

Efficiency Maine

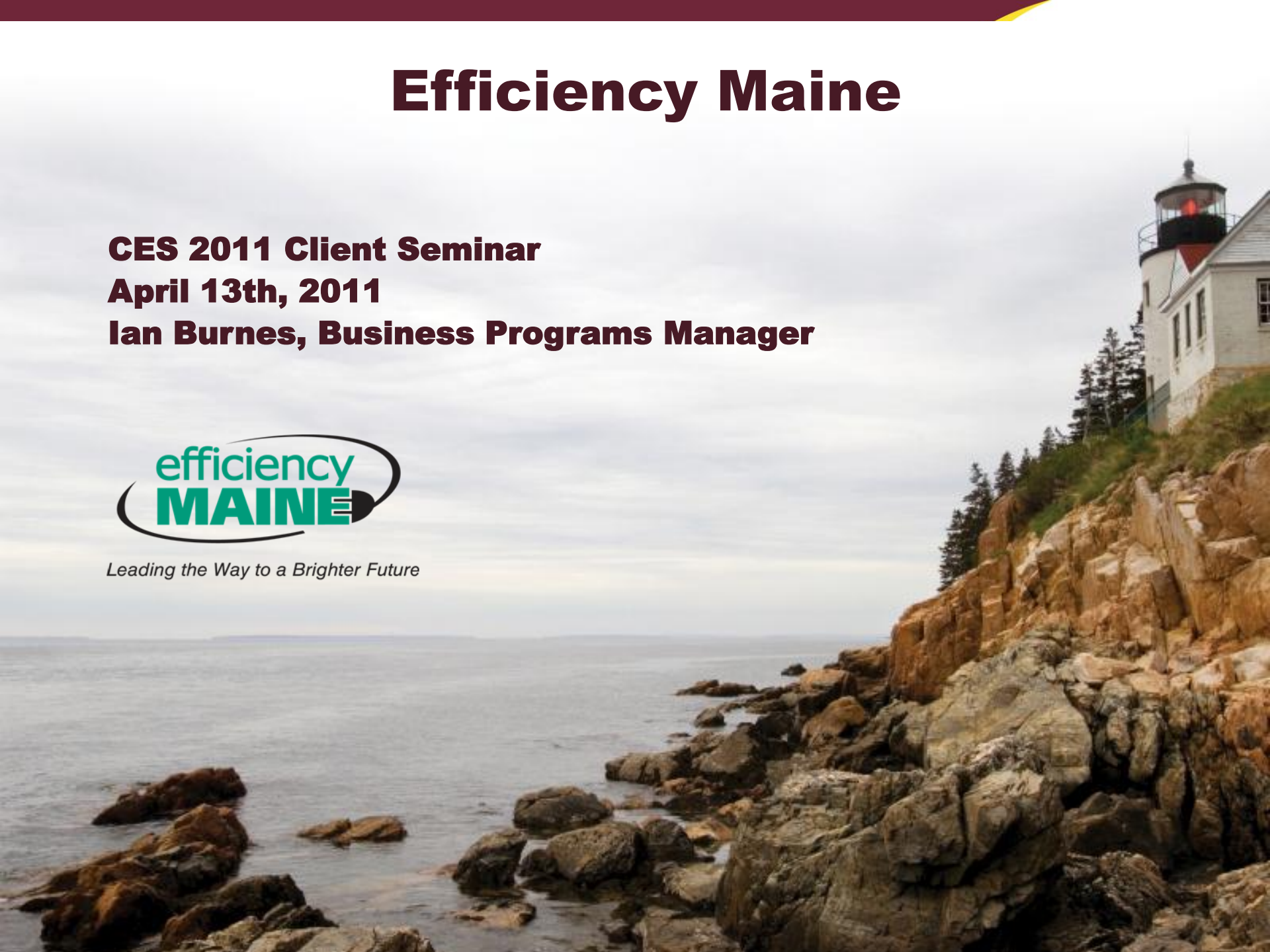
CES 2011 Client Seminar

April 13th, 2011

Ian Burnes, Business Programs Manager



Leading the Way to a Brighter Future



- **Who is Efficiency Maine Trust?**
- **What are the programs available to Businesses in Maine?**
- **What is the process by which Large Projects Grants have been awarded?**
- **How competitive and cost-effective are natural gas conversions?**
- **What are some of the lessons learned by Efficiency Maine over the two rounds of funding?**

