BOARD OF REGENTS

EASTERN MICHIGAN UNIVERSITY

SECTION: 15
DATE:
April 20, 2023

RECOMMENDATION

UTILITIES SERVICES AGREEMENT

ACTION REQUESTED

It is recommended that the Board of Regents approve the selection of CenTrio as the University's utilities services partner, and authorize the President, or his designee, to finalize and execute a utilities services agreement with CenTrio.

In addition, it is recommended that the Board of Regents authorize the President, or his designee, to finalize and execute the pre-development agreement with Gilbane Development Company, as well as approve the immediate infrastructure improvements outlined in the attached resolution.

STAFF SUMMARY

The University began exploring the potential for an energy services partnership in Spring 2022, working with the University Budget Council (UBC) Alternative Revenue Sub-Committee to assess the benefits of a potential partnership. Following the UBC's recommendation to further explore an energy services partnership to sell surplus power generated at the Cogeneration Center, the University worked with its consultants (Rieth Jones Advisors) and Master Developer (Gilbane) to assess the marketplace. Selling surplus power was not deemed feasible, but other opportunities for energy partnerships were identified. During Summer 2022, the University and Gilbane, solicited national leaders within the industry to identify interested parties, conducted interviews and ultimately is recommending CenTrio as its preferred energy services partner.

The proposed 50-year partnership with CenTrio would provide the University with a significant upfront payment of approximately $115 million upon financial close. This agreement would enable the partner to operate and maintain the University's power plant and facilitate the delivery of utilities across campus. The University will be able to leverage both the financial compensation and reduction in ongoing maintenance expenses to bolster its financial position and invest in strategic student recruitment and retention initiatives, while allowing CenTrio to operate the plant and make investments in the utilities infrastructure to support the University's continued dedication to sustainability and energy efficiency.

CenTrio is an experienced and leading developer, investor and operator of campus utility and district energy systems, with ownership focused on long-term infrastructure investments as well as strong commitments to sustainability and ESG initiatives.

FISCAL IMPLICATIONS

Upon financial close in June 2023, the University will receive $115 million in upfront compensation. The funds will be invested by the University to provide a sustained future income stream to support

investments in student recruitment and retention efforts. The University will be responsible for a $5.3 million annual payment to CenTrio, as well as the cost of utilities.

Upon financial close, the University will also retire $25.4 million of existing debt associated with the University's infrastructure assets, which will provide the University an average debt service savings of $1.0 million per year through 2033, and $700,000 from 2034 to 2048.

Finally, the University also expects to save $1.9-$2.4 million in annual expenses related to maintenance, operations and commodities.

ADMINISTRATIVE RECOMMENDATION

The proposed Board action has been reviewed and is recommended for Board approval.

[redacted]

EASTERN MICHIGAN UNIVERSITY

Utility Services Agreement

Mike Valdes
Chief Financial Officer

THE "WHAT"

- The University has spent the last several months working to evaluate a potential utility and infrastructure partnership. The University considered limiting this initiative to simply selling excess power, but the University has limited excess power, and there would need to be investment to support this. The partnership, if approved, would result in:
  - A third party operating/maintaining the Energy Center and other utility infrastructure;
  - Creating a new funding model to invest in infrastructure such as Energy Conservation Measures, deferred maintenance, and modernization of the utility distribution systems;
  - Reducing our outstanding debt by $25mm, generating $1.1mm in annual debt service savings and improving our debt-to-liquidity ratios; and
  - Yielding substantial sustainability improvements that will be measured and publicly shared.

THE "WHY"

1. We can leverage this opportunity to invest in strategic initiatives to improve student recruitment, retention, satisfaction and experience
2. The potential project would enable massive investments in University infrastructure (outside capital) at sole discretion and approval of Eastern Michigan
3. It would create ongoing mechanism to fund infrastructure investments for decades to come over the life of the agreement
4. Energy efficiency enhancements to the utility system and campus infrastructure would reduce overall energy consumption and utility costs and significantly enhance the University's current and future sustainability efforts
5. The agreement would provide University with substantial upfront funds to be used to establish long term investment income stream through a Strategic Fund

THE OPPORTUNITY

NATIONAL & REGIONAL CONTEXT

Across Michigan and the United States, institutions of higher education are facing a backlog of deferred maintenance and increasing operational pressure. Colleges and Universities have sought innovative ways to improve how they function through strategic investments in both their organizations and the physical infrastructure supporting their mission.

