installation which will be visible to both current and prospective UMD students and staff, as well as the greater Duluth community
- "Learning. We educate students through an integrative learning-centered environment that fosters a lifelong pursuit of wisdom. Discovery. We discover, create, and share knowledge."
    - The pavilion will be in a central, easily accessible location on campus, allowing it to serve as a meeting place for students, alumni, & community.
    - Sustainability tours and groups will be able to utilize the pavilion as a starting point
    - We plan to include metering software that will assist in student and faculty research & outreach.

Potential Maintenance Concerns

- Solar panels are durable and designed to withstand various weather systems
    - Hail and wind damage are uncommon, however the group could set aside a few thousand dollars from Green Revolving Fund money to cover potential damage or panel replacement.
        - Molasky Stadium was damaged in record-breaking storm (90 mph winds) and is in the process of being repaired
    - Solar pavilion design considerations will include manufacturer warranties and recommended maintenance schedules (ex: software upgrades)
    - Essentially no regular maintenance is required
        - No snow removal required
        - During design, we will work with the vendor to determine and address any needed maintenance.