

## **Energy & Solid Waste Work Group Core**

Meeting Notes of January 3, 2007, 4:00 p.m. Howes House, West Tisbury

---

Members Present: Phil Forest, Kitt Johnson, Paul Pimentel, Bart Smith, Paul Strauss, Kate Warner

Members Absent: Don Hatch, Dick Knabel, Fred Lapiana, Russell Smith (Chair)

MVC Staff Present: Bill Veno

Others Present: David Nash, Sharon Strimling Florio

The meeting started at 4:05

### **1. Core Group Leadership**

Bill reported that Russell has confirmed his willingness to play whatever role the core wishes, including remaining as chairman. However, personal circumstances currently are demanding much more of his time. Kate said that John Abrams had spoken to her after the last meeting of the core, but that she will not assume the added responsibility of chairing the core group because of her other responsibilities. Sharon said she had been approached to consider being the committee chairman but feels she needs to better understand the scope of the core's tasks. No other members expressed an interest in serving as chair. Kate pointed out that it is the Steering Committee's responsibility to see that the work group has a chairman. The matter was tabled for further discussion at the next meeting.

### **2. Assessment of Work Group Input**

The core reviewed each individual suggestion from the full work group meeting of December 6. Kitt had reformatted the suggestions from the meeting minutes into a list space before each item in which to record a score of significance. While the members were to have scored each item with lower priority items given a "1" and items with high priority given a "5", leaving "3" for items where the priorities are not clear, it was agreed to first run through the list identifying how many members ranked the item in the high priority category. In going through the list, members found that there was a mix of goals, strategies and implementation actions that defied direct comparisons. It also decided, for the purposes of this exercise, to focus more on the strategic items rather than the ways to affect the strategies. Also, some suggestions were made in more than just one of the four topics. In most instances, the core combined items when appropriate. The implementation measures will be more useful later in the process.

The core cited 34 items from the December 6 list as being high priority for action (both the priority and Dec. 6 lists are attached to these minutes). The core members assigned themselves the task of reviewing the list of priority items and add any new items they think are missing. These new items will be considered at the next meeting. Members were also asked to examine the items for opportunities to further consolidate and streamline to make the statements very clear.

### **3. Matrices**

Bill distributed a version of the matrix tables where Phil F. had categorized several of the December priority items as he saw them. Several members suggested that the core finish its prioritization of items before trying to categorize them. The matter was tabled to a future meeting.

### **4. Work Group Interrelationships**

Bill reminded the core that in its first meetings, it had identified the need to quickly get information out to the other work groups about how their topics interrelate with energy and waste issues. The core wanted to increase the likelihood of the other groups taking into account the energy and waste impacts of potential alternatives before spending much time on developing particular strategies. The core was again concerned about diffusing the members' efforts. It was decided to focus on the identification and prioritization of the energy and waste issues in order to establish a solid base upon which the group to proceed. The matter was tabled to a future meeting.

### **5. Miscellaneous**

One final assignment for individual core members is to develop one concise statement for each of the four topics. This could be similar to the group's Goal Statement (timeless).

Kitt suggested the group get away from the "doing with less" message and, instead, stress getting a desired effect but in efficient ways.

Kitt reminded the other members that he would be vacationing for several weeks and would not be able to attend meetings for a while. There was discussion about Kitt patching in via conference call, which he agreeable to. The group decided to subsequently hold its meetings at the MVC office to facilitate such remote interaction.

Next Meeting: Wednesday, January 16, 4:00 p.m. at the **MVC Building**

Agenda: Review and prioritize individual core member's additional suggestions  
Discuss members' statements for each of the four topics (Energy Efficiency, Energy Production, Waste/Biomass, Transportation)

**Homework for core members:** Review Jan 3 prioritization of Dec 6 suggestions and:

- 1 – Add any priority items felt to be missing (also propose consolidations and rewordings)
- 2 – Create a statement for each of the four topics

The meeting concluded at 6:08

Notes prepared by Bill Veno with assistance of meeting flipchart notes of Kitt Johnson

## Preliminary List of Priority Items for Energy and Waste

The Energy and Waste Work Group Core identified as high priority the following list of suggestions the work group made in December 6, 2006. While they are listed by the four categories of the work group session, several items appeared in more than one category and were merged. Also, while the work group members at the December 6, 2006 meeting were instructed to identify specific actions for implementation, in this task the core members decided to focus more on the strategies rather than ways to affect the strategies. The core members also refined some wording from the original input (the list of items from the December 6 meeting are attached to these minutes).