- **Efficiency Maine Trust was created by the Maine's Energy Future Act, 2009**
 - **35-A MRSA, Sec. 10101 et seq.**
- **Significant changes:**
 - **Increased emphasis on cost-effective delivery of programs**
 - **Centrally coordinated, statewide delivery**
 - **Program Administrator moved outside of PUC, regulated by PUC**
 - **Independent stakeholder representation from our Board of Directors**

All Non-Residential owned facilities including:

- Public & Private Schools K-12
- Local, County & State Governments
- Commercial
- Industrial
- Institutional
- Nonprofits
- Farms
- Colleges
- Water & Wastewater Facilities

Business Program Prescriptive Incentives



- Participants receive specified incentives for purchase of pre-qualified energy-efficient equipment – can be applied for online (including cuts)

- Prescriptive Incentives
 - Lighting/LED
 - HVAC
 - Variable Frequency Drive for HVAC systems
 - Compressed Air Systems

- Project Pre-Approval **IS REQUIRED** for most prescriptive incentives
 - Lighting & Refrigeration in excess of \$2,500
 - HVAC & Variable Frequency Drives

- Project Pre-Approval **IS NOT REQUIRED** for:
 - Agricultural Measures
 - **Application, cut sheets and invoices must be submitted within 60 days of purchase**

Business Program Custom Incentives



- Encourages comprehensive & innovative energy-efficiency measures
- Requires engineering assessment of complex projects
- Technical analysis can be cost-shared under specific conditions
- Application can be e-mailed, faxed, or mailed due to the detailed analysis
- **Pre-Approval is required on all Custom applications.**
- Custom incentives include:
 - Lighting Systems w/Controls
 - Variable Frequency Drives
 - Compressed Air
 - HVAC
 - Other Non-Specified Energy Measures

In Summary: Anything that produces cost efficient electrical savings!

- Incentives intended to cover a portion of the additional cost of premium efficiency equipment, compared to standard practice components
- Application must be supported by documentation of existing vs. proposed condition
- Labor & material costs
- Savings must support project cost
 - Simple payback = 1/2 measure life
 - Benefit/cost ratio ≥ 1.0
- Incentives up to 75% of incremental measure cost for new installation
- Incentives up to 35% of installed cost for retrofit measures
- Will not exceed buy down to 1.5 year payback period



- **Lighting Upgrade:** Replace T12 Fluorescents with High Performance T8s
 - Project Cost: \$5,095
 - Efficiency ME Incentive: \$1,255 (25% of project cost)
 - Annual Electricity Cost Savings: \$1,996
 - Payback = 1.9 years

- **Motor Controls:** Add VFD to Air Handling System Motor
 - Project Cost: \$7,000
 - Efficiency ME Incentive: \$2,000 (29% of project cost)
 - Annual Electricity Cost Savings: \$3,429
 - Payback = 1.5 years

- **High Efficiency Chiller – New Construction**
 - Incremental Cost of High Efficiency Equipment: \$33,000
 - Efficiency ME Incentive: \$24,750
 - Annual Electricity Cost Savings: \$4,636
 - Payback = 1.8 years



Contact us in advance of projects.
We can help!

