Smart and Sustainable Campuses Conference

MIDWESTERN HIGHER EDUCATION COMPACT

Cost Savings ◆ Student Access ◆ Policy Research

Update on Lumina Grant for Development of a Buying Consortia For Energy Efficiency Improvements

Jim Sebesta, MHEC

Cost Savings

- MHEC awarded a three year grant from Lumina Foundation for Education
- Purpose of grant is identify and develop cost savings initiatives through group buying opportunities in the areas of energy and health care
- First phase is a survey to collect energy usage information from the campuses which ias complete

Survey Benefits

- Collection of better data for identifying group procurement opportunities
- Participating institutions can see how they compare to others in overall energy usage
- Participating institutions will be eligible to take part in pilot projects identified as a result of the survey (beginning 2010)

Energy Advisory Committee

- Ted Weidner, Univ. of Nebraska
- Michael Allen, Univ. of South Dakota
- Pat Apel, Maryville University
- Blair Bosworth, Cuyahoga Community College
- Ray Courter, NW Missouri State
- Bruce Frantz, ND State
- Mike Gardner, Butler University
- Craig Hansen, University of Kansas
- John Harrod, Univ. of Wisconsin
- Craig Hjelle, Mid-State Technical College
- Paul Hoemann, Univ. of MO-Columbia
- Jerome Malmquist, Univ. of MN
- Bob McMains, Purdue University
- Dave Miller, Iowa State University
- Brian Morgan, Univ. of Michigan
- Ken Oas, MNSCU
- Jim Packard, Missouri University of Science and Technology
- Randy Peterson, Lake Superior State University
- Terry Ruprecht, University of Illinois
- Pete Sandberg, St. Olaf College

- Advisory Committee Role
  - Provide assistance with interpretation of the survey data
  - Provide input and review of potential program initiatives that would bring value to Higher Education Institutions‘
  - Provide input in the development of pilot programs for targeted institutions
  - Review and recommend elements of the RFP process for targeted institutions
  - Provide review and comment on RFP responses

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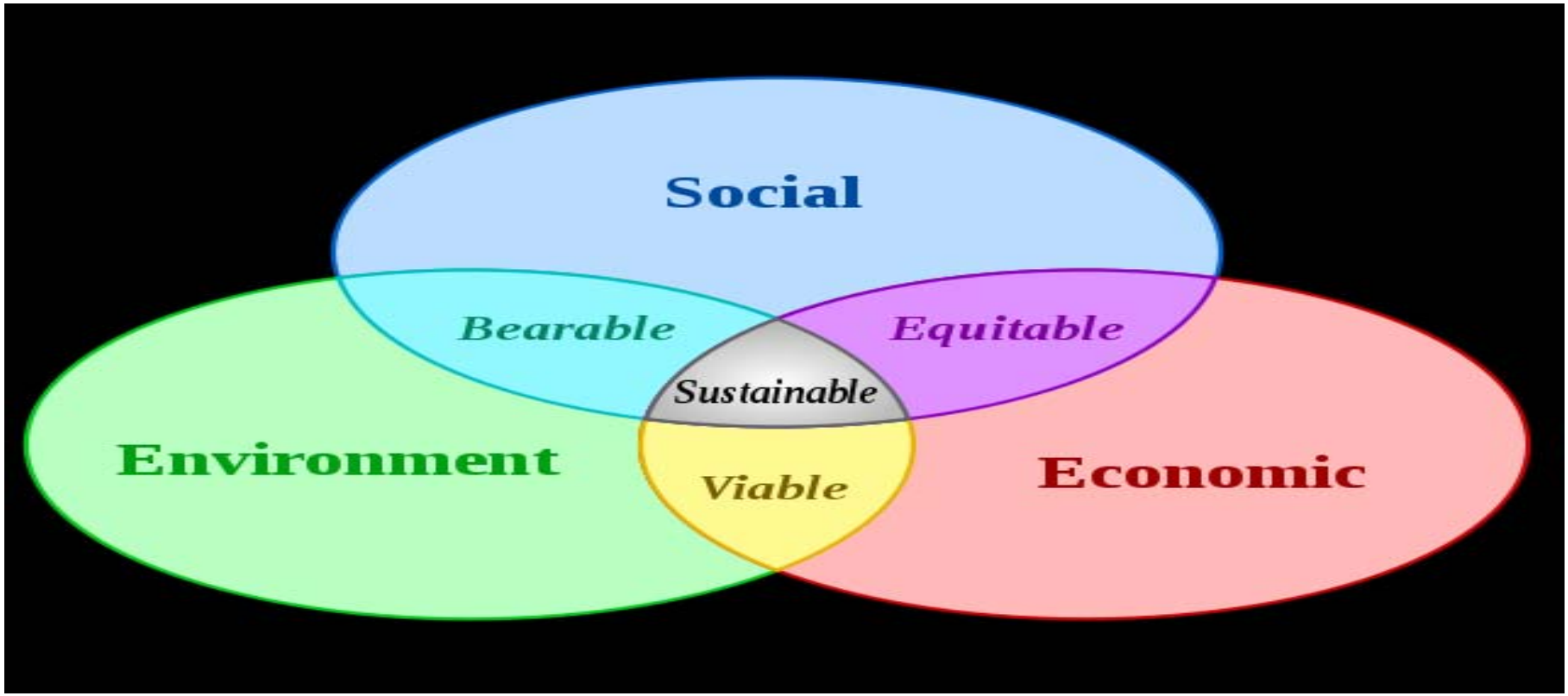
Buying Consortia For Energy Efficiency Improvements

