

CLIMATE & ENERGY



The most pressing environmental issue today, climate change, is a central focus to Millipore's Sustainability Initiative. Our activities to address climate change encompass energy conservation initiatives to reduce our GHG emissions, while preparing our business for a carbon constrained world. We have set an aggressive target to reduce our carbon footprint 20 percent by 2011—a goal we are well on our way toward meeting. We are improving energy efficiency and reducing our consumption of non-renewable energy resources, such as natural gas and oil. And we are incorporating green design into our facility renovation and construction projects to help reduce emissions and improve our overall environmental footprint.

Risks and Opportunities

Evaluation of the risks and opportunities associated with climate change is an ongoing process. We remain both cautious and conservative in our approach to assessing the risks, and we are working as aggressively as possible to manage them. Some potential risks include:

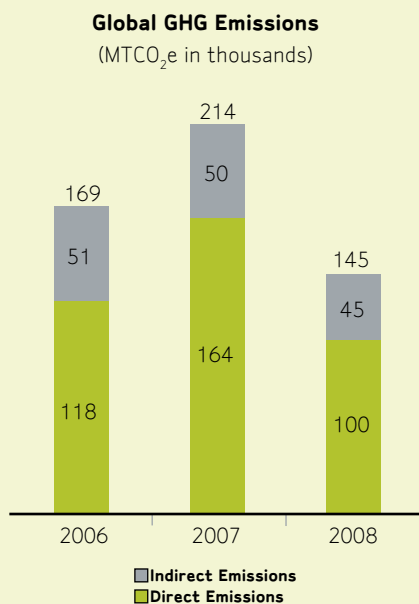
- Escalating energy costs
- Regulations related to GHG emissions
- Water use regulations, escalating water costs, and increasing water scarcity, which could affect our Lab Water product line as well as our manufacturing processes
- Use of petroleum-based, virgin-grade plastics in many products

Just as we work to assess the risks associated with climate change, we also remain alert to potential opportunities to help others mitigate climate change impacts while enhancing our own market position. Millipore anticipates increasing concern from our employees, shareholders, and customers regarding our impact on climate change. Given that the company's product sales are managed through a business-to-business model, our focus is to proactively address interest from these stakeholders. We also recognize the competitive advantage and increased market share available to companies that are reducing energy and water consumption, minimizing GHG emissions, reducing use of conventional plastics, and making other improvements.

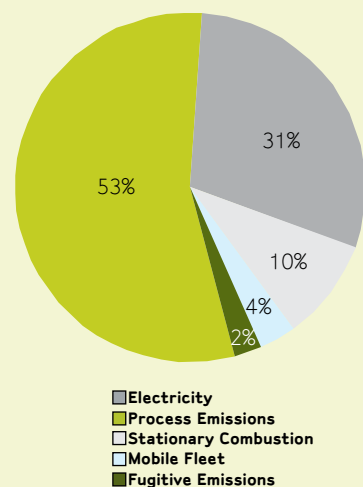


"Our sustainability commitment drives us to seek out more innovative solutions and services for our customers, helps us achieve our social responsibilities, reduces our environmental impacts, and supports business growth. In our design projects, we integrate sustainability systematically, which is often challenging, but always rewarding."

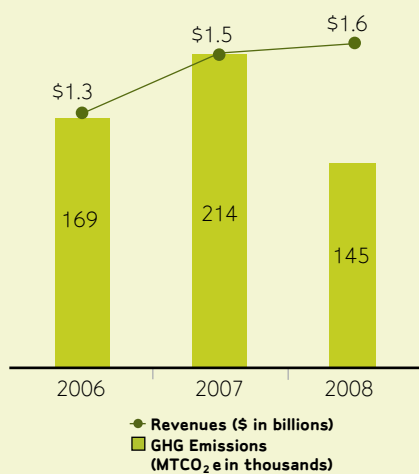
Sébastien Leyendecker, EHS Manager
Molsheim, France