*Note: the first number, in brackets, identifies the list number from the list of all December 6 suggestions; the second number indicates the number of core members who think that item is a high priority*

### **Energy Efficiency** (a suggestion has been made to change this title to **Use of Energy**)

- (1) 8 Switch to more efficient light bulbs
- (7) 6 Develop disposal plan addressing CFL (compact florescent bulbs) mercury
- (8) 5 Approach businesses that have unnecessary lighting
- (11) 5 Establish per capita energy allowance, above which people would pay extra, funding EE programs
- (16) 3 Request auto rental agencies offer hybrid and other super-efficient, low-emission vehicles
- (17) 8 Building code on Vineyard requiring greater EE
- (18) 8 Require energy audit and EE upgrades at sale of home (similar to Title 5 septic)
- (19) 3 Create energy "thermometer" showing Island's monthly energy usage

#### 25-yr and 50-yr Targets

- (22-23) 8 25-yr – reduce non-renewable energy use on Island by 50%; 50-yr – net zero energy [*note: core identified a strong relationship to item (8) and suggested rewrite. I did not attempt.*]

### **Energy Production**

- (3) 3 Mark the 20-year and 50-year projected levels of sea level rise in Edgartown
- (4) 4 Get each town to install a prominent wind turbine
- (5) 7 Install 500 2.4KW solar arrays (similar to one at SSA building)
- (7-8) 5 Get tangible town commitment to solar energy (rewrite)
- (9) 1 Raffle off a solar array system
- (12) 6 Identify what areas could be used for large-scale wind turbines
- (13) 6 Get SSA to use biodiesel in new boat "Island Home"

#### 25-yr Targets

- (15) 5 Convert excess energy into a storage medium (rewrite)
- (16) 5 Island-generated power sufficient to meet electricity and transit demands [*notes said to integrate (30) dealing with transit; consequently, I replaced "transportation" with "transit"*]
- (22) \* Require renewable energy certification for builders [7] / for architects [4]
- (23) 8 All new buildings will be energy neutral

### 50-yr Targets

- (27) 9 No combustion of fossil fuels on MV
- (28) 9 Island has a municipal power utility (rewrite)
- (29) 7 All housing will have some renewable energy generation component

### **Waste/Biomass**

- (2) 5 Re-use resources first
- (4) 5 Island-wide composting
- (5) 4 Recycle materials; remove roadblocks
- (7-8) 9 Use biomass and construction debris to generate energy locally (rewrite)
- (10) 9 Educate on all topics (rewrite)
- (19) 5 Encourage cooperative, common waste management Island-wide
- (24) 6 Identify areas of Island potential energy production and crop growth

### 25-yr and 50-yr Targets

- (21,23) 7 Create on the Island a net zero waste utilization/energy production system (rewrite)

### **Transportation**

- (1) 7 Focus on reducing vehicle miles traveled as having the greatest impact on energy use and carbon emissions
- (8) 8 Develop a fossil fuel impact fee (e.g. carbon tax)  
25-yr and 50-yr Targets
- (13) 8 Seamless multi-modal transportation system between Island and mainland