OPPORTUNITIES & BENEFITS

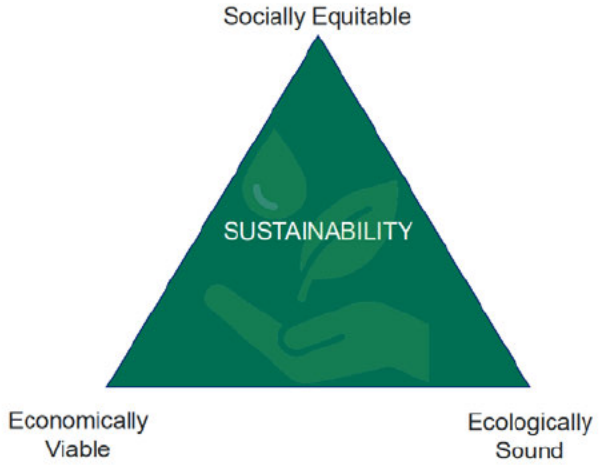
One opportunity utilized by institutions to advance their mission is through infrastructure partnerships. These partnerships can take many forms, including combinations of capital investments, operational efficiencies, and providing solutions that meet institutional objectives.

Institutions such as Ohio State, Iowa, Georgetown, Idaho, and LSU have recently executed infrastructure partnerships to accomplish their sustainability goals, enhance infrastructure reliability, and provide alternative revenue streams to re-invest in their enterprise in support of their strategic objectives.

POTENTIAL ACADEMIC COLLABORATION

1. Real Time Dashboard: Campus Energy and Water Resource Use - Highly visible dashboards across campus to display actual real time progress towards achieving specific sustainability initiatives after implementation of smart metering and reporting systems.
2. Living Laboratory - Utilize the institution's infrastructure and operations as a living laboratory for applied student learning for sustainability.
3. Student "Shark Tank" - Integration and support of existing entrepreneur programs at EMU.
4. Campus Engagement - A focused campus communication community education strategy on the "Why" infrastructure and sustainability matter.
5. Internships/Student Engagement
    a. Development of student led sustainability projects
    b. Student internships and support for career pathways
6. Energy Advisory Committee ("EAC") - The EAC serves as an informal review board as part of the iterative development process and provide guidance and feedback on the scope, economics, and schedule of various infrastructure and operational projects.
7. Sustainability Platform – the platform provides the opportunity to advance

- the relevancy and impact of the utility and infrastructure system into other
- areas of campus.
    - Educational benefits, curriculum enhancements
    - Positive impacts to EMU ratings, rankings, and accreditations
    - Community benefits
    - Social equity focus and commitment
    - Enrichment of health and wellbeing of people



POTENTIAL BENEFITS

A. GREENHOUSE GASES/ENERGY USAGE INTENSITY REDUCTIONS

The potential partnership realizes an estimated 217,000+ MMBtu reduction. This projection is based on a ~35% reduction in natural gas and electrical consumption for the entire campus after implementation of a series of Energy Conservation Measures (ECM's) and capital projects. This reduction is equivalent to the following:

- Greenhouse gas emissions from 2,500+ gasoline-powered vehicles for one year
- CO_2 emissions from 1,340,000+ gallons of gasoline consumed
- CO_2 emissions from 2,300+ homes' electricity use for one year

B. STARS RATING IMPROVEMENTS

- STARS is intended to provide a ranking for colleges and universities regarding sustainability initiatives, efficiency of buildings, academic curriculum, operations, and campus engagement.
- AASHE awarded EMU with a Bronze rating in 2022, placing the University in the top 5% of colleges in the US for sustainability efforts. The area providing the biggest challenge for the existing rating is facility systems, and this project could provide significant improvement to that category.
- Due diligence and capital planning efforts developed thus far indicate that there is a potential to dramatically improve the rating from Bronze to Gold, nearly doubling EMU's score.