Sustainability is enhanced by reducing the economic cost to positively impact Social needs through environmental improvements. This program reduces the economic costs to achieve reduced energy consumption benefiting the social structure of the institution.



- Survey Process
  - –Nearly 200 participants
  - –Data arranged by facility type, size, and other distinguishing factors

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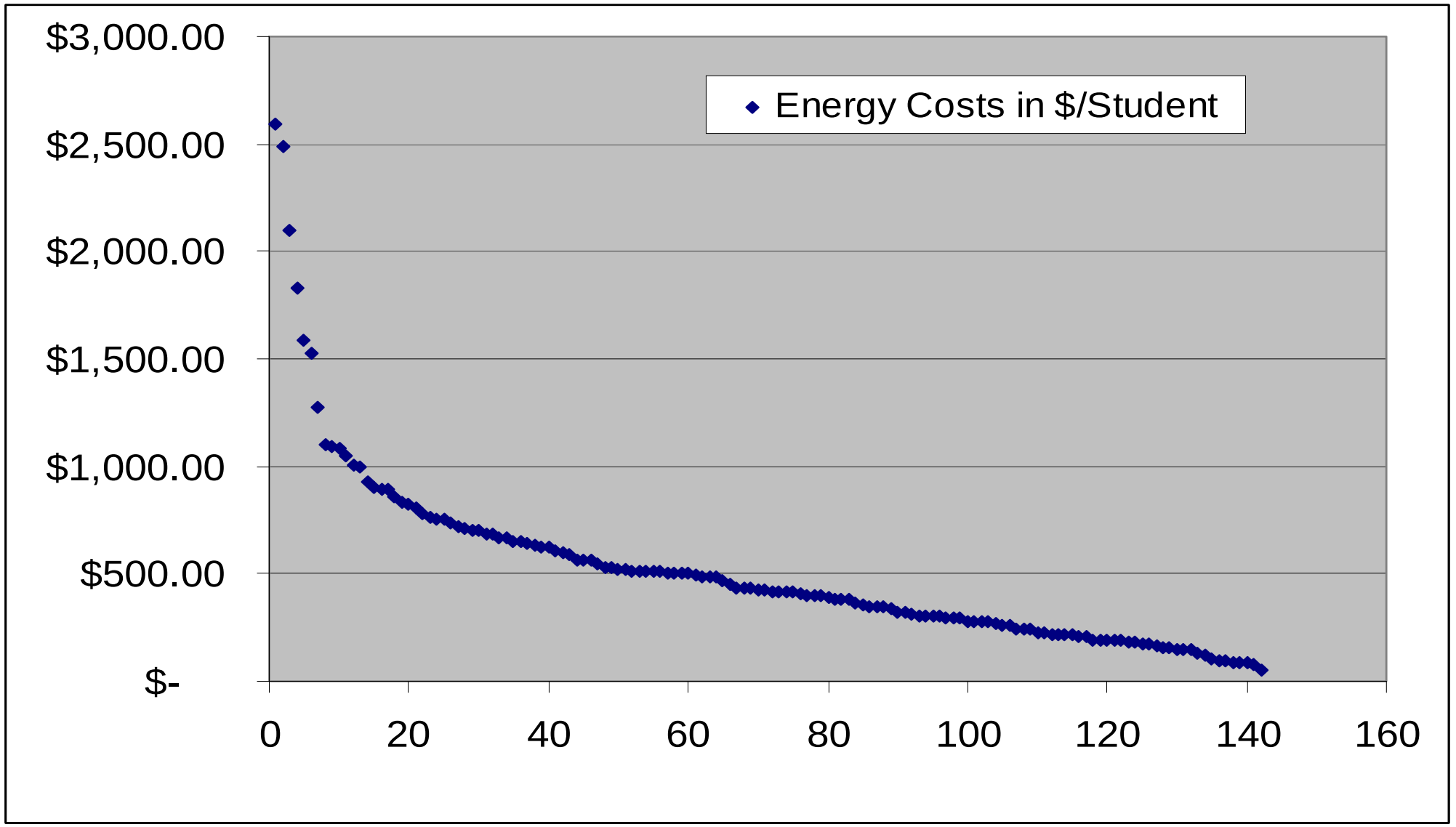

