

SustainAbility Update

Q1-Q2 2012 (Inaugural Edition)

Dover companies are committed to creating economic value for shareholders and customers through sustainable practices that protect the long-term wellbeing of the environment. From greenhouse gas and waste reductions, to increased energy efficiency, Dover is striving to meet the global environmental needs of today and tomorrow. As a worldwide, diversified manufacturer of industrial products, we are ideally positioned to make a positive difference on a large scale. We are continuously developing new and innovative products that deliver compelling green benefits. By utilizing Dover solutions, our customers not only realize cost savings, but also take important steps toward fulfilling their own goals of social and environmental responsibility.



Recent Program Highlights



November 2010

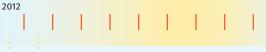
Dover SustainAbility Metrics tool developed and initial training conducted to support the calculation of Dover's first greenhouse gas (GHG) footprint

March 2011

Dover's 2010 GHG footprint and baseline calculated and publicly disclosed on Dover's website, as well as through the Carbon Disclosure Project

April 2011

Dover sets a 20% energy and GHG intensity reduction goal from 2010 baseline to be achieved by 2020



January 2012

To drive progress toward goals, OpCo Energy Efficiency Captains (EECs) appointed to direct energy management and drive progress toward energy reduction goals

February – May 2012

EEC Training modules launched and Energy Management Plans developed

October 2011

Dover sets internal energy reduction goals for OpCos in 2012

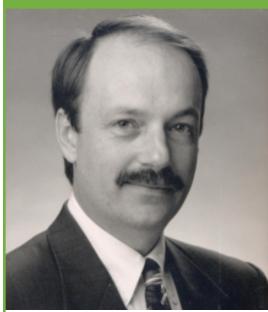
Inside:

- Spotlight on: Gary St. Onge of ECT
- DeStaCo implements effective energy management approach
- Note from the SustainAbility Working Committee Chair
- Syfer incorporates natural light to reduce energy

EEC Training Topics To-Date:

February 2012: Introduction March 2012: Using the SMT April 2012: Developing an Energy Management Plan May 2012: Lighting June 2012: Sub-metering

PROFILE OF AN ENERGY EFFICIENCY CAPTAIN



- Lighting upgrade Changed T12 light fixtures to T8 lighting – 250 fixtures changed, \$7k rebate from utility
- Variable frequency drives on air compressors and large motors – rebate from NY state

Gary St. Onge

I first became involved with energy management at ECT when I realized the utility bills were increasing without reason or any significant change to our business. The bills were also significantly higher than I expected they should be, and were affecting the bottom line. As I studied the utility bills I could see where the costs were emanating from. The demand charges represented almost half the entire bill, and the usage was also climbing though we hadn't added any equipment.

The list below shows the largest findings and changes that were made in NY. Some savings occurred without my intervention, but most were a result of understanding and managing the power usage and equipment efficiency. And, in 2012, the Clifton Park facility's utility bills are averaging 60% less than 2010. Some of the key energy savings initiatives taken include:

- Heating A/C system changed to roof top units landlord bore entire cost
- Landlord siphoning power 3 other companies using power from our electrical meter. Forced landlord to repay ECT and rewire building.
- National Grid lowered delivery rate! This savings came as an unexpected surprise
- Installed programmable thermostats

 temperature controlled by
 management rather than anyone in
 the building

My focus has now shifted to our ECT Pomona facility, where \$100k in annual savings can be realized by changing the air compressor to a variable speed unit, and switching the lighting from T12 to T8 technology. There are numerous other possibilities for savings at this site beyond the two noted.

The energy field has long been of interest to me, which really started when I designed and developed my own wind turbine for my thesis work at Union College. That interest continues and today I operate my own micro hydro-electric site and wind turbine that turn the utility grid's meter backwards with the power generated. I am also driving a Nissan Leaf (all electric vehicle) to utilize the power generated.

For more detail, contact Gary St. Onge at gary.st.onge@ectinfo.com or 518-877-3750.

From Eric Pettersen, chair of the Dover SustainAbility Working Committee

Welcome to Dover SustainAbility and a sincere thank you for all of the efforts that you and your operating companies have made to-date. On behalf of the Working Committee, we are encouraged and excited by the energy, innovation and collaboration this initiative has already inspired. In this newsletter alone, you'll find many great stories and initiatives from your co-workers and colleagues. And we are only getting started! We see this program as a journey, and look forward to highlighting all of your stories along the way. Together, we are building a culture of sustainable practices that help protect the long-term well-being of the environment, our employees, and the communities in which we operate. Please keep us up to date with any of your current wins, challenges and struggles; we'd love to hear from you, contact me via at *epettersen@dovercorp.com*.



