

Minutes
Energy Policy Committee Meeting
June 16, 2009

7:00 pm Village Hall
5 Mead Street, South Orange Village, New Jersey 07079

Attendees: Walter Clarke (WC) , Eric Hoffert (EH) , Ken Krasner (KK), Joel Levin (JL), Howard Levison (HL),
Anita Louis (AL), John Nettleton (JN)

Main Items Discussed:

- **BioDiesel at DPW:** Grant Decision announced June 22. Unfortunately we didn't get it. SO submission for WalMart grants would have covered the fuel storage and mixing system. Metering is in the current budget. Collected data from proposed system to be used to analyze which vehicles to eliminate and purchase hybrids - **Action: HL**
- **Joel to interview Howard for energy projects article:** For the Gaslight or News Record. Automatic re-igniters for SO's lamps to save \$ and carbon. Many lamps are out. PSEG blames landscapers. HL involved Congressman Pascrell to help in our David & Goliath battle with PSE&G. *See next page for HL's calculations.* Recap: *Street lighting represents roughly 75% of the energy costs for the town, which are close to \$1,000,000 per year. PSE&G tested a prototype re-igniter switch that would be installed on individual gas lamps to turn them on and off with a solar sensor/monitor. Gaslights will monitor the presence of light; once dark the gas will be turned on with a sparking mechanism; when light then the gas flow will be disabled. This should reduce gas usage by 50%.* **Action: JL & HL** on the article. **HL** on PSE&G/lamps issue
- **DPW roof:** We are moving forward with the Roof Design using the standing seam option that will accommodate the solar panel installation – submitted a grant from the ARRA. Recap - *Either the Village funding, installing and maintaining the system, or pursuing a Private Purchase Agreement (PPA) with a solar provider (ESCO). Small system = Village ownership better option. Potential payback is around 15 years. If we own the system, the SRECs are ours to sell. Finally, since the system is small, not likely see a great deal of interest for the project from ESCOs.* **SR** (Sal Renda)
- **Pool Solar Water Heater:** JN suggested passive system, which pre-heats the water a la MASH 4077 field showers, instead of active DHW. By installing photovoltaic on the roof we could mitigate electrical costs of pumping. Tanks on ground instead of roof. Recap: *SR spoke to the vendor that HL recommended. He felt that since the pool house is only used for about 3 months out of the year, and that the hot water demand during those months is high (showers and concession stand) that the cost of a system large enough to meet that demand may prohibitive and that the payback period would be long. A 30-40 gallon residential hot water tank can provide enough hot water for a family of 4-5 people over the course of a day. However, to provide enough hot water for all of the people using the pool to take showers during peak usage may require a very large solar system.* **JN will call SR**
- **Sustainable Jersey:** We think we have 90%, of what we need for priority action of Energy Audits for Municipal Facilities. Working on carbon footprint. Recap: *Mandate will require municipalities to measure CO2 utilization within two years (by 2011) Mandate will also be put into place to reduce emissions by 20% by 2020. For Eric's calculation of carbon footprint - see next page* **Action: EH &**

WC working on main points, **KK** to investigate
Maintenance and Green Fields on SustainableJersey.com

Green Purchasing, Grounds

- **Community Garden:** to be located at 3rd and the river, New Waterlands park. Vegetation on banks?
- **Solar Scooter Shed:** 2/3 funded, 1/3 grant
- **Building issues:** exit signs and emergency lighting (LED/motion sensor)

New Business/Ideas

- Trustee liaison – It's all **HL**
- Secretary – **KK**
- EPA Grants pursue need Volunteer to drive grant process – **JN** with resend of **WC**'s info
- More Sustainable Jersey – Municipal Carbon Footprint – Need SHU follow through, **WC** to call Adam Lerner

Contd.

Eric's back-of-the-envelope calculation of South Orange's carbon footprint - Conversion factors

- 1 kilowatt hour = 0.537 kg CO₂ / 1 therm = 5.5 kg CO₂ / 1 gallon gas = 10kg CO₂
- 2400 tons CO₂ or 4.8 million pounds
- 16,000 people in town - 300 pounds per person
- Municipal CO₂ footprint = 2 million kg CO₂
- Town Lamps/gas 450,000 kg
- Gas (heating & cooking?) 300,000 kg
- Gasoline/vehicles 600,000 kg
- Electricity 480,000 kg

HL's Gas lamps figures:

- 1450 gas lamps * .77 therms/day365 days/year = 407,523 therms
- 12.41 lbs of CO₂/therm
- 5,057,354 lbs of CO₂/year ~ 2,500 tons /year
- 1,250 tons / year could be saved by the automatic igniter

- Next Meeting Date is set for 7/21/09, August meeting possibly cancelled