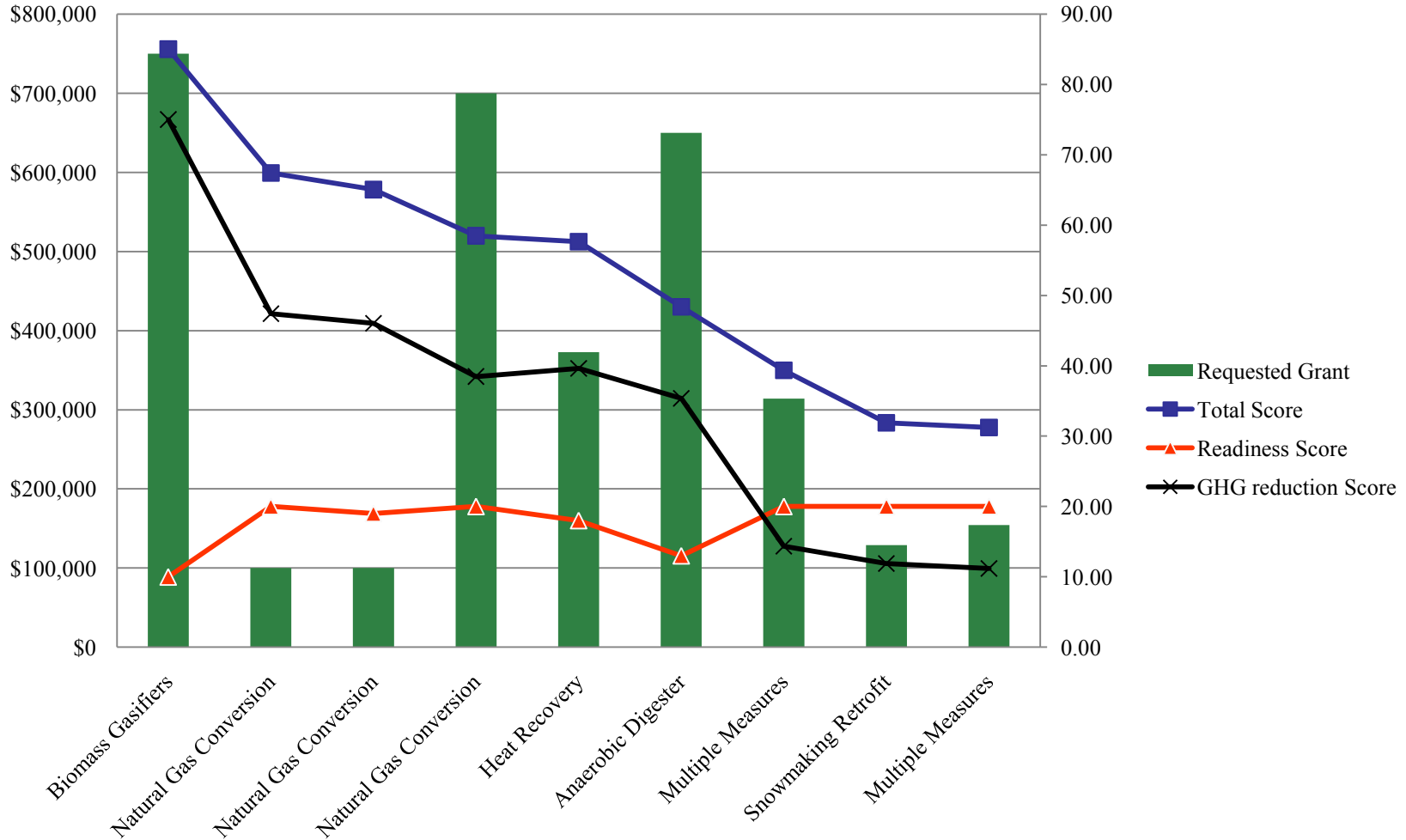
- Maine-Based Call Center
 - **(866) 376-2463 – Option 1**

- Bookmark our website:
 - ✓ **www.energycymaine.com**
 - General program information
 - Energy Wise Tools & Program Materials
 - Incentive applications
 - Searchable list of participating Qualified Partners
 - Links to other Energy Efficiency websites