## Review Dec 6 meeting notes and assign 1,3,or 5 prioritization (low to high) to the Work Group's suggestions

### Energy Efficiency

0		Short-term (10-Year)
1	-	Switch to more efficient light bulbs:
2	•	Compact (CFL) lighting demonstration at a public building to show people how good CFLs look.
3	•	Ask retailers to stock more CFL bulbs and fixtures; education for retailers.
4	•	Open house tour of homes with CFLs to show what the illumination is really like in residential setting.
5	•	CFL display at local businesses, such as Mansion House.
6	•	Create logo, make plaques for businesses to hang-up showing they only use fluorescent lighting (or don't use incandescent).
7	•	Develop disposal plan to address CFL mercury. Make it free to recycle/dispose of CFL's, like Rechargeable Battery Recycling Corporation (transfer station currently charges \$1/bulb).
8	-	Approach businesses that have unnecessary lighting
9	-	Increase school energy education programs: kids ("energy detectives" or "junior energy corps") conduct energy audit of homes, businesses. Kids give prizes/awards to people and business owners that use the least amount of energy.
10	-	Provide examples and education on how to compare life-cycle costs of appliances.
11	-	Establish per capita energy (beyond electricity?) allowance. If people choose to go above, they pay extra, which funds EE programs.
12	-	Gasoline quota per car; only sell limited amount (8 gals?) of gasoline per stop at the pump
13	-	Parking meters that charge more for SUVs (already exist in England).
14	-	Talk/educate contractors who leave diesel trucks running while working.
15	-	Playground equipment that makes electricity; a bicycle that powers a television.
16	-	Request auto rental agencies offer hybrids and other super-efficient, low-emissions vehicles.
17	-	A Vineyard building code requiring greater EE; establish standards, long-term goal, and milestones.
18	-	At sale of homes, require energy audit and upgrade to EE code (similar practice to septic systems).
19	-	Create energy "thermometer" showing how much energy Island is using each month. Could be accessed on line allowing people to visually gauge Island's progress in reaching goals for improvements/reductions.

20	-	10-year target: establish Island utility co-op.
21		<u>Long term (25- and 50-Year)</u>
22	-	25-year target: reduce non-renewable energy use on Island by 50% (Ideas – only CFLs available on Island; all old houses have upgraded insulation and appliances; rewards for people making a difference on EE; 75% of houses have solar hot water; new houses are solar-oriented; change the way electricity is transported)
23	-	50-year targets: Net-zero energy (Ideas – all houses have separate zones capable of being closed off when not in use and not heated; heat clusters of building with steam system generated by waste)

## Energy Production

1		Perspective: Energy usage of Island vs. what it takes to produce that energy.
2	-	Slogan: "Solution to Pollution"
3	-	Emulate Santa Barbara's blue line demarcation on streets and buildings of projected sea level rise. Mark the 20-year and 50-year projected levels in downtown Edgartown; provide map of same; parade float with similar info.
4	-	Get each town to install a prominent wind turbine
5	-	Install 500 2.4 KW solar arrays similar to one at SSA building:
6	•	allowances for zoning variances as credits for energy self reliance
7	•	make town bylaw recommendations
8	•	towns lead by example (and demonstrate commitment) by installing one on every school, town hall, police building
9	•	raffle off a system
10	-	VEP's recommendation of ten 10 KW turbines within 10 years will happen with market forces; recommend to Steering Committee to increase the target number (twenty turbines?).
11	-	VEP's recommendation of a 100 KW and Ice Arena, school, or hospital.
12	-	Practicality of large turbines at landfill needs more research (concern of perforating landfill cap membrane). Aquinnah not practical due to distance from substation.
13	-	Get SSA to use biodiesel in new boat, Going Home (today!). Have the ability to work with SSA (now!)
14		<u>Long term (25-Year)</u>
15	-	Renewable energy mechanisms' overflow used to produce hydrogen as a storage medium and to power public transit.
16	-	The Island will be self sufficient for electricity and fueling of automobiles by offshore wind.
17	-	Huge mix of new and existing technologies due to paradigm shift regarding consumption/economic viability/underpinnings.

18	-	Will be telling story about how we saved the human race; that we were able to do this as an Island and was an example to other communities.
19	-	Everything will be electric
20	-	Consumption must be checked
21	-	Biodiesel from wastewater-grown algae (currently done in New Zealand)
22	-	Builders required to take a renewable energy course
23	-	All new buildings will be energy neutral
24	-	<u>Long term (50-Year)</u>
25	-	50% of new Vineyard homes are entirely heated by geothermal energy.
26	-	Utilize sewage, biomass, wood, wind and solar PV to produce hydrogen.
27	-	In 50 years there will be no combustion of fossil fuels on MV
28	-	In 50 years the Island has its own power project
29	-	All housing will have some renewable energy generation component (starting with affordable housing)
30	-	All Island transit powered by renewable energy

