

**PLEASE NOTE NEXT MEETING WILL BE WEDNESDAY MARCH 5
AT 2:30 IN THE AFTERNOON IN THE SACO CITY HALL**

**SACO ENERGY COMMITTEE
FEB. 14, 2008 MINUTES**

Committee members present: Howard Carter (Treatment Plant Director); Travis Peaslee (Lab Tech. Treatment Plant); Maggie Daigle (Ferry Beach Ecology School); Bob Hamblen (Saco City Planner); Eric Cote (Saco City Councilor); Mark Mitchell (Code Enforcement); Ron Rochefort (Police Dept.); David Shaw (Saco Middle School teacher)

Guests: Shannon Hill and Andrew Kellar (both from Simply Green); Henry Smith (interested citizen); Michaela Lamare (Saco Middle School teacher)

1. EW15 WIND TURBINE

On Feb. 8, the EW15 started producing electricity. Howard read the meter this morning, and beside what electricity was produced to power the parking lot lights, 529 kilowatt hours of electricity was produced. Until the transportation is complete, this electricity production will be credited against the police station's electrical usage. In a couple of weeks, live data on the EW15's production will be available on the city's website. The turbine is currently too noisy. Options are being looked at to make it quieter.

2. MIDDLE SCHOOL PROJECT

David Shaw discussed with the Committee the Food From Schools Project described in the attached. The Committee was enthusiastic about this terrific project. Funds have already been aside from private sources for 4 trays, which cost \$350 apiece. David would like to have up to ten trays. David thinks the Middle School is a good site for a wind turbine. The current thought is to put a EW15 at the school. The students may have a naming contest to name the project. Perhaps the work will lead to a greenhouse at the Middle School. David would like to compost food waste from the cafeteria to use in growing the vegetables. Maggie described the program the Ferry Beach Ecology School has to compost. Also, when students first come to the Ecology School, they weigh what food waste they leave in their trays. Over the students' stay at the Ecology School, the waste is continued to be weighed to help the students learn to reduce wasted food. Maggie offered to advise on such a program at the Middle School.

3. MILES ELECTRIC CAR

The Zenn is still in Falmouth for repair. Mark likes the Miles electric car that was provided as a replacement. The Miles is good in snow, and the heat from the electric heater is instant. Mark is going to measure with a watt meter how much electricity it takes to charge the electric vehicle.

4. SMART STRIP POWER STRIP

Travis is going to calculate how many power strips the city and schools currently could use. Travis believes the power strip is currently about \$20 apiece, with approximately a 6 week payback for each. Bob thinks this a terrific project. Ron thinks a suitable power strip may currently be available in Staples. Maggie want to know where we end up buying the power strips.

5. SIMPLY GREEN LLC

Shannon Hill and Andrew Kellar answered questions concerning the biodiesel and bioheat the one year old company sells. See attached brochure. Simply Green has 400 customers from South Portland to Newburyport. 25-30 of these customers are commercial accounts. The products are picked up from the Sprague Terminal in South Portland. Simply Green is selling fuel at its costs to the people, who got screwed by the recent going out of business of a local oil delivery company. Andrew explained that his company does not sell ethanol, which is made from corn. There currently is a dispute whether or not using ethanol is energy efficient. The biofuels sold by Simply Green are produced primarily from soy bean waste. Five units of energy are produced for every one unit of energy used to make biofuel from soybeans and grow the soybeans. Andrew said Steve Russell in Keene, N.H., is a good contact person to discuss B20. Keene has been using B20 for 6 years in 80 vehicles. Andrew further explained that a 20% biofuel blend reduces pollution by 16%, and a 5% blend reduces pollution by 4%. Shannon uses bioheat in her house, and she believes that because of its use her daily oil use has been reduced from 5 gallons to 2.8 to 3 gallons. Shannon and Andrew said other people are of the same belief concerning the efficiency of bioheat. Simply Green will be putting in a

bid in the spring, when Saco goes out to bid for oil, gas, and diesel fuel.

6. NEXT MEETING

The next meeting will be Wed. March 5 at 2:30 in the afternoon in the Saco City Hall. The agenda at this time is:

1. Mark's report on the Zenn;
2. Travis' report on the smart strip power strip project;
3. Discussion with David Shaw and students on Middle School project;
4. Howard's report on EW15 wind turbine project;
5. Discussion on further projects.

FOOD FROM SCHOOLS PROJECT

12/18/07

Overview

This project will involve many students and the community. In brief, a proposal will be made to the Saco City Council for the purchase and installation of a windmill at Saco Middle School. The windmill requested will be comparable to the windmill now in use at the water treatment plant producing from 4000 to 6000 kwh of electricity.

Plant growing carts that have four (4) levels will be purchased and placed in participating classrooms. Vegetable seeds will be sown and grown by students using the green energy from the windmill. Students will tend the crop of vegetables and when harvested be given to local food pantries for distribution.

This project has many goals and challenges. First, the concept needs to be presented to the city council so the city of Saco will fund the windmill. The windmill that is presently being used by the city has been a reliable source of energy and is non polluting and renewable.

Another goal is to use some of the energy produced to grow food. The energy consumption will have to be monitored so as not to exceed the energy produced. Not only can the green energy power the growing of food but the excess should help defray total energy costs for the city.