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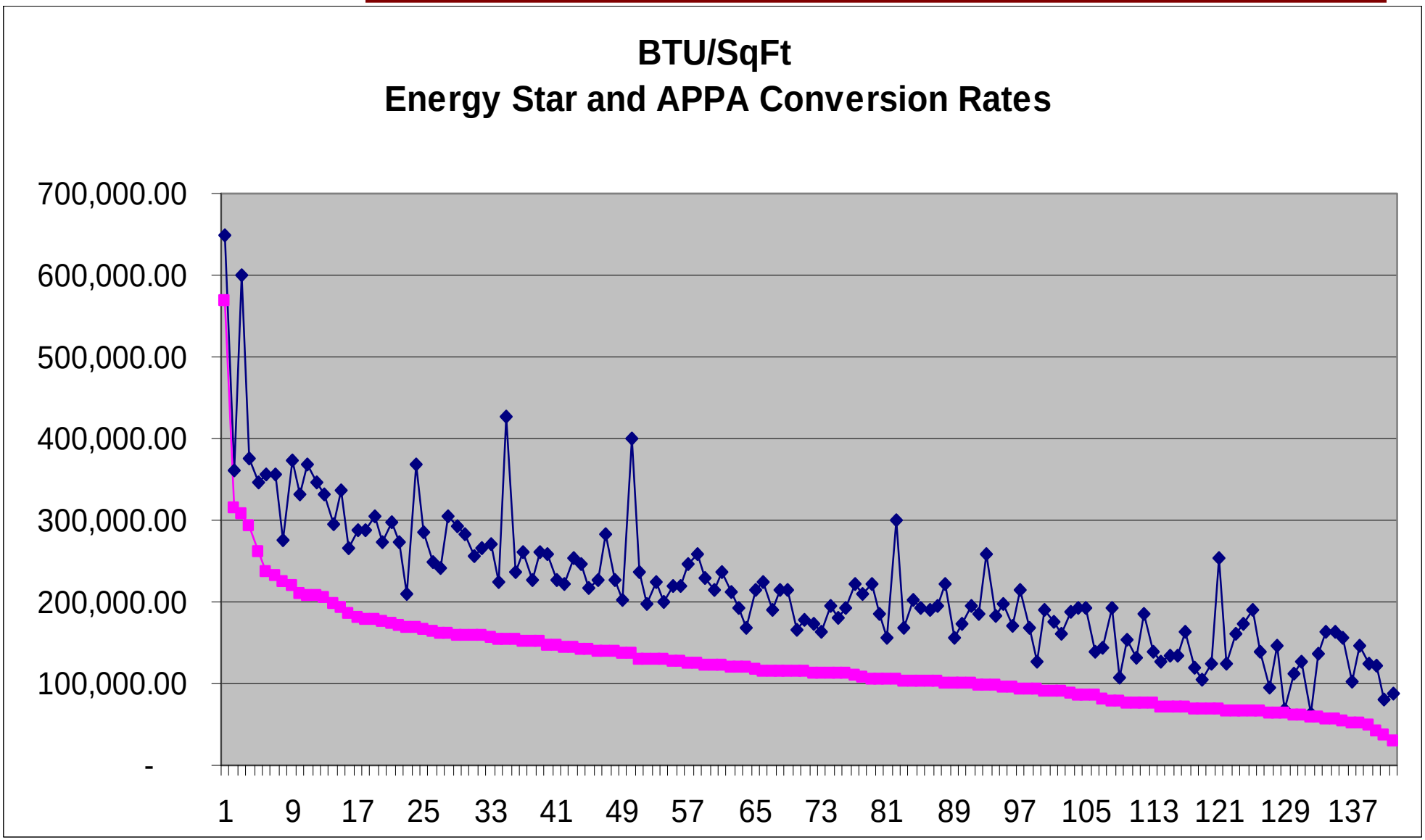

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Buying Consortia For Energy Efficiency Improvements