DeStaCo: Building a strong energy management program, on track to meet 2012 energy goal

DE-STA-CO's (DSC) plan to reduce 5% of the energy consumption in operations is outlined below:



- Elect Champions: Each of the 14 DSC sites identified an Energy Champion responsible for communicating and driving site-based energy conservation initiatives.
- Target Sites and Set Objectives: DSC determined the heaviest energy consumption by plant and by type. The top 3 consumers were found to be in the United States (2 in Michigan and the largest in Illinois).
- **Communications**: DSC set up action plans that provided general recommendations and could be customized by site. Examples of recommendations included: surge protectors, energy jets, lighting retrofit, lighting sensors, BITS energy saving smart strips, "Kill A Watt[™] monitor" installation, revised start schedule, thermostat positioning, programmable thermostats, manual flow racks vs. powered equipment and green roof.
- Monitor Results: Currently, the results are monitored from the SMT entries and reported on a global scorecard. Once results are available through the Summit Energy Website, DSC will add to weekly conference calls within each region.
- **Progress Review**: Results of the SustainAbility Project for DE-STA-CO are a top priority of the Executive Staff, who review energy conservation progress of the results as well as the means semi-annually.

For more detail, contact Katherine Eago at keago@destaco.com or 248-420-0702.

Some example project plans and initiatives:

Leaker Seeker: The use of ultrasonic detection or simply evaluate air leaks when production is down. Leaks are tagged with information on the size of the leak and maintenance work tickets entered. Upon repair, energy savings can then be calculated (see table to the right).

Draft Analysis (Thermography): Thermography is a fantastic tool for predictive maintenance, but some DSC sites plan to use it also to evaluate areas for improvement in heat retention during winter months and cooling losses in the summer. If contracting an electrical audit, see if the contractor is willing to combine services with a building assessment (see figure at top right).

Local Communications & Planning: DSC sites use newsletters, video monitors, 5- min talks, Standard Work Instructions, and are evaluating environmental options for new equipment and processes.

Energy evaluations: DSC solicited advice from retired engineers, which is a service subsidized by state government funding.

Quick hits: Lighting upgrades at OPW FC Cincinnati

- Changed lighting from metal halide sodium lights to the high efficiency fluorescent
- Installed motion detectors in all offices
- Investment required: \$88,000
- Annual savings: \$82,000
- Payback: 1.1 years
- Currently changing the offices from T12 to T8 bulbs for further savings

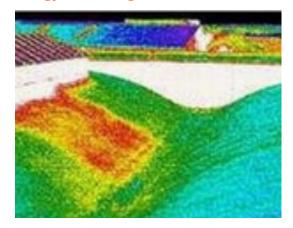
For more detail, contact Greg Pearson at gpearson@opw-fc.com or 513-870-3133.

Compressed air leak cost savings

Leak Dia.	Air Loss, CFM/Day	CFM Loss/Day	Cost (\$) Lost/Day	Cost (\$) Lost/Year
1/ 64	0.45	576	0.13	48
1/ 32	1.60	2,304	0.51	186
3/64	3.66	5,270	1.16	424
1/16	6.45	9,288	2.04	744
3/32	14.50	20,880	4.59	1,674
1/ 8	25.80	37,152	8.17	2,981
3/16	58.30	33,952	18.47	6,738
1/4	103.00	148,320	32.63	11,904
5/16	162.00	233,280	51.32	18,721
3/8	234.00	336,960	74.13	27,036

Based on 100PSI, \$0.22/MCF, 8,760 hours/year

Thermography analysis shows energy loss through roof



Syfer focuses on lighting:

Steve Watts, Energy Efficiency Captain for Syfer, shares Syfer's success to-date:

"As part of our ISO14001 implementation, we identified a potential improvement of removing unnecessary fluorescent tubes. Work areas were assessed by Maintenance and our Health & Safety Officer to identify and remove unnecessary tubes whilst maintaining sufficient lighting conditions. This resulted in the number of fluorescent tubes being reduced from 1006 to 936. The energy saving (if all tubes on) was 7.1 kW/h (from 70.7 kW/h to 63.6 kW/h).

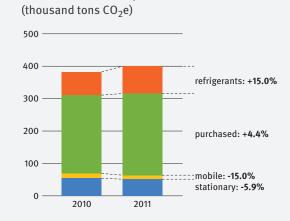
"In addition to removing tubes, we have also installed ceiling diffuser panels. Syfer already had glass panels fitted in the roof and the ceiling diffusers allow natural light into some production and office areas. This enables lights to be switched off especially during summer months. Our estimation is that this reduces our lighting energy consumption by 10% per annum."

Syfer is a business unit of the Ceramic & Microwave Products group under the Dover Communication Technologies. For more detail, contact Steve Watts at swatts@syfer.co.uk or +44 (0) 1603 723347.



The project team for this activity (Maintenance, Health & Safety Officer. and Ouality Manager) in a production area fitted with roof panels. Team members from left to right starting next to the wall are Gordon Fisher (H&S Officer), Brian Bircham (Maintenance Technician), Andrew Davison (Maintenance Manaaer) and Steve Watts (Quality Manager)

Dover's GHG footprint was calculated directly from data entry into the SMT globally by all facilities. While use of purchased energy (electricity) and refrigerants increased, mobile sources (such as fleet vehicles and forklifts) and stationary usage (often natural gas) decreased. Growth is mainly attributed to organic growth and acquisitions (2010 energy usage of acquisitions is added into baseline). Totals are subject to change due to further acquisitions and divestitures and changes to calculation methodology.



Greenhouse Gas Footprint

While emissions increased by 4%, revenue increased by 20%. We have a 13% decrease in overall intensity (metric tons CO₂e per thousand USD revenue).

65% progress towards our 20% reduction goal!

The Dover SustainAbility Working Committee



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Vince Sweenev

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