



**Energy Focus Group Meeting
Minutes
April 8, 2009, 8:00 AM, Room 101**

Introduction by Supervisor Cunningham

- **Objectives:** Explore the use of technology, existing resources, demand side energy reduction programs, current federal and state incentives, and collaboration to drive our energy costs to the levels that help our businesses and town be cost competitive. These efforts will result in balance budgets, attract businesses and people to our town and make our businesses strong employers.
- **Scope:** Schools, Town Facilities, Commercial and Industrial Businesses

Introduction of Group Members

Members Present: James Banahan (Air Liquide), James Benham (Logistics One), Michael Catalina (Huttig), Kevin Cookingham (Linde), Jeff Dunbar (SABIC-IP), John Glavin (Owens Corning), Kenneth Green (McNeary), Stephen Kampilla (Selkirk Cogen), John Morgan (SABIC-IP)

Staff Present: John Cunningham (Town Supervisor), Terrence Ritz (Town Engineering & Bethlehem IDA), Thomas Connolly (Bethlehem IDA), Deborah Kitchen (Town DEDP & Bethlehem IDA)

Discussion Items – John Morgan, SABIC

- Identify Large Energy Users- completed
- Identify Possible Collaborations- completed
- Identify Funding Opportunities and Grants- to be discussed in second meeting
- Review Technologies- to be discussed in second meeting.
- Develop Several Projects to Save on Energy- In progress

Next SYID Meeting – Terrence Ritz, Bethlehem IDA / Town Engineering

- Upcoming Presentations - April 23, 2009 SYID Meeting #3
 - CSX Rail Yard
 - Brownfields Redevelopment

Open Discussion

Following the Agenda we listed the major energy users. The table below shows energy users and generators. Selkirk Cogen Generates Electricity and uses it. If we all received electricity from them we would load their smaller 80 MW turbine to the approximately 69% level. If we were to bring in a new business that used 24 MW and 500,000 MMBTU's of heat we could fully load the unit and make the cost of electricity lowest.

	Electricity KW Hrs	Heat MMBTU's	Electric @ 8400hrs	Heat	Electric SupplyKW/Hr	
SABIC	17,000	600,000	\$14,280,000.00	\$4,800,000.00		
Linde Gases	14,500		\$12,180,000.00			
Air Liquide	10,200		\$8,568,000.00			
Selkirk Cogen	8,500		\$5,100,000.00		80,000	
Owens Corning	4,125	450,000	\$3,465,000.00	\$3,600,000.00		
Town of Bethlehem	1,667		\$1,400,000.00			
Logistics One	250,000	sq ft warehouse	1.46/Sqft	\$365,000.00		
Huttig	4,700	sq ft warehouse	1.46/Sqft	\$6,862.00		
Total Demand	55,992				80,000	69.99%
New Business Need	24,008		500,000 MMBTus			

Note: Warehouse data is square feet and an estimated cost to heat that number of square feet.

Opportunities for Reducing Energy Costs

- 1) Create a "Selkirk Rail Yard Energy District" to allow sharing of utilities buy and leverage volume. Maybe it could be a town or municipal power unit that supplies power to the "District"
- 2) Work with ESDC and BIDA to identify a foundry company or new company to share in our "Selkirk Rail Yard Energy District", need more megawatts and heat to maximize use of 80 MW unit at Selkirk Cogen
- 3) Leverage the 80 MW unit at Selkirk Cogen to supply power at lower cost to the Energy District. If they took over National Grids substation they could supply the District.
- 4) Install a 24-31 MW Cogen at SABIC to supply power to the Selkirk Rail Yard Energy District.
- 5) Manage or reduce energy usage with demand side programs in lighting and air conditioning, hot water etc. invite NYSERDA in to review and help prioritize opportunities.

CHP and lighting in schools. Move food warehouses next to school so cogeneration has best payback. Generate electricity and cool using CHP and adsorption chillers.
- 6) Investigate if Owens Corning could benefit from a cogeneration unit because of their simultaneous heat and electric demand.

- 7) Use existing pipeline at Selkirk Cogen to sell and buy larger strips of gas in the Selkirk Energy District for lower cost gas.

An attraction to the new companies to join the district.

- 8) Waste to Energy plant. Use environmentally friendly and new methods to turn waste wood and cardboard, plastic etc to energy and eliminate waste cost for each site and reduce carbon foot print. Become Zero Waste Sites.

Other Comments

Invite National Grid to meetings to help make this happen
Review Town of Bethlehem website for energy savings ideas

Next Steps

Committee to review draft meeting summary and generate next steps/action items

Next Meeting

SYID Focus Group – Thursday, April 23, 2009 at 7:45 a.m. Bethlehem Town Hall, Auditorium
SYID Energy Focus Group – Friday, May 16, 2009, 8:00 a.m., Bethlehem Town Hall, Room 101

Submitted by John M. Morgan, SABIC Innovative Plastics, Noryl Process COE Leader