- Carnegie Classifications
  - Associate Two Year
  - Baccalaureate
  - Doctoral – Research
  - Masters
  - Research High
  - Research Very High
  - Specialists

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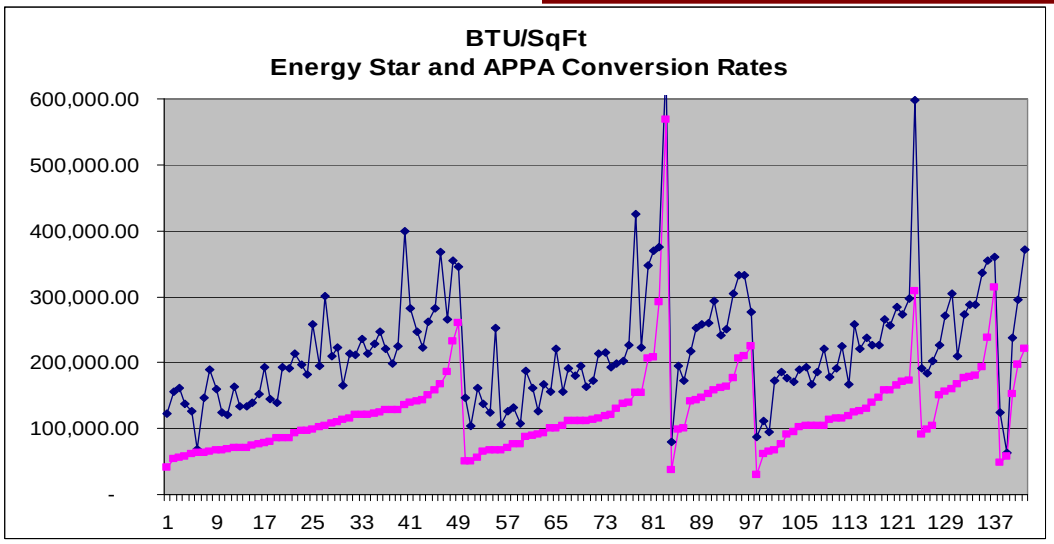

