



Keene State College

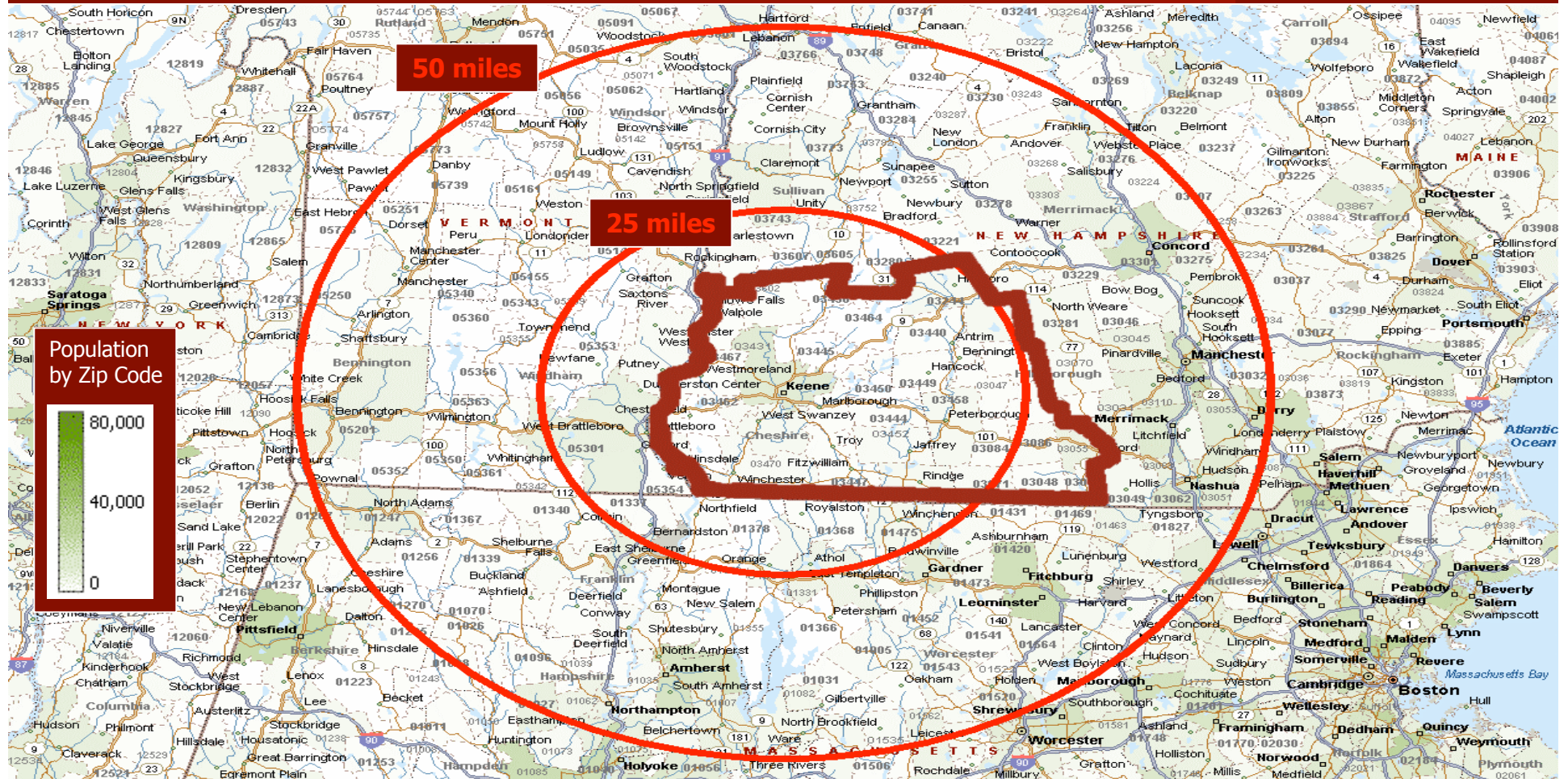
Making Cents of Greening Initiatives

*Linking Sustainable Initiatives to
Keene State College Mission and Values*



Keene State College

Monadnock Region

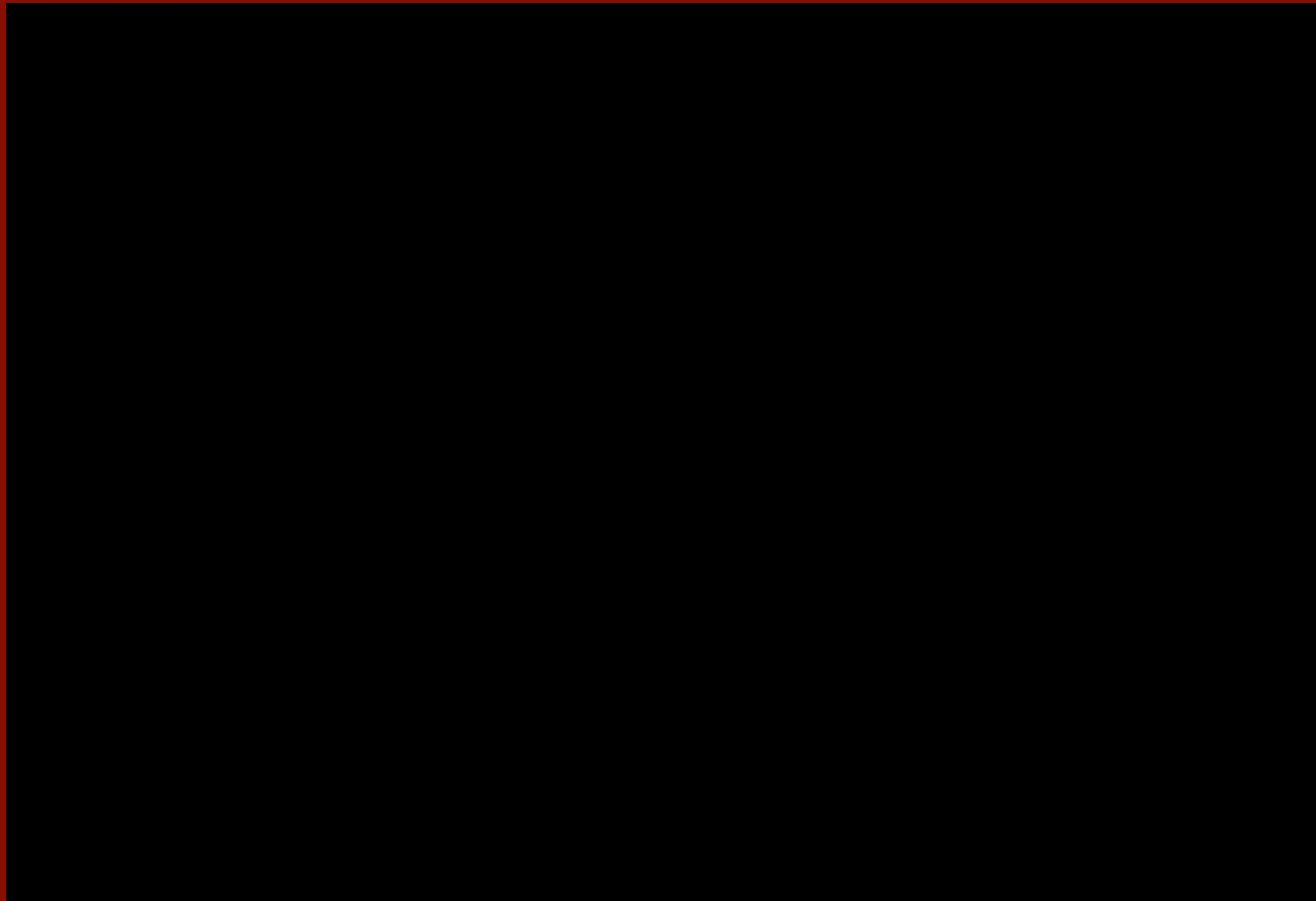


6th Largest City in New Hampshire
Nearly 200,000 people in 25 mile radius



Keene State College

Keene State College





Sustainability: Mission & Values Based Examples

- Technology Design and Safety Department
 - Architecture
 - Product Design
 - **Safety Studies**
 - NE OSHA Training Center
- Living Learning Communities
- Heat Plant Renovation and Co-generation
- Community Partnership



Values Statement: Our liberal arts mission dedicates us to the development of knowledge and skills necessary to meet the challenges of our changing world.

- All members of our community: students, faculty, staff, alumni, and friends.
- Strong relationships among students, faculty, and staff.
- Excellence in teaching, learning, and scholarship.
- Commitment to learning and cultural enrichment.
- Social justice and equity in our community and in our curriculum.
- Educational challenge and support for a wide range of learners.



Keene State College

Monadnock Biodiesel Collaborative



BBR Refinery
MAKE BIODIESEL

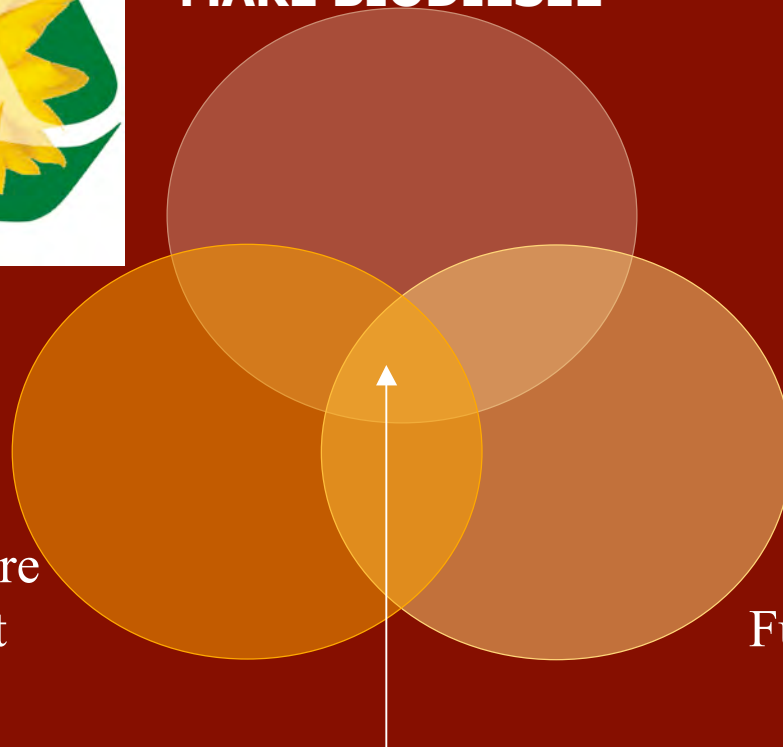


**RESEARCH
BIODIESEL**

KSC Exposure
Assessment
Research

TEST BIODIESEL

KSC ASTM
Fuel Quality Testing
Lab



New Facility



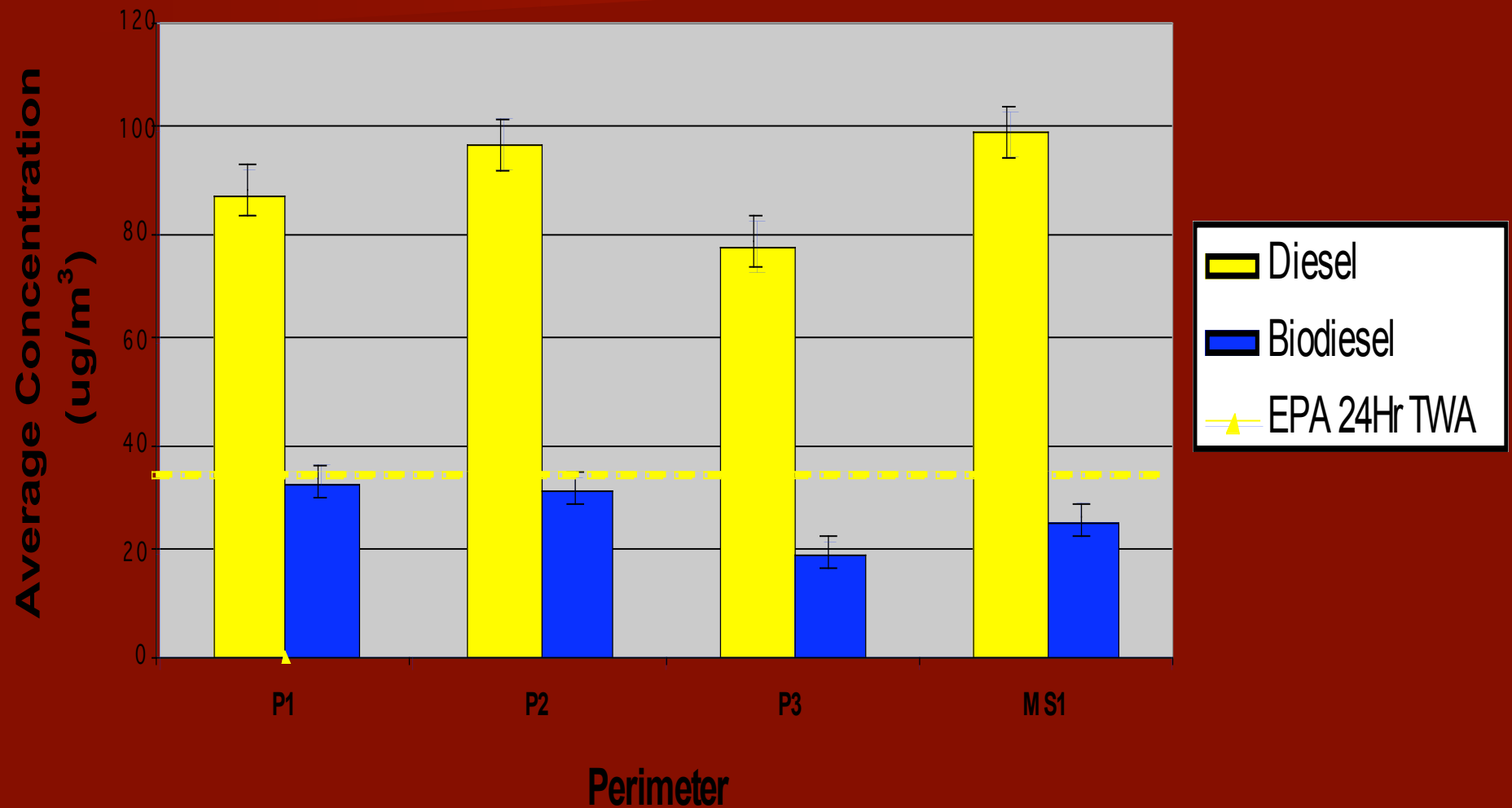
Student Work on MBC

- Present biodiesel research to Academic Excellence Conference
- US EPA grant and research competition
- Participate in Fuel Quality Testing Lab
- Participate in Air Quality Emissions Testing
- Future – will test alternative feedstocks



Keene State College

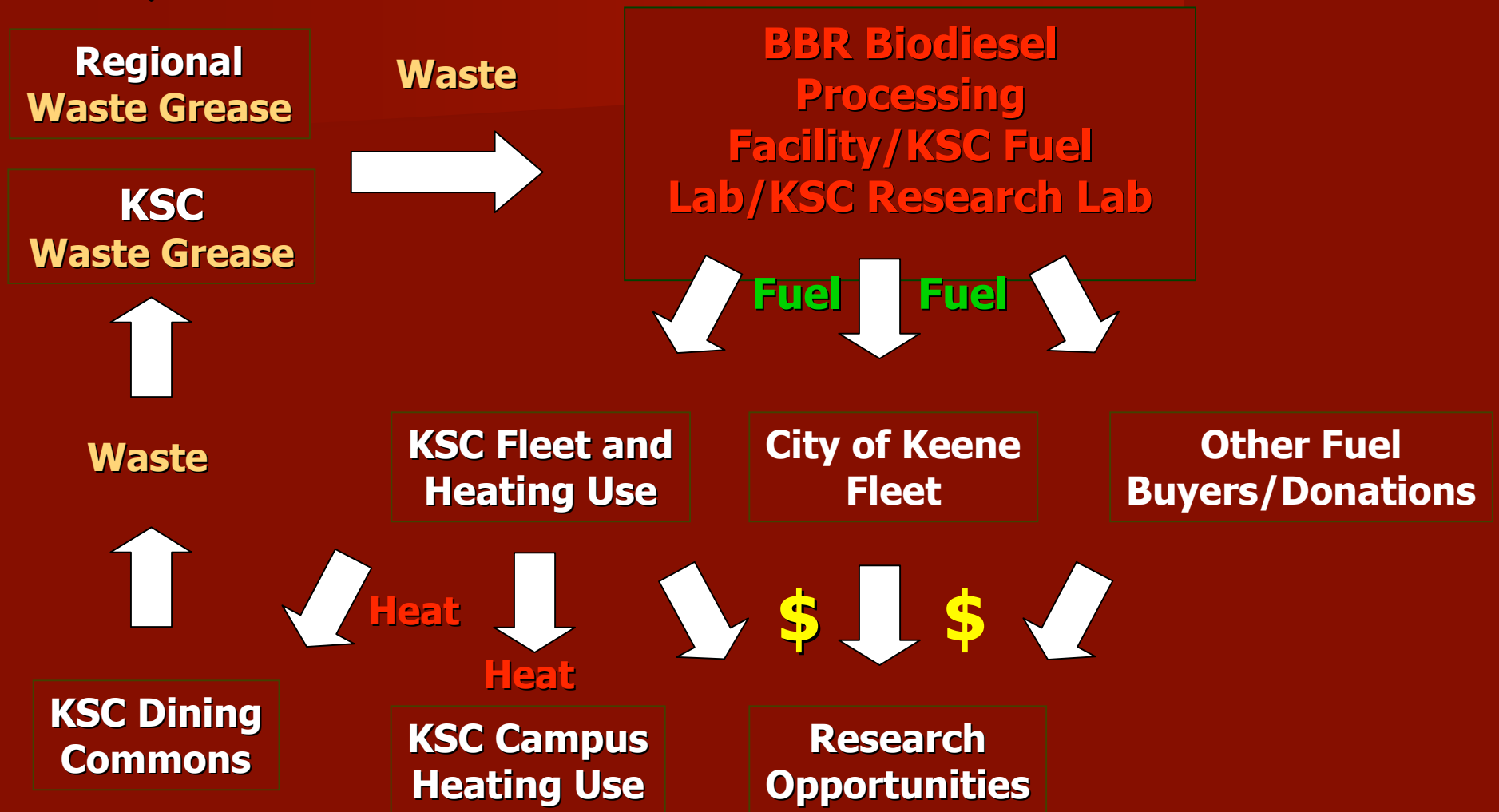
PM_{2.5} - 24 HR Time Weighted Average Using Ambient Air Data Diesel vs. Biodiesel





Waste
Keene State College

The Closed-Loop System: Waste=Fuel



Cost savings

Revenue generating



As a public institution, we provide educational opportunities for all qualified students and continue our heritage of service to New Hampshire and the New England region.

- Physical and financial access and support.
- Balanced development of mind, body, and character.
- Diversity, civility, and respect.
- Civic engagement and service to the community.
- **Environmental stewardship & sustainability**
- Partnerships that enhance the quality of life in the Monadnock region, New Hampshire, and the world.
- **An attractive campus that inspires and supports inquiry, reflection, and social interaction.**



Keene State College

Environmental Stewardship & Sustainability



Pondsides 3 Suites



Living Learning Communities

- Buddhist Minds
- Collaboration of the Arts
- Community Service
- Education in the Arts
- GLBT education
- **Going Green**
- Honors
- Leadership Community
- Literature Appreciation
- Music Community
- Resources for Educators
- Social Justice
- Strictly Ballroom
- The Science Community
- Through the Lens
- Wellness Living



Keene State dorm awarded green building silver certification

◆**Pondside III:** Suite-style residence hall adds a new standard for campus housing at the college.

KEENE
KEENE STATE COLLEGE'S Pondside III residence hall has received LEED Silver Certification from the U.S. Green Building Council (USGBC). LEED is the USGBC's rating system for designing and constructing the world's greenest, most energy-efficient, high-performance buildings.

"Each facility project presents an opportunity for applying energy-saving designs," said Jay Kahn, Keene State's vice president for finance and planning. "With Rhodes Hall, the Library, the Science Center, the Dining Commons, One Butler Court, and most recently Fiske Hall, the college and its consultants have challenged each other to consider the most cost-effective measures we can bring to a project. Pondside III was the first project we chose to document our efforts for external review and certification."

A \$14 million project that spans 51,300 square feet and has 154 beds, Pondside III overlooks Brickyard Pond on the campus. The suite-style building sets a new standard for dorm life at the college — suites with singles, doubles, or a mix of both promote social interaction, and support "living and learning" communities centered on academic themes, service learning, leadership, wellness, the arts, and other common interests.



The building incorporates super-insulated walls, motion-sensor lights, dual-flush toilets, and recycling rooms on each floor.

Pondside III was designed by Lavallee Brensinger Architects and Herbert S. Newman and Partners to achieve LEED certifi-

cation for energy use, lighting, and water and material use, as well as incorporating a variety of other sustainable strategies.

Rist Frost Shumway engineering and construction managers and MacMillin Company Inc. also worked on the project. LEED certification of Pondside



Shown are various angles and interior shots of Keene State College's Pondside III Residence Hall. The new hall has been receiving commendations such as the American School & University "Outstanding Project" and Award of Merit, Association of Builders & Contractors. The project has also received LEED Silver Certification from the U.S. Green Building Council.



III was based on a number of green design and construction features, including:

- Sustainable interior surfaces and furniture — such as a composite product made of recycled soda can shavings for countertops and windowsills

- All flooring materials include recycled content.

- Lighting controls with mo-

- tion-sensing on/off switches

- Low-energy lighting fixtures
- Natural light comes from the placement of glass walls, allowing spaces to be viewed from within the building and from outside, further encouraging students to socialize and work together.

- Natural materials and colors serve to complement and mirror the building's rural environ-

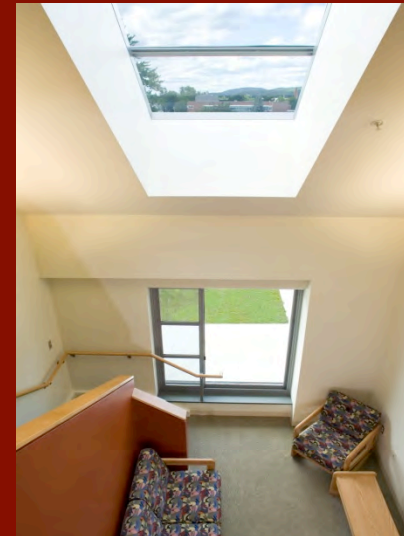
- mental context and emphasize the residential feeling of the structure.

For more information about LEED certification, visit www.usgbc.org/. For more information about Keene State College's Pondside III residence hall, visit <http://keeneweb.org/media/2008/04/25/ksc-dorm-awarded-leed%20ae-greenbuilding-silver-certification/>



Keene State College

Pondside 3 – Earns LEED Silver





Keene State College



American School and University – Outstanding Design Award in August 2008



Keene State College

BUILDING BETTER BUILDINGS

Increased on-campus housing helps alleviate off-campus housing shortages and offers students modern, energy efficient living space.

- Features include dual flow toilets, day lighting and lighting controls and locally sourced materials.
- These features are also being used in renovations of older buildings.
- We save money, energy, water and offer a comfortable living environment.





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Heat Plant Renovation





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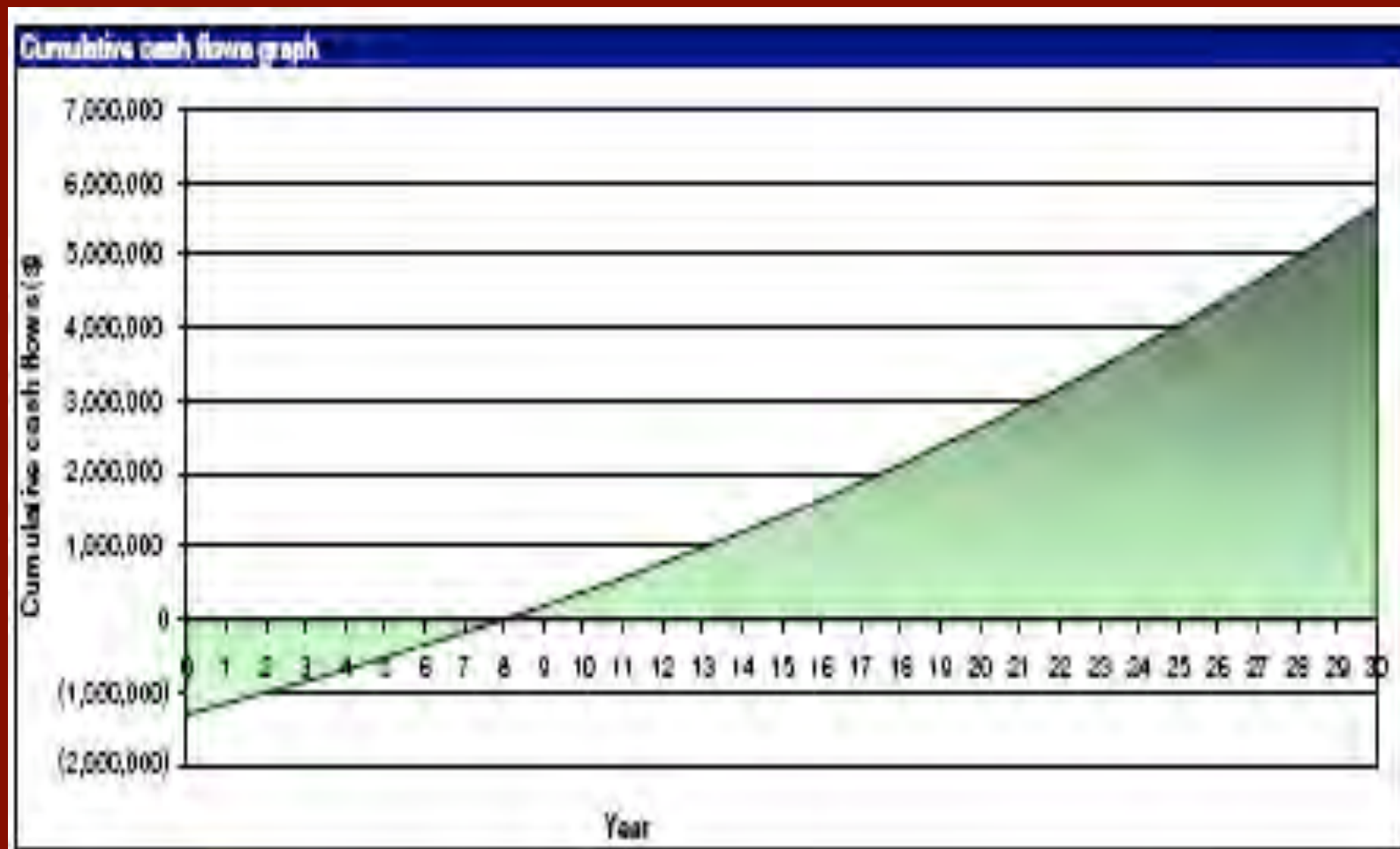
Central Cogeneration Plant





Keene State College

Electrical Co-Generation Cost-Benefits





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Keene State College

Partnerships Enhancing the Quality of Life in the Monadnock Region



Rail-Trail Partnership



Keene State College

TRANSPORTATION CHOICES

Parking demands and traffic congestion is an ongoing concern on campus and in the City.

Green Bikes began as a Campus Ecology partnership with Keene High School students. This popular program is now maintained by R.O.C.K.S. and the Mason Library.

Covered bus stops offer students a dry place to wait for the City Express in multiple locations on campus.





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