Conservation Goals

In April 2000, Merck launched its rigorous campaign to reduce its energy consumption at each manufacturing site. Since then, more than 30 sites have agreed to take up the energy reduction challenge, including all of the MMD manufacturing sites worldwide. These site representatives form the Merck Energy Reduction Initiative Team (MERIT), whose goal is to cut energy consumption by 2 percent per year for each of the next five years. MERIT has announced that there are plans to cut energy by 3.4 percent in 2001.

The Team

Headed by Bill Tortoriello, the 10-member core team is in place to guide the site representatives and offer advice on strategic planning, annual reporting, implementing best practices and communications.

The Newsletter

The purpose of this quarterly publication is to augment other communication efforts to reduce energy consumption. Learn more about communication tools, including information about your web site, on the back cover.

Dear Dr. Watts:
My spouse and I have a lovely relationship, however, we continue to argue about one thing. She says that fluorescent bulbs are better than incandescent. I disagree. Can you help resolve this conflict?

Jim R., Rahway, NJ

Dear Jim R.
I’m here to tell you that “your wife is right.” The conventional incandescent bulbs are not only extremely inefficient, they also have a very short life and must be replaced frequently. Compact fluorescents will fit many of the fixtures previously used by incandescent bulbs. So where you have been using a 60-watt incandescent, you can use a 15-watt compact fluorescent that will last 10 times as long -- and will deliver the same amount of light for about one-quarter of the energy! I encourage you to make the switch.
Heating and cooling your home uses more energy and drains more energy dollars than any other system in your home. Typically, 44% of your utility bill goes for heating and cooling. In this issue, we’ll focus on tips to help you lower your heating costs and your pollution output.

**Heating Tips**

- Most people are comfortable with the thermostat set between 68-70 degrees Farenheit. This is traditionally called the comfort zone. When turning your heat down at night, never lower temperatures more than 8 to 10 degrees below the comfort zone setting. Recovery to comfortable temperatures will cost you more than you save. An automatic setback thermostat will pay for itself within a year.
- Clean warm air registers, baseboard heaters, and radiators as needed; make sure they are not blocked by furniture, carpeting, or drapes.
- If you have a forced hot air system (oil or gas), install a humidifier. Proper humidity makes lower thermostat temperatures feel more comfortable. Proper humidity will also prevent static shocks.
- Keep your shades on south-facing windows open during the day to allow sunlight into your home and closed at night to keep the warm air in your home.

**Core Team Members**

- Bill Tortoriello, Site Engineering, RY
- Paul Berndt, Utilities, RY
- Karen Casey, Global Procurement, WS
- Vinny Gates, Utilities, RY
- Tom LaBuz, Central Safety & Environment, WS
- Harry Marshall, Management Engineering, WP
- Suzanne Matlock, Maintenance & Repair, WP
- Annette Nichols, Central Engineering, FTA
- Keith Williams, Technical Operations, EK
- Hank Kacala, Site Facilities Engineering, WP

Go to our Intranet site at http://rymmd.merck.com/energy
The biggest energy users identified at the Rahway and West Point sites, according to Paul Berndt, Utility Manager at Rahway, are lab fume hoods. “In Rahway, we’ve made some great strides in getting employees to close the hoods when not in use,” he noted. “There has been tremendous cooperation once employees were made aware of the problem.” Still, Paul looks forward to a day when ‘smart hoods’ (see below) are in use at all Merck facilities.

**Success Stories**

**Banyu, Japan**

Nobuyuki Yamamoto has realized significant savings by identifying operation opportunities to reduce energy consumption. The facility operates multiple chillers to provide comfort and process cooling.

The traditional method was to operate all of the chillers and all of the pumps. By analyzing this operation, they were able to take one chiller off-line as well as the pumps associated with it. In addition to reducing utility costs, they now have a chiller and pumps as backups, should one fail. This is just one example of how a change in operations can conserve resources without spending money. Way to go!

**Danville, PA**

Vince Sedlmeyer reports that the Cherokee site has reduced energy costs by using the water they pump from the river to cool their processes, saving the energy it takes to operate their chillers. Because the river is fed from the mountains, the water is cold for much of the year. This water is readily available and can be used once and then returned to the river at temperatures that are within their permitted limits. Good job!