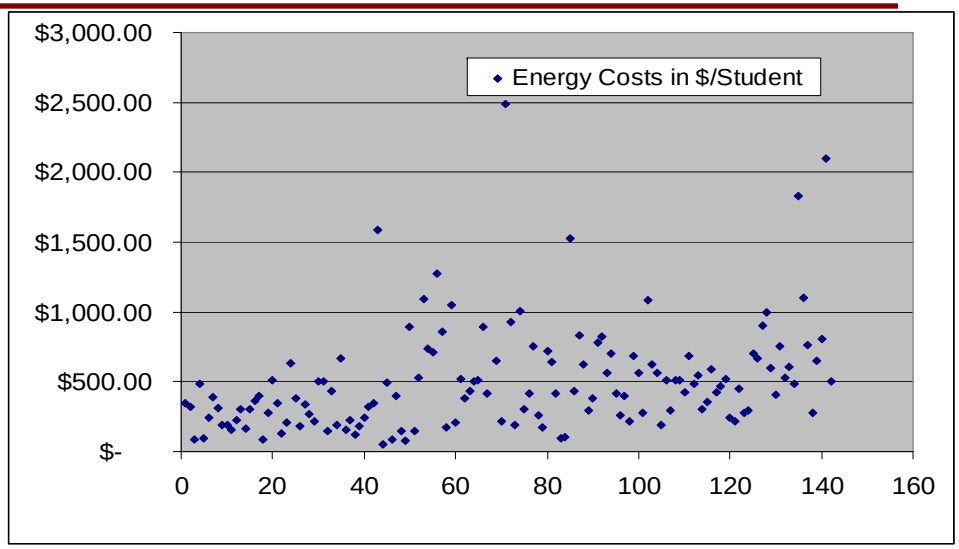

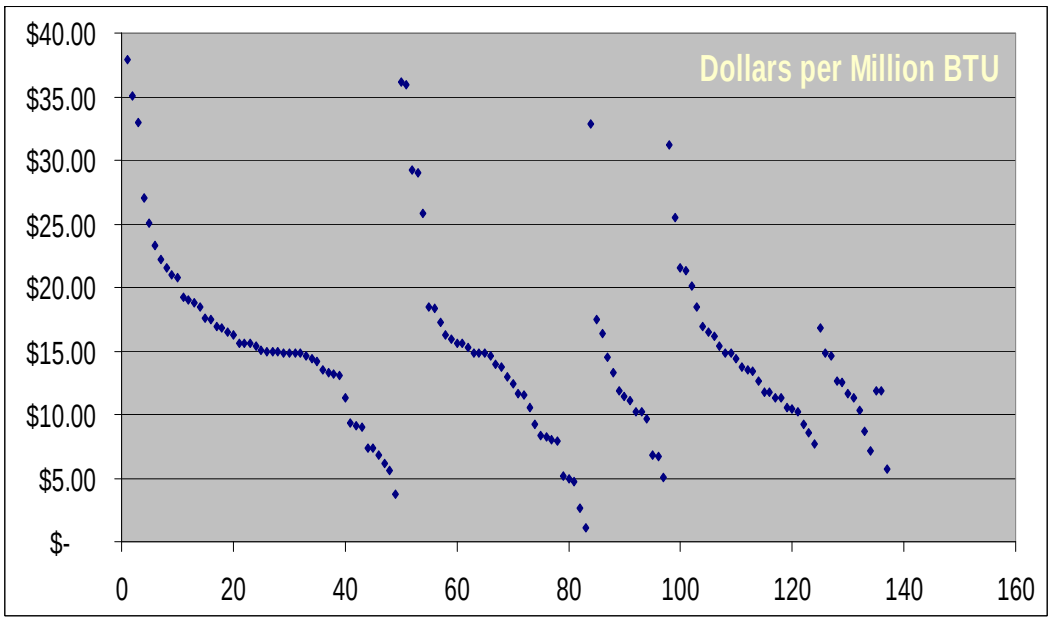

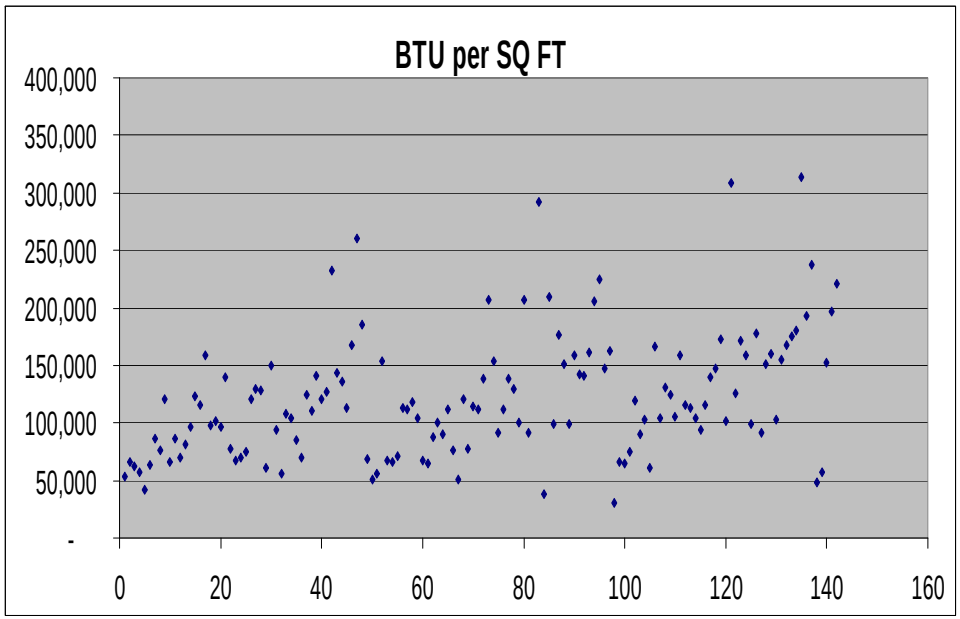