### **Solid Waste/Biomass**

0	-	<u>Short-term (10-Year)</u>
1	-	Create energy task force alliance
2	-	Reuse organic resources first:
3	-	<ul style="list-style-type: none"> <li>• create swap shops for clothing, furniture, construction debris and packaging and shipping materials (latter used for moving, gifting and shipping)</li> </ul>
4	-	<ul style="list-style-type: none"> <li>• composting, or conversion to energy</li> </ul>
5	-	<ul style="list-style-type: none"> <li>• recycle materials</li> </ul>
6	-	Convert organic resources to energy:
7	-	<ul style="list-style-type: none"> <li>• Use biomass from State Forest for school furnaces.</li> </ul>
8	-	<ul style="list-style-type: none"> <li>• Use construction debris for wood-fired dual system/oil burner</li> </ul>
9	-	<ul style="list-style-type: none"> <li>• Use modern incinerator (different from Nantucket's) (check on practicality and best practices)</li> </ul>
10	-	Educate through workshops and provide incentives to towns, business community and individuals:
11	-	<ul style="list-style-type: none"> <li>• on use of low-energy light bulbs, energy saving appliances, low-flow showerheads.</li> </ul>
12	-	<ul style="list-style-type: none"> <li>• separate food from recyclables and trash (clarify that BFI/SEAMASS really recycles)</li> </ul>
13	-	<ul style="list-style-type: none"> <li>• get citizens to do [recycle?] their own waste</li> </ul>

- |    |   |                                                                                                                                            |
|----|---|--------------------------------------------------------------------------------------------------------------------------------------------|
| 14 | • | remove roadblocks: payment, change of habits, availability of more containers                                                              |
| 15 | • | require several dumpsters at construction sites for material sorting                                                                       |
| 16 | - | Remove roadblocks to recycling                                                                                                             |
| 17 | • | Curbside pick-up instead of homeowner taking trash/recyclables to transfer station                                                         |
| 18 | • | Fund pick up and disposal through taxes rather than pay-as-you-go (may also alleviate roadside- and empty-lot dumping)                     |
| 19 | - | Get all waste managed under one system to create a fully functional infrastructure (Tisbury and OB are not in the regional waste district) |
| 20 |   | <u>Long term (25- and 50-Year)</u>                                                                                                         |
| 21 | - | Create waste/energy closed production system                                                                                               |
| 22 | - | How to change mindset of Vineyarders for the long run? – marker/meter to show E/W use declining                                            |
| 23 | - | Create net zero system of some kind for Island                                                                                             |
| 24 | - | Grow energy crops (as in Sweden) – cycle of growing, burning, residue disposal pulls heavy metals out of soil                              |
| 25 | - | Investigate viability of MV running its own recycling/reuse/compost facility similar to Nantucket’s                                        |
| 26 | - | Somehow use wastewater sludge/compost for production of energy                                                                             |
| 27 | - | Create better opportunities on Island to make it easier to comply with new ways                                                            |

## Transportation

- |    |   |                                                                                                                           |
|----|---|---------------------------------------------------------------------------------------------------------------------------|
| 0  |   | <u>Short-term (10-year)</u>                                                                                               |
| 1  | - | Focus on reducing vehicle miles traveled as having the greatest impact on energy use and carbon emissions.                |
| 2  | • | Rideshare program – develop an electronic database to facilitate drivers/riders finding each other.                       |
| 3  | • | Regionalize taxis, allowing them to carry passengers in two directions; centralized dispatching and track electronically. |
| 4  | • | Promote incentives for resorts/developments to entice customers to “leave the car behind.”                                |
| 5  | • | Provide VTA more flexibility and responsiveness with use of mini-transport                                                |
| 6  | • | Assess fees to developers of projects that impact traffic and parking.                                                    |
| 7  | • | Implement a nominal (\$30) parking fee in all towns, the proceeds going to other transportation items.                    |
| 8  | • | Develop a fossil fuel impact fee for all vehicles – including planes aircraft and watercraft.                             |
| 9  | - | Promote using current availability of bio-diesel.                                                                         |
| 10 | - | Through towns’ licensing procedure, phase-in required percentage of rental car fleet be hybrid.                           |

- |    |   |                                                                                                                                                                                                   |
|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11 | - | Locally subsidize, and lobby state and federal governments to subsidize, bio-diesel and other alternative fuels.                                                                                  |
| 12 | - | <u>Long term (25- and 50-Year)</u>                                                                                                                                                                |
| 13 | - | Seamless transportation system between transportation modes and between Island and mainland.                                                                                                      |
| 14 | - | All vehicles fueled by non-fossil fuels (preferably, locally-produced). The Island's compact size and small number of gas stations makes it a great testing ground for hydrogen-powered vehicles. |
| 15 | - | System of multiuse paths will be as extensive as the road system. As many miles of footpaths as miles of roads.                                                                                   |