POTENTIAL BENEFITS

C. FINANCIAL & ECONOMIC

- Total upfront consideration of $115mm paid to the University at financial close
- $90 into the Strategic Initiatives Fund after defeasing ~$25mm of existing infrastructure debt
- The University would be able to make annual distributions from the Strategic Initiatives Fund to address EMU's strategic priorities
- These annual distributions are a net new revenue stream that allow the University to invest in recruitment, retention, sustainability, and other campus-wide initiatives established by the University and its constituents

D. IMMEDIATE IMPACTS

- Energy Conservation Measures are projects within buildings that help reduce the energy utilized (and paid) across campus directly resulting in operational cost avoidance, O&M efficiencies, increased sustainability efforts, and generate reductions in "energy use on a per-square foot basis," known as Energy Usage Intensity (EUI)
- Potential capital expenditure projects such as converting the campus from steam to hot water, centralizing chilled water operations, and infrastructure modernization have the potential to generate further reductions in EUI and more significant GHG reductions
- EMU is able to utilize its Master Development Partner, Gilbane, to undertake $20-25mm of Immediate Infrastructure Improvements which otherwise did not have direct funding routes.

POTENTIAL BENEFITS

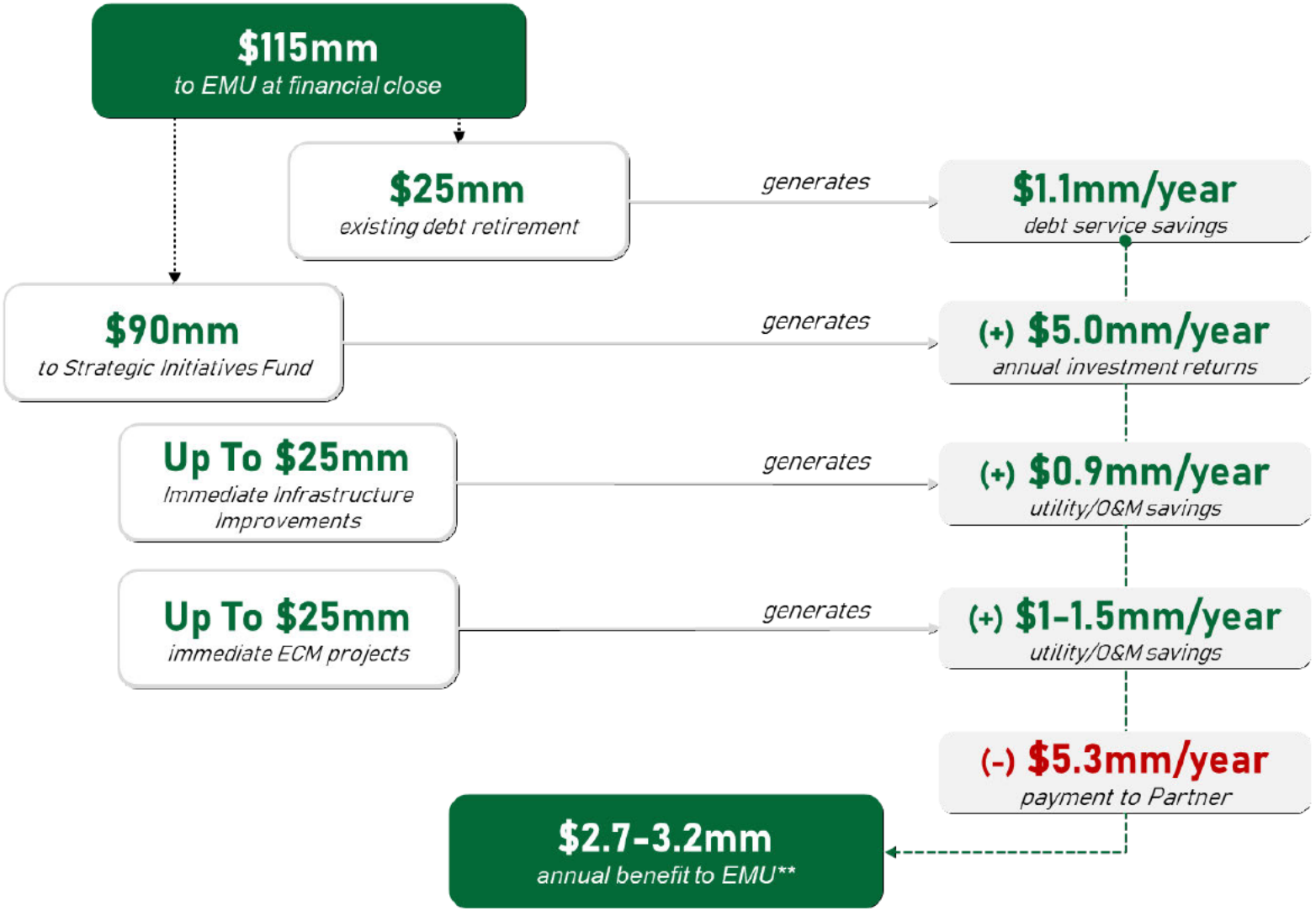
D. IMMEDIATE IMPACTS (continued)

