

Date: May 12th, 2022

To: Muscatine Community College Administration and Phi Theta Kappa Chapter

From: University of Iowa Capstone Team: Michaela Dohleman, Noel Mills, Jackson Wright

Cc: University of Iowa Faculty Advisors, Professors Jerry Anthony and Travis Kraus **Re:** Sustainability and Environmental Responsibility at Muscatine Community College

SUMMARY

According to the Princeton's Review 2021 College Hopes and Worries Survey of 14,093 US college applicants and their parents, 75% indicate that institutional commitment to environmental issues would affect their choice of college: a 10% increase from 2020. Prior to the start of the MCC partnership with the UI Project Team, sustainability efforts were largely limited to small student-driven projects. The UI Project Team conducted a survey of MCC students, faculty, staff, and administration, a campus waste audit, and peer institution research to inform its recommendations. MCC administration, motivated by the leadership of Phi Theta Kappa students, has committed to creating a campus-wide Sustainability and Environmental Responsibility (SER) Committee that will design and execute an SER Plan.

BACKGROUND

According to the International Panel on Climate Change (IPCC), "human activities have caused global temperature to rise about 1.0 °C degrees above preindustrial levels (before the 1880s) and that, if increases continue on the current trajectory, global warming will likely reach 1.5 °C between 2030 and 2052". The Environmental Protection Agency states that reaching this increased temperature could increase the frequency, durations, and intensity of heat waves, worsen air and water quality, cause rising sea levels, change ecosystems' patterns of migration and reproduction, and increase the frequency and intensity of extreme weather events.²

While decarbonization and waste reduction at MCC will likely have a small impact on global climate change, the impact of training students on how to practice sustainability in their own lives as well as lead climate action in their industry is incalculable. According to the student survey conducted by the UI Capstone Team, 20.35% of respondents had little or no confidence in their understanding of sustainability as it relates to their future education or job. Yet, the most common word respondents used to describe how they feel about climate change was "scared." Empowering MCC students to have agency over their role in climate change in their career will benefit both students and society.

STAKEHOLDERS

- Phi Theta Kappa Honors Fraternity, a student organization that has made environmental sustainability and climate action their cause of focus for the 2021 and 2022 calendar years
- MCC administration, including the President and Dean of Instruction, have committed to creating a campus-wide SER Committee, guided by the UI Project Team recommendations
- MCC faculty and staff, who will need to be considered at every step of the SER Plan development and execution, as their work will be most directly affected by new initiatives

¹ https://www.princetonreview.com/college-rankings/college-hopes-worries

² https://www.epa.gov/climatechange-science/impacts-climate-change

BEST PRACTICES

- Forming a Sustainability and Environmental Responsibility Committee. Many institutions considered peers of MCC in terms of size and instruction that have developed a plan to move toward campus environmental sustainability through reducing carbon and waste begin the process by forming a SER Committee. Made up of students, faculty, staff, and community stakeholders, these committees lead sustainability efforts on campus conducting waste, energy and water use audits to develop a baseline in order to guide their plans going forward.
- Developing a campus-wide SER Plan. Once a campus SER Committee has been formed, they
 typically complete audits to establish baseline data and create a SER Plan to set goals regarding
 various sustainability topics such as energy efficiency, recycling, and green purchasing practices.
 Goals included in SER Plans are realistic, attainable, and involve different groups of
 stakeholders in order to hold the committee accountable to its sustainability efforts.

POLICY RECOMMENDATIONS

- Form campus-wide SER Committee at MCC. The committee should be composed of administration, faculty, staff and students, including representation from PTK. This committee will be responsible for developing and executing climate action projects.
- Join the Association for the Advancement of Sustainability in Higher Education. AASHE provides sustainability support and resources for higher education institutions.
- Establish baseline emission data. Free online emission calculators provide baseline data to aid the SER Committee in setting goals and tracking progress.
- Create comprehensive long-term plan that guides SER Efforts. The SER plan will outline priorities and goals as well as how MCC will achieve those goals.
- *Improve the MCC waste management system.* Switch to single-stream recycling through current contractor, Republic, and improve communication around campus compost bin.
- *Increase sustainability education in the curriculum*. Copy principles of MCC's successful "diversity-rich course" design, in which professors voluntarily have their courses designated.

NEXT STEPS

- Select individuals for the SER Committee and invite them to serve
- Schedule first meeting of the SER Committee, which should cover setting priorities and goals
- Apply to join AASHE and pay the annual fee
- Choose an online emissions calculator from the options provided by the UI Project Team