**Korachi, Pakistan**

Ashiq Ramma reports that they are saving water by piping their reverse osmosis (RO) reject to the toilets in the facility. Ramma also motivates employees to shut off the air conditioning and lights in their offices during lunch and tea time.

**BEST PRACTICES**

Best Practices are key to reducing energy consumption both in identifying opportunities within existing facilities and in designing new facilities with energy conservation built into the design. We have identified companies, such as Johnson & Johnson, who have progressed to the point where their entire energy management program consists of implementing Best Practices as a part of doing business.

Best Practices will be a regular feature in this publication.

Go to our Intranet site at http://rymmd.merck.com/energy
Communication Tools Multiply

This publication, to be distributed quarterly, is one of a series of communication tools designed to help you to conserve resources at your home and at your site.

This newsletter is also available for downloading as a PDF file from our Intranet web site. Your site management encourages you to visit: http://rymmd.merck.com/energy for a wealth of information on sound conservation practices, frequently asked questions and links to many energy related web sites.

Throughout this campaign we will be using voice mail, e-mail, posters and signs to encourage conservation. If you have any thoughts, please contact your site representative.

We are in the process of developing a series of articles for site communication over the coming months. If you have any ideas, contact one of the individuals listed below.

### Site | Site Rep | Core Team Rep
--- | --- | ---
Albany (Georgia) | Mike Velez | Annette Nichols
Alcala (Spain) | Luis Cifuentes | Keith Williams
Arecibo (Puerto Rico) | Felix Matos | Hank Kacala
Ballydine (Ireland) | Joe Ryan | Tom LaBuz
Barcelonta (Puerto Rico) | Hector Ramos | Hank Kacala
Caguas, (Puerto Rico) | Felix Amador | Hank Kacala
Cherokee (Danville, PA) | Vince Sedlmeyer | Kelly Williams
China | Roy Ding | Karen Casey
Costa Rica | Luis Flores | Annette Nichols
Cramlington (England) | Mark Boldy | Harry Marshall
Haarlem (CO4, Netherlands) | Jan Kamphius | Annette Nichols
Korea | B.K. Choi | Harry Marshall
La Vallee (France) | Louis Rivoirard | Vinny Gates
Menuma (Japan) | Nobuyuki Yamamoto | Karen Casey
Merck-Frosst (Canada) | Jean Barrette | Paul Berndt
Merck-Medco | Denise Tulp | Harry Marshall
Mexico | Bernardo de la Vega | Tom LaBuz
Mirabel (Clementel, France) | Serge Roubine | Harry Marshall
Neopharmed (Milan, Italy) | Nino Columbo | Karen Casey
NSW (Australia) | Steve Twist | Harry Marshall
Okazaki (Japan) | Takashi Shibata | Paul Berndt
Pakistan | Hussain Ramma | Paul Berndt
Pavia (Italy) | Leonardo Vaccariello | Vinny Gates
Ponders End (England) | Lee Elkington | Annette Nichols
Quito (Ecuador) | Fernando Calero | Tom LaBuz
Rahway (NJ) | Vincent Gates | Keith Williams
Singapore | Oliver Arango | Tom LaBuz
South Africa | Andy Harris | Vinny Gates
Stonewall (Elkton, VA) | Keith Williams | Keith Williams
USSH | Charles Hoff | Vinny Gates
West Point (PA) | Hank Kacala | Paul Berndt
Whitehouse Station (NJ) | Gerald Pentlucky/Craig Warner | Vinny Gates
Wilson (NC) | Tony Little | Karen Casey

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JUST DO IT

If natural light provides enough working light, don’t turn the overheads on!

- Ask yourself, am I always turning off lights when not in use?
- Have I replaced incandescent bulbs at home with compact fluorescent bulbs where possible?
- Do I turn off lights in the copy rooms?
- Do I turn off my PC and monitor when not in use?
- Remind your coworkers to conserve energy too!
- Is the VCR turned off in the conference room?