Global Emissions by Source, 2008



GHG Emissions versus Revenues



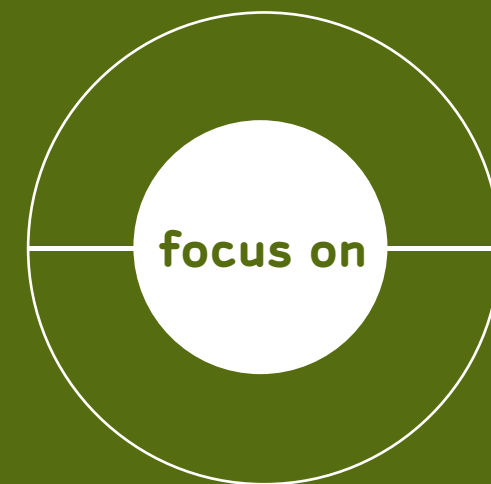
GHG Management

Millipore's GHG reduction target is aggressive—a 20-percent reduction by 2011 using 2006 as a baseline year—but achievable. Our target is expressed as an absolute reduction of GHG emissions. We are working toward this target through energy efficiency projects, manufacturing process improvements, fleet vehicle changes, renewable energy installations, and even behavioral changes in our employees.

Despite our steady growth, we have achieved a 14% reduction in our GHG emissions since 2006. Process emissions resulting from our manufacturing activities are our largest source due to their greater global warming potential. From 2006 to 2007, our process emissions significantly increased due to greater demand. For information regarding our data methodology, please see the Closing section of this report.

In 2007, we joined the U.S. EPA Climate Leaders program, and have developed a company-wide GHG inventory based on the GHG Protocol Corporate Accounting and Reporting Standard. We are also an active participant in the Carbon Disclosure Project, the largest database of corporate climate change information in the world. We disclose our GHG emissions through our external sustainability website and through external voluntary reporting initiatives such as the Climate Leaders program and the Carbon Disclosure Project.

In our manufacturing facilities, we continue to seek opportunities to eliminate or reduce associated GHG emissions. For example, in 2008 in our Jaffrey facility, Millipore employees identified a way to dramatically reduce GHG related process emissions, and implemented a solution that cut the facility's GHG emissions by 54,000 MTCO₂e. That is equivalent to the energy use from 4,900 homes. This saves Millipore more than \$200,000 per year at the Jaffrey facility alone.



COMPRESSED AIR ELECTRICITY SAVINGS

Several of our manufacturing facilities consume large amounts of electricity due to the compressed air systems necessary to run our manufacturing equipment. Air compressors are generally the largest horsepower electric motors on-site, and the overall efficiency of a typical compressed air system can be as low as 10 to 15 percent.

By adding a variable-speed compressor to the system at our Bedford facility, sealing air leaks, and eliminating non-productive uses of compressed air, we are saving almost 600,000 kWh of electricity per year. This translates into a reduction of 430 MTCO₂e and annual cost savings of \$90,000.

Our plants in Jaffrey and Cork are using a similar technology with equally good results. And at our Technology Center and Customer Service in Billerica, we built a state-of-the-art compressor room to provide superior operational reliability while reducing energy consumption.

Energy Management

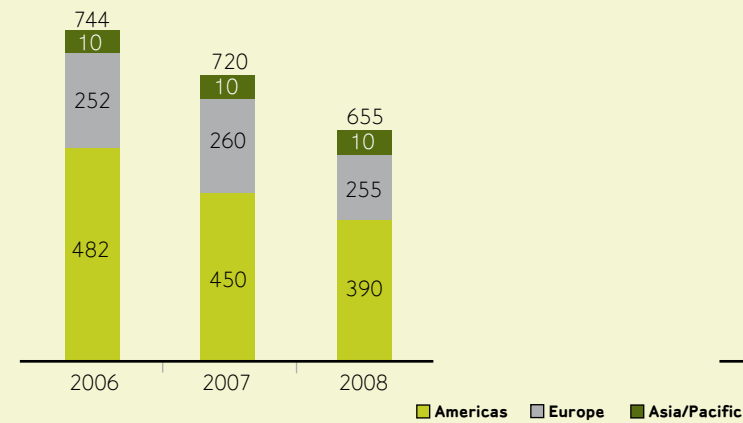
Energy use is a significant and rising expense at Millipore and a key source of our total environmental impact, so using this resource wisely has both environmental and financial benefits. We have made progress toward our goal of cutting electricity use by 10 percent between 2007 and 2008, through a comprehensive energy management program.