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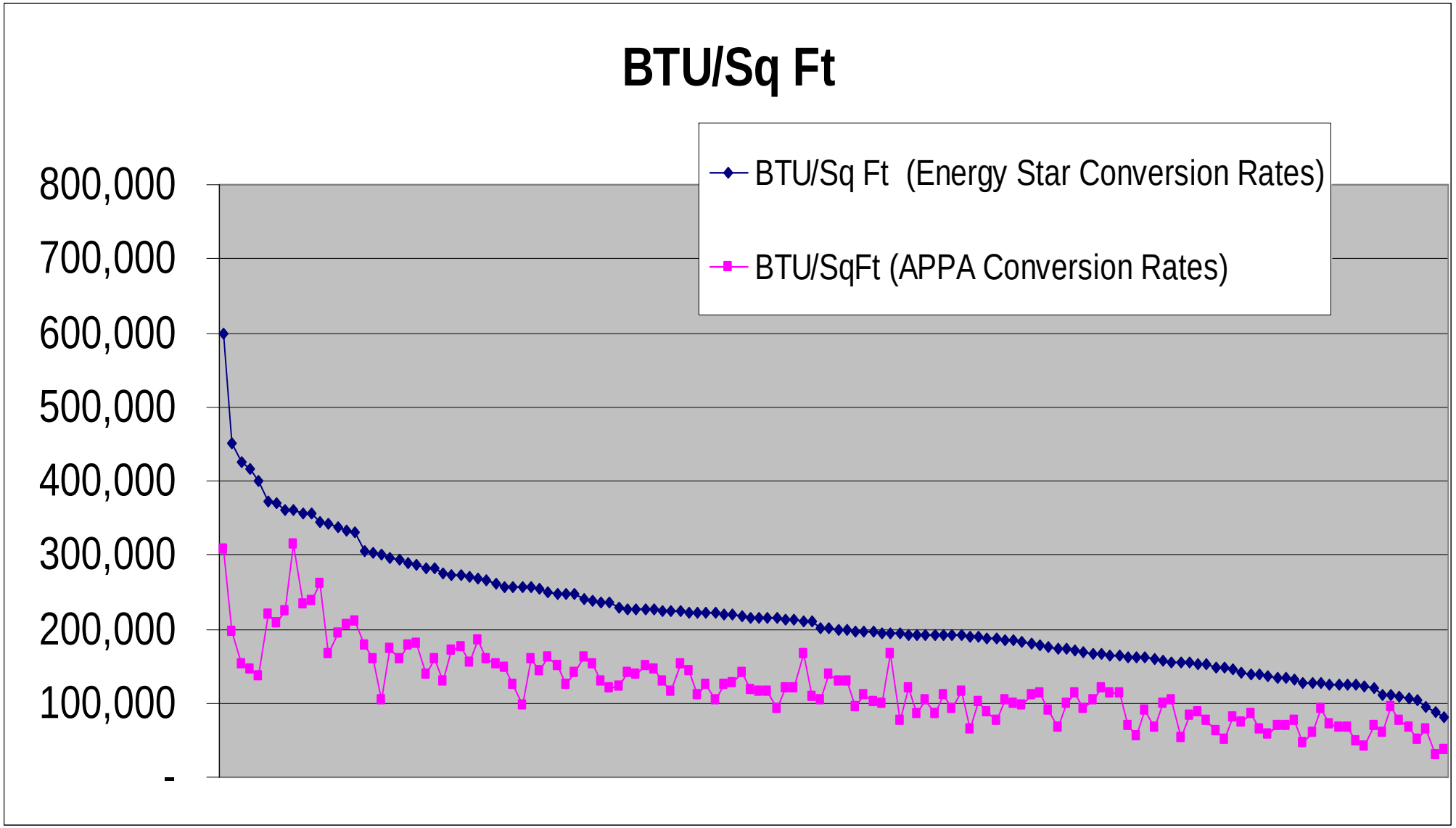