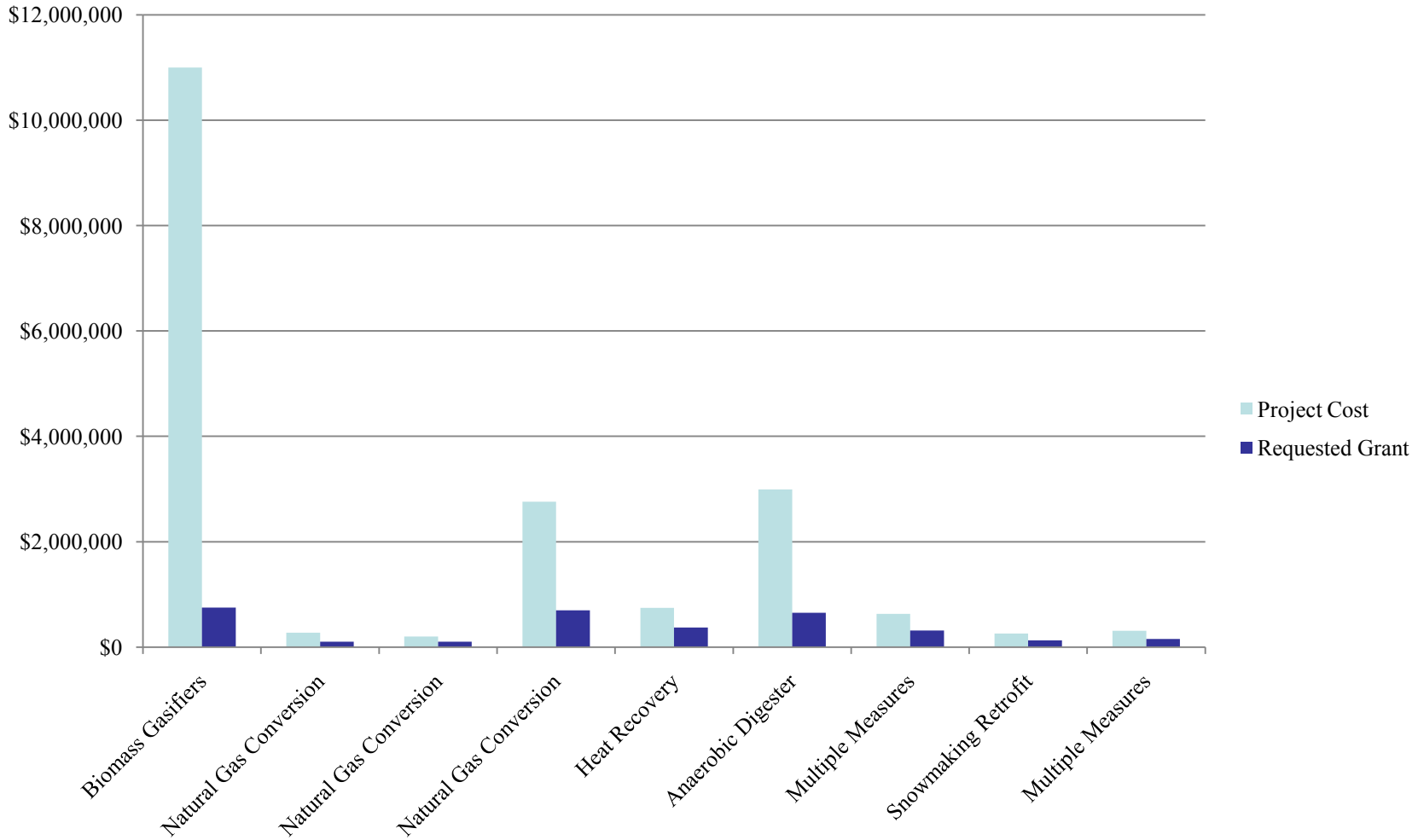
- **Two Rounds of Funding**
 - Funding from ARRA and RGGI
 - RGGI funds restricted by law
 - 85% for electrical efficiency
 - 15% for reducing greenhouse-gas emissions
 - ARRA funds are a one-time infusion of fuel-neutral funding
 - Open to all sectors

- Independent technical review
- Scoring committee convenes
- Decision made on the basis of scoring committee and technical recommendations.
- Grant contract negotiations
 - Project scope must closely match application scoring
 - Independent technical review to determine savings
 - Must verify all project financing and permitting
- Invoicing on the basis of project milestone completion