Company-wide, energy reductions represent our most significant sustainability improvements to date. We continually seek opportunities to conserve energy through process upgrades and new technologies. In addition, we have conducted energy audits in all our major facilities, and focused assessments on specific mechanical and electrical systems. We continue to rely on our own staff to find these improvements. In 2008 we trained

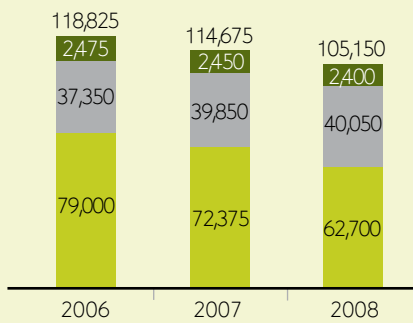
18 of our properties, facilities, and sustainability professionals in an intensive energy auditing training course. As a result of this training, we identified nearly 80 energy efficiency measures worldwide to implement, amounting to more than 750,000 kWh per year of electricity savings and \$130,000 per year in cost savings.

Beginning in 2009, we are tracking our energy performance in our web-based environmental metrics database through a customized energy metric that normalizes each Millipore facility's electricity consumption. This will help to evaluate the relative use of electricity and identify areas where improvements are most needed.

Global Energy Consumption by Region
(gigajoules* in thousands)

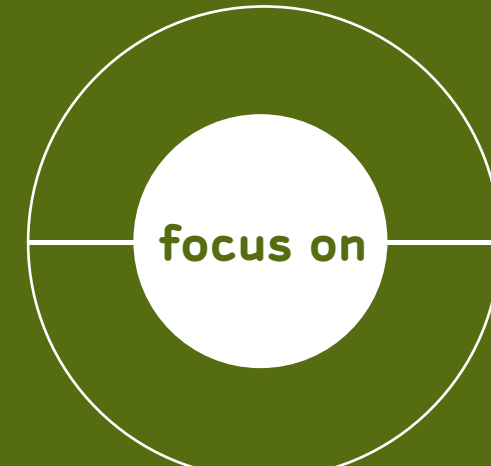


Global Electricity Use by Region
(kWh in thousands)



Globally, we reduced overall energy consumption (electricity, fuel oil, and natural gas) by 12 percent due to multiple energy efficiency projects, process improvements, and behavioral changes. Electricity use alone decreased by 8 percent against our 10-percent target between 2007 and 2008.

*1 gigajoule = 10⁹ joules = 277.8 kWh



BOILER CONVERSIONS

We have replaced the traditional burner controls on two boilers in our R&D facility in Bedford with autoflame controllers, providing independently controlled optimization of combustion. This technology offers independent micro modulation of air and fuel valves and dampers, while an exhaust gas analyzer provides continuous combustion monitoring. We are able to examine our combustion parameters through a computer monitoring system.

This technology allows for an improved, stable, and consistent emissions profile and provides significant natural gas savings. Estimated savings include 35,000 therms per year (approximately 175 MTCO₂e), resulting in a 14 percent reduction of natural gas use. This equates to cost savings of \$50,000 per year. In 2009, we will look to expand this technology to other facilities.

"Our new boilers are more efficient, cleaner, burn less fuel, produce fewer emissions, and provide a good return on investment. Since we completed the upgrades, I've been showing the technology to our other sites so they can make similar improvements."

Dave Bodwell, Licensed Boiler Technician
Bedford, Massachusetts



Energy Efficiency

Our energy reduction strategies range from energy-efficient appliances and manufacturing equipment to new lighting systems, green design renovations, and use of renewable energy sources. In many facilities, we launched employee awareness initiatives to engage employees in conservation and other contributions to our energy reduction success. In Jaffrey, we have seen electricity use drop from 2007, primarily due to good management of electrical usage, especially during off-peak hours. In the facility's production area, we have achieved even higher returns by using equipment more judiciously and turning it off whenever appropriate. We also hosted an energy awareness day for Jaffrey employees where they were able to calculate their personal carbon footprints and learn about energy efficiency improvements, heating conservation, and renewable energy opportunities for their homes.