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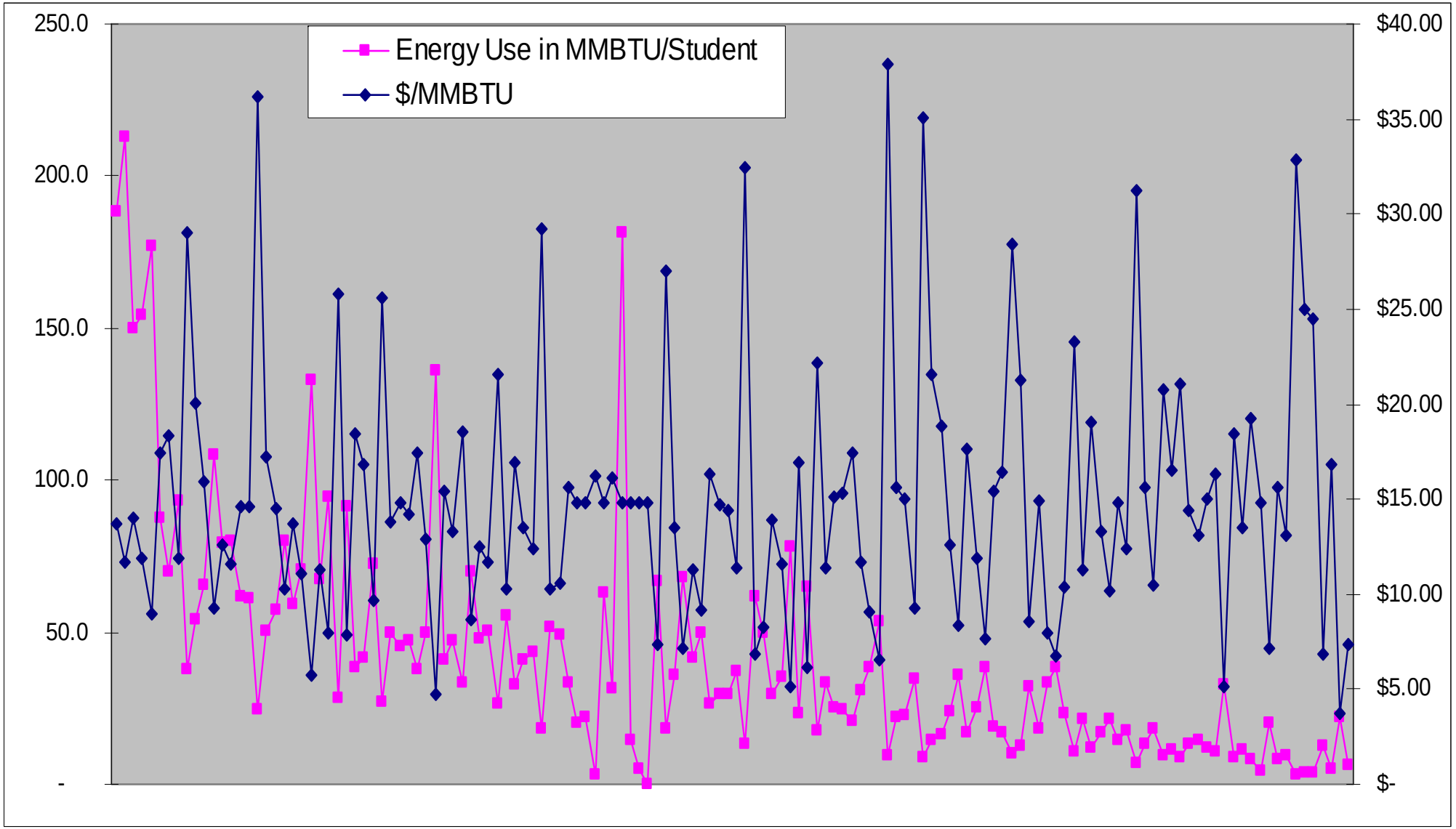

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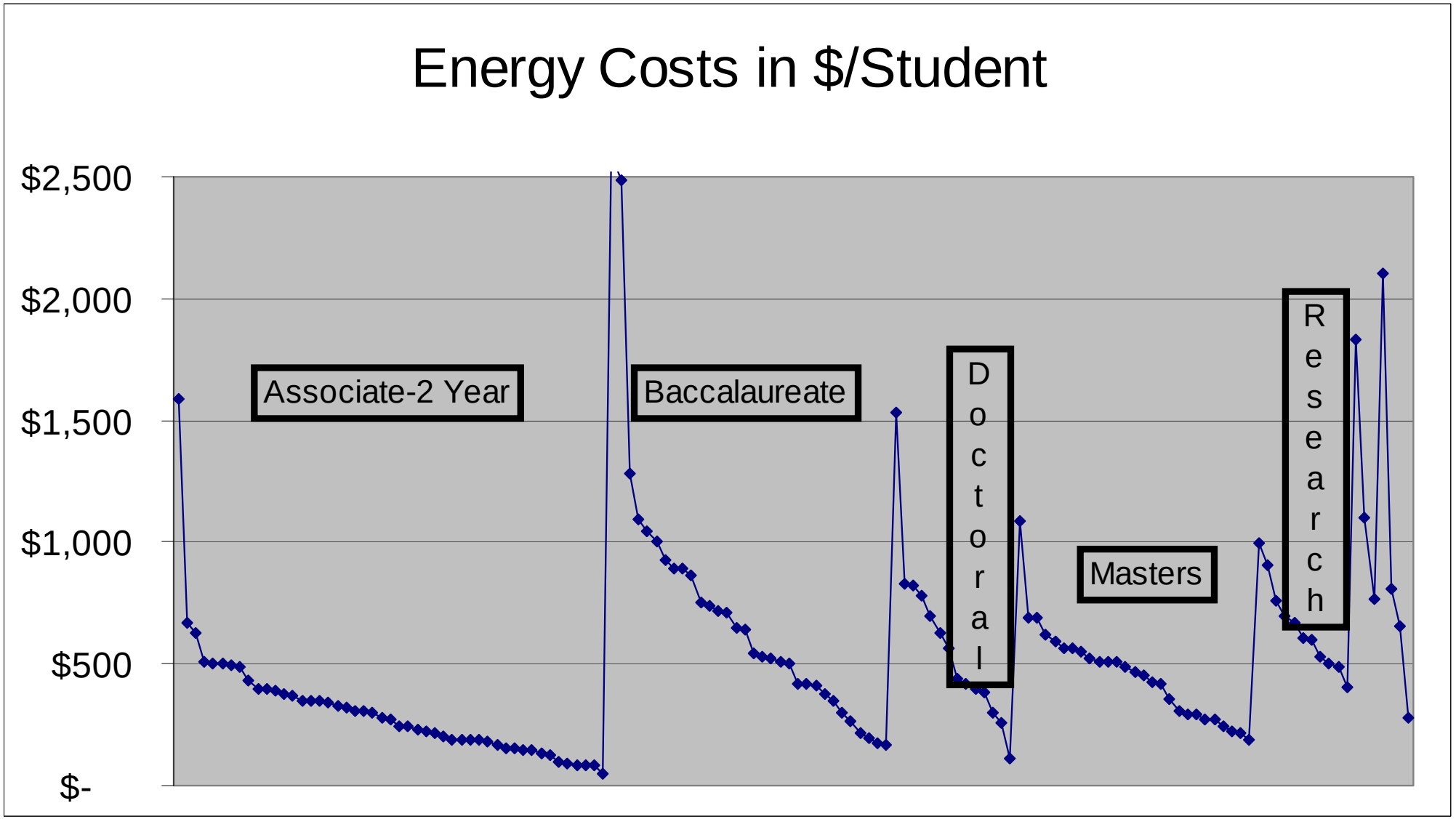