The University has worked with the Master Developer (Gilbane) and our potential Infrastructure Partner (CenTrio) to identify a series of projects that would yield reductions in energy use intensity, electrical/utility loads, and reduce operating costs while enhancing redundancy and reliability of the University's electrical grid and its capacity.

Immediate Infrastructure Improvements (IIIs)		
Demolition of Obsolete/Unused Campus Buildings	Reductions in operating costs (utilities, maintenance), increases efficiency, and addresses critical concern re: primary infrastructure	$14-17mm
Building Envelope, Electrical, Stormwater, Infrastructure, and Sustainability Enhancements	Reductions in operating costs (utilities, maintenance), increases efficiency, provides operational certainty during unplanned outages *(includes housing enhancements)*	$4-5mm
Utility & Electrical Infrastructure Expansion and Modernization	Provides revenue generating opportunity, modernizes "at-risk" electrical infrastructure to reduce potential future damages	$2-3mm

Energy Conservation Measures* (ECMs)		
Building Automation System Upgrade	Reductions in EUI and greenhouse gases, modernizes in-building and campus-wide infrastructure, increases operating efficiency, conserves water, enhances sustainability, provides opportunity for academic collaboration, allows for real-time monitoring and adjustments	$20-25mm
Utility Metering for On-Campus Buildings and Energy Monitoring		
Building and Irrigation Water Conservation		

ILLUSTRATIVE CASH FLOW



OPEN DISCUSSION

OPPORTUNITY DRIVERS

1. The University has made challenging decisions over multiple years to build a solid foundation for future success. This potential project would be a positive strategic decision with a positive financial outcome that would benefit the University and its constituents over the long term.

2. Eastern Michigan can leverage this opportunity to invest in strategic initiatives to improve student recruitment, retention, satisfaction, and the overall experience.

3. Energy efficiency enhancements to the utility system and campus infrastructure would reduce overall energy consumption and utility cost and increase Eastern Michigan's current and future sustainability efforts.

4. The University can reduce its NOx, SOx, and other emissions in the short-term while significantly improving our AASHE STARS rating through strategies and infrastructure improvements that otherwise may not be possible in the near-term.

5. The existing six (6) EMU employees serve as the foundation for the infrastructure and utility system success. The potential partnership would allow these employees to remain EMU employees working in the Energy Center *or* begin working for our partner. This provides opportunities to continue their careers in a variety of different methods at their discretion.

6. EMU has the opportunity to be a "first-mover" among its peer institutions in the state of Michigan and Mid-American Conference by utilizing the type of infrastructure projects that have been leveraged predominantly by larger organizations across the country.

APPENDIX - RECENT EXAMPLES

	The Ohio State University	The University of Iowa	Georgetown University	University of Idaho	Louisiana State University
Partnership Term	50 years	50 years	50 years	50 years	30 years
Upfront Proceeds	$1.165B	$1.165B	$800MM	$225MM	$125MM
Annual Fixed Fee	$45MM	$35MM	*Confidential*	$7.6MM	*Confidential*
Strategic Initiatives	▪ Sustainability leadership ▪ Energy innovation center ▪ Faculty endowment ▪ Student scholarships & internships ▪ Curriculum development ▪ Investment in University organizations	▪ Coal-free by 2025 ▪ Internships & employment opportunities ▪ Experiential learning events ▪ Investments in teaching, research, & scholarships	▪ Carbon neutral & water neutral by 2030 ▪ 100% renewable power by 2035 ▪ New sustainability & environmental studies courses ▪ Internships ▪ Experiential learning events	▪ Focus on attaining R1 research status ▪ Undergraduate scholarships & stipends ▪ Marketing & recruiting initiatives ▪ Internships & on-campus lectures	• $90MM in energy savings for LSU • Campus-wide sustainability initiatives • Utility-system capital improvements • Academic collaboration