At the same time, our company-wide emphasis on process excellence has helped employees appreciate the synergy between quality and sustainability. The result is more efficient operations and reduced energy use.

We use a natural gas fired cogeneration plant at our facility in Cork. Generating energy on-site is environmentally preferable and increases efficiency because it:

- Avoids the power loss that occurs when transmitting electricity over long distances
- Uses waste heat from power generation for process heating demand
- Burns cleaner and releases less carbon dioxide than coal or oil

Our Burlington, Massachusetts distribution center replaced all existing 400-Watt metal halogen lights with energy-efficient, 235-Watt T5 fluorescent lights. Each light fixture is equipped with a motion sensor set to automatically turn off after a certain period (location-dependent) of no movement. Fixtures at the end of the aisle remain on for safety. Benefits include:

- Reduces electricity usage by almost 1,000,000 kWh per year
- Saves \$140,000 per year
- Provides easy identification of areas that are not frequently used because lights remain off most of the time
- Provides a brighter environment and supports greater accuracy in order picking

Energy Project Savings

Project Type	Energy Savings (kWh/Yr)	Cost Savings (\$/Yr)	Average Payback (Yr)
Lighting	1,243,000	\$141,000	1.88
Compressed Air	2,071,000	\$270,000	2.17
Other (HVAC, Boilers, etc.)	1,765,000	\$58,000	1.47
Total	5,079,000	\$469,000	1.84

We track energy improvement projects implemented at each site according to the energy and cost savings realized per year.

For our Massachusetts facilities, Millipore is also an EPA ENERGY STAR® Partner, a program through which we commit to improving the energy efficiency of our facilities through:

- Measuring, tracking, and benchmarking energy performance
- Developing and implementing a plan to improve energy performance using the EPA ENERGY STAR strategy
- Educating our employees and other stakeholders about our performance

Renewable Energy

In 2008, we completed our first purchase of renewable energy certificates (RECs). Each credit is equal to 1 megawatt hour (MWh) of renewable, or green, energy to the electrical grid, displacing 1 MWh of conventional fossil fueled power. Renewable energy is electricity produced from renewable resources, such as solar, wind, geothermal, biomass, and low-impact hydro. Using the financial savings realized from various energy efficiency measures, Millipore purchased 10,000 MWh of certified, verified, and audited RECs. The Green-e® certified credits, generated by a wind farm in Montana, offset 100 percent of the electricity used by five of our manufacturing facilities. Overall, they offset about 10 percent of our energy usage worldwide. In January 2009, we joined the EPA Green Power Partnership as a commitment to identifying and buying green power products, including RECs, and reporting on our green power purchasing activities.

In addition, a small portion of the electricity we use in New Hampshire and California is generated from renewable energy. We recently installed a wind turbine at our Cork facility (please see focus on page 49). We will continue to both purchase and generate cleaner energy, helping us again independence from fossil fuels, and from volatile commodity prices.

focus on

WIND ENERGY

In Cork, where wind is strong and reliable, Millipore has installed a wind turbine at our main manufacturing site. This wind turbine is a visible sign of our commitment to sustainability. Specifications of the wind turbine include:

- Generation power: Up to 2,500 to 5,000 kWh per year
- Rotor diameter: 4.7 meters
- Tower height: 9 meters
- Rated wind speed: 10 meters per second

We are evaluating the possibility of installing more of these units, as well as solar energy systems, at other facilities.

Alternative Fuels

Another way we are reducing our consumption of non-renewable energy sources is through the use of alternative fuels, which may include biodiesel, ethanol, hydrogen, vegetable oil, and other biomass sources. Through a pilot project in our Jaffrey facility with the New Hampshire Department of Environmental Services, we tested the use of B20, a blend of 20 percent biodiesel and 80 percent conventional