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Buying Consortia For Energy Efficiency Improvements

- Program Focus
  - Follows focus of MHEC in the development of contracts which generate substantial savings through increased volumes and reduced contracting efforts for its members.
  - Provides improved response from contract suppliers due to larger volume base
  - More responsive service providers for warranty and operational issues
  - Greater access to rebates and grants for larger based projects

- Utility and Alternative Energy Opportunities
  - Solar applications with improved pricing through larger volume applications
  - Biomass fuel conversion and regional fuel supply contracts
  - Wind energy through joint powers or cooperative ownership of larger wind energy generating facilities.
  - Geothermal applications at reduced costs through larger volume contracting agreements in individual regions.
  - Centralized chilled water applications with integrated thermal storage systems
  - Demand Control aggregation

- Service Contract Opportunities
  - Maintenance agreements for regionally located institutions including opportunities for national agreements with large service provider organizations
  - ESCO Contracts for similar projects on small to large institutions
  - Energy Monitoring and internal billing processes
  - Energy monitoring and reward systems for dormitory and other self support facilities on the campus.

Buying Consortia For Energy Efficiency Improvements

- Equipment and Materials Contract Opportunities
  - Electrical Systems
    - New generation lighting systems including controls, fixtures and lamps
    - Variable speed drives and high efficiency motors
    - Improved controls interface
    - Energy Meters and Monitors
    - Pricing strategies and real time cost to use information systems

Buying Consortia For Energy Efficiency Improvements

- Equipment and Materials Contract Opportunities
  - Mechanical Systems
    - Refrigeration and cooling system components
    - Ventilation components including VAV boxes, control components,
    - Steam trap and steam trap monitoring systems
    - New Generation high efficiency lab hoods (60 FPM)
    - Commissioning activities
    - Automation Controls
    - Energy Meters and monitors

- Equipment and Materials Contract Opportunities
  - Plumbing Systems
    - Waterless urinal systems
    - Flow control devices for faucets, showers, laundries and kitchens/dining facilities
    - Integration of condensate from cooling systems into make-up water systems
    - Water heater replacement and upgrades
    - Dual flush water closets

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Buying Consortia For Energy Efficiency Improvements

- Advantages of Consortia Buying Program
  - Cost advantage due to larger volume purchasing opportunities
  - Schedule Contract purchases reduce Institutions time and effort for bid solicitations, review, due-diligence contract development and warranty response leverage
  - List serve process developed and maintained for instant and relevant review of materials, suppliers and vendors directly related to the consortia buying contracted vendors
  - Accurate and timely “Best Practice” information dissemination

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Buying Consortia For Energy Efficiency Improvements

- Time Line:
  - Current 2009
    - Survey information received and being analyzed
    - Energy Committee identification of priority projects, supplies and vendors for initial contract development
    - Identification of Project pilot locations and participants
  - 2010
    - Development of RFQ/RFP
    - Implementation of Pilot Programs
  - 2011
    - Identification of Program Results
    - Reporting of Program results relative to goals and objectives

Questions?