

**Testimony Presented by Joan Ferrini-Mundy, University of Maine President  
and University of Maine System Vice Chancellor for Research & Innovation  
In Support of LD 1871, *An Act to Authorize a General Fund Bond Issue to Invest in a Green  
Energy Materials Building at the University of Maine, May 25, 2023***

Senator Rotundo, Representative Sachs and distinguished members of the Joint Standing Committee on Appropriations & Financial Affairs: My name is Joan Ferrini-Mundy and I am honored to serve as the President of the R1 University of Maine and its regional campus in Machias, and also as the first Vice Chancellor for Research & Innovation for the University of Maine System (UMS). Relevant to today's testimony is that I also serve on the Executive Steering Committee overseeing implementation of Maine's 10-Year Statewide Economic Development Strategy, as the chair of the Maine Innovation Economy Advisory Board and on the board of Maine & Company.

I am here to **urge your support of critically needed investment in Maine's public university infrastructure**, like that proposed by LD 1871, *An Act to Authorize a General Fund Bond Issue to Invest in a Green Energy Materials Building at the University of Maine*.

Earlier this month, this Committee took up legislation sponsored by Representative Sawin Millett that would require certain legislation to be independently analyzed to determine how it advances the actions and goals outlined in the State's 10-year strategy. As you are aware, that plan identified talent and innovation as *the* two primary necessities to spur growth in our economy for the benefit of all Maine people.

Through that lens, I believe the single capital project that could have the most transformative impact on talent development and innovation generation, and thus, accelerate the state's economy consistently with the recommendations of the 10-year plan, is the UMaine Green Engineering & Materials Factory of the Future (GEM).

Under the leadership of the visionary Habib Dagher and his team, and utilizing artificial intelligence and arrays of massive 3D printers, this cutting-edge facility will enable the expansion of our Advanced Structures & Composites Center's workforce training and research into next-generation, large-scale bio-based manufacturing process and materials development.

The GEM project builds on the success of the world's first 3D-printed home made entirely from low-value wood waste. It leverages the state's vast, sustainable forest resources and market opportunities for durable, low-cost, low-carbon construction materials. An entire bay of the 90,000-square-foot Factory of the Future would be focused on R&D for affordable housing, also a priority of the 10-year plan and the Legislature. Other applications advanced by GEM, and then commercializable by the private sector, would be clean energy, durable transportation infrastructure and boat building, including for national security use. Additionally, GEM will:

- Attract hundreds of millions of dollars in new public and private investment to Maine;
- Spin-off new companies that will create great-paying innovation jobs for Mainers while enabling existing businesses here to grow and hire more Mainers;
- Stabilize, strengthen and diversify the forest economy, and dependent rural communities;

- Advance Maine's climate action goals;
- Enable UMS to deliver on a bold commitment to double our output of engineering and computing graduates over the next decade;
- And sustain UMaine's R1 designation and solidify the state as a global leader in R&D that matters to Maine and the world.

The construction and equipping of GEM has already garnered \$80 million in investment, including from the Departments of Defense and Energy and Congressionally Directed Spending secured by Senators Susan Collins and Angus King. The bipartisan \$35 million bond before you represents the remaining funding needed to break ground on GEM in 2024.

However, please know this amount is far less than what is needed now to realize the full potential of the Factory of the Future and Maine's public universities.

Last month you heard from Chancellor Malloy that **UMS is burdened by a backlog of deferred maintenance that exceeds \$1.6 billion**, more than four times the combined need of Maine's community college system and maritime academy. At UMaine — where 61% of space has not been meaningfully renovated in at least 50 years, upgrading our archaic electrical infrastructure is becoming increasingly urgent. We regularly experience outages that threaten campus safety and productivity, and our grid cannot meet the added demand anticipated by GEM and other planned improvements, like those underwritten by the Alford Foundation to Black Bear athletic facilities.

LD 460, a bipartisan \$100 million bond sponsored by Senator Teresa Pierce with the support of President Jackson and many of you, and the endorsement of the Education Committee in its March budget report-back, proposes investment across our System. Those funds would allow us to both modernize existing spaces and systems that undergird our operations, and create new state-of-the-art facilities that move forward world-class public education and research, and Maine's economy and communities. As GEM demonstrates, pursuing both catch-up and get-ahead projects simultaneously is essential to enabling UMS to strengthen and grow student enrollment and Maine's workforce. UMaine would invest its \$58 million share to modernize electrical and mechanical systems and construct the Factory of the Future.

If the Legislature opts not to advance general obligation bonds like LDs 460 and 1871 this year, we urge you to **appropriate an additional \$10 million in ongoing debt service to UMS in the Part II budget to support \$100 million in critical, time-sensitive infrastructure investments to classrooms, residence halls and laboratories like GEM**. As Trustee Pat Flood recently reminded you, our System utilizes debt service provided to us by the Legislature to make payments on revenue bonds issued directly by UMS to finance capital projects. S&P just affirmed our AA- rating, allowing the System to continue to borrow at competitive rates without the backing of the full faith and credit of the State.

We are grateful to President Jackson, who was so inspired by a recent visit to ASCC, for championing this and other important investments in Maine's public universities. As the 10-year plan notes, Maine's greatest growth potential lies at the intersection of global trends and the state's assets. Through talent development and research-driven innovation enabled by your support of modern public university infrastructure, UMS uniquely activates those assets for maximum return so that Maine's people and economy can prosper.

Thank you and I welcome your questions.