GHG Grant Overview

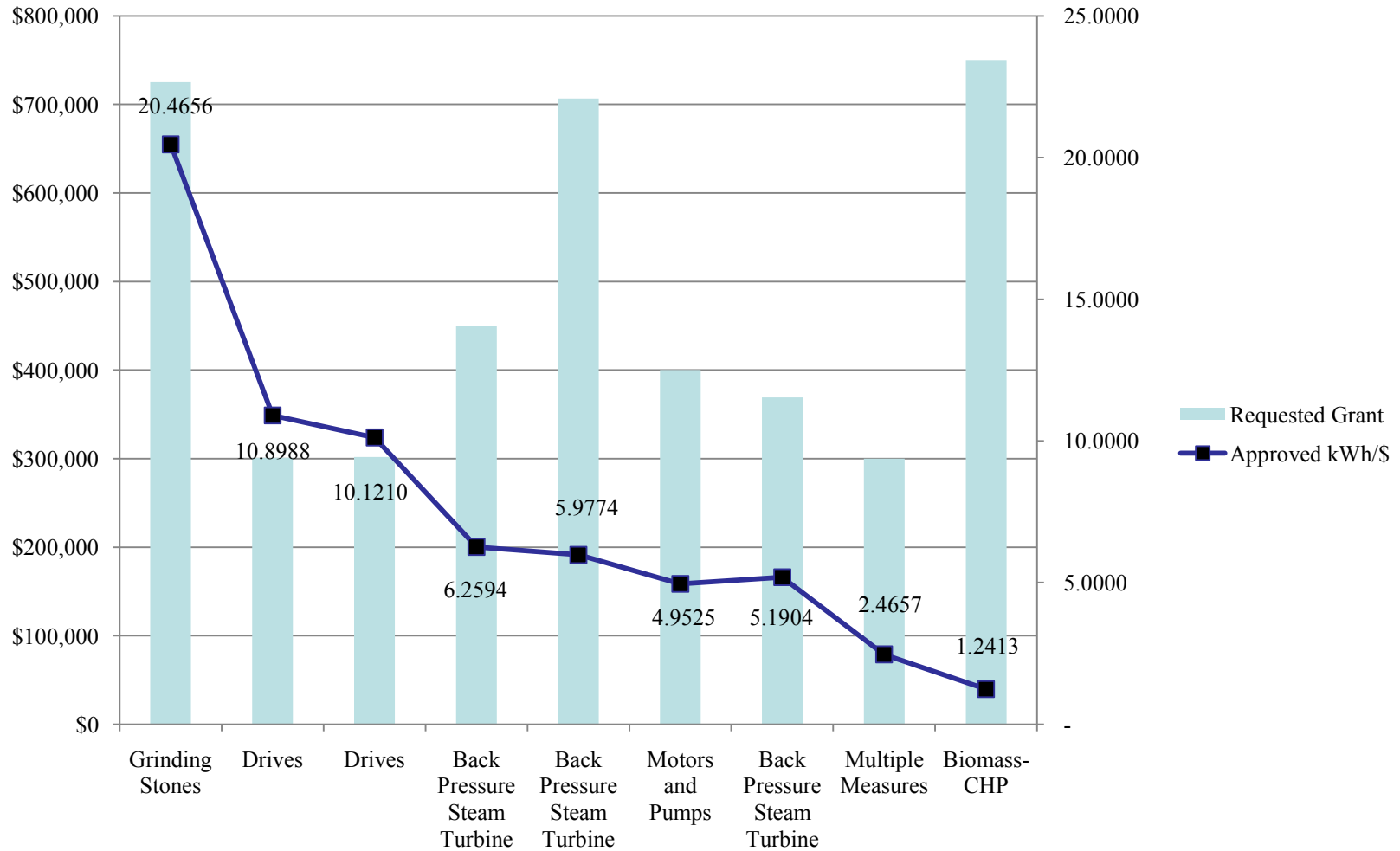


GHG Grant Overview



- **USM Conversion of #3 Boiler**
 - Boiler #3 would be converted from burning #6 oil to burning natural gas
 - State-of-the-art intake air systems, boiler controls, and controlled exhaust to optimize heat utilization and minimize emissions
 - New Stack through the roof of existing boiler plant

kWh Reductions



Bowdoin

- 60,000 PPH, 250 psig boiler providing 75% of the campus of more than 2,500 faculty, staff, and students.
- 665kW Backpressure steam turbine generator to create both heat Offsetting 9% of annual campus use.

- Bigger isn't better except when it is.
- Efficiency is CHEAP:
 - Over two rounds of projects when you take the capital cost over the expected life of the measure
 - 1.8 cents/kWh
 - 11 cents/gallon heating oil equivalent

Questions?



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efficiencymaine.com