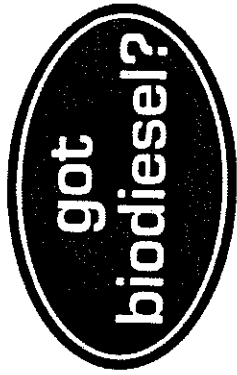
Seeds, potting soil, fertilizers, etc. need to be purchased and money needs to be raised to cover the costs. With the horticulture comes a need for farmers. Interested students need to be taught what to do and schedules of planting needs to be done by an advisor to the project. All vegetables should be grown without pesticides and be as organically grown as is practical.

The student council at SMS will take the lead on implementing this project and records will be kept on all materials used, time spent, and energy consumed. With base line data on growing food using green power by students to supply food to the community future plans can be ascertained. If the project is a success it might be expanded in the future to include a small greenhouse at SMS using a solar hot water collection system to heat the greenhouse and grow cole crops (lettuce, beets, radish, carrots, onions, etc.) that do not require a hot house.

Funding for the start up of this project will include the city of Saco providing the windmill, corporate sponsors for the grow carts and school fundraiser for seed, soil, et.

It is also a natural evolution of a community project to have a web site that could be a link for S. U. 7 or the city of Saco to inform the public of the purpose and needs that this would entail. If this project is a success it could be considered a model for other schools around the state to help students give back to their community along with hands on application of science and technology to help aid with some community needs.

David R. Shaw
Saco Middle School
drshaw@saco.org
282 4181 ext 2110



Simply Green
a Biofuels company LLC
603.772.3155

If you have any additional questions regarding your BioFuel needs, contact us at 603.772.3155 or at www.seacoastbiofuels.com

Be sure to ask us about our

"Plant a tree for the next generation" promotion!!!



BIO DIESEL
THIS TRUCK IS A VEGETARIAN

Is your fuel GREEN...

Home heating
&
On & off-road diesel



We also offer a range of fuel services:

- *Onsite delivery
- *Automated delivery service
- *Service contracts
- *Volume trucking
- *Payment plans

www.seacoastbiofuels.com



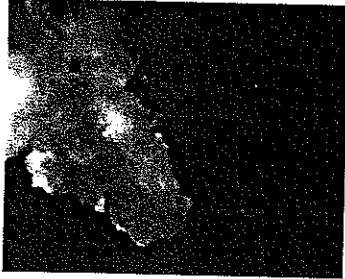
Delivery Services

BioHeat®
Off road BioDiesel
On road BioDiesel
Marine BioDiesel

Priced daily at seacoastbiofuels.com

Fact: If everyone in the Northeast used a B-5 blend (5% Biofuel/95% heating oil), we'd cut annual oil consumption by 50 million gallons & reduce our CO2 emissions by 40,000,000 lbs!

Solution: Call Simply Green to do your part in reducing dependency on foreign oil while protecting future generations!



CO₂ Reduction Comparisons

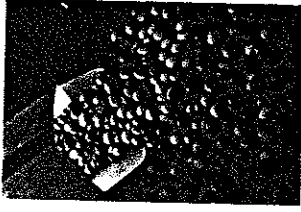
#2 Oil or Diesel	Biom. Heating	Volume
B5	800 lbs	644 lbs
B20	3,200 lbs	2,400 lbs
B100	16,000 lbs	12,000lbs

#2 Oil or Diesel	CO ₂	Percentage
B5	-3.92 %	-3.14 %
B20	-15 %	-20 %
B100	-70 %	-55 %

*The average home uses 1000 gallons of oil
 **The average vehicle uses 800 gallons of fuel

More info at:

<http://www.biodiesel.org/tools/calculator/>



FAQ's

What is BioHeat® & Biodiesel? Biofuel is a clean-burning mix of No. 2 heating oil and/or diesel and a fuel product made in the USA from renewable resources, primarily soybean. It can be used in compression-ignition (diesel) engines & home heating systems with little or no modifications. BioHeat® & BioDiesel is simple to use, biodegradable, nontoxic, and essentially free of sulfur and aromatics.

Where does it come from & who makes it? Biofuel is produced from crops grown in the USA. Some dealers purchase soy oil or mash and "splash mix" in their own tank themselves; others buy it blended from suppliers. We purchase pre-blended biofuel from Sprague Energy.

How does biofuel compare to regular heating oil? Industry studies show that biofuel burns cleaner than No. 2 alone, adds life to a heating system and reduces service calls. A renewable fuel, biofuel reduces harmful emissions.

Will it affect my heating system or engines? Biofuel studies have been conducted by at least a half dozen industry organizations at the state and national level with results demonstrating that B5 biofuel functions satisfactorily in home and commercial heating systems with no adverse operational characteristics.

Does the use of BioHeat® void my heating oil system or engine warranties? No, manufacturers do not warranty fuel quality, only parts & workmanship. However, over 40 million miles of positive, trouble-free experience with up to B20 blends in the on-road market provides a level of confidence that there should be little or no issues with equipment if the biodiesel concentration is at the 20% or lower level.

How much does BioHeat & BioDiesel cost?

Typically BioHeat is 5 cents more or less than the average cost of #2 oil. BioDiesel is usually 10 cents more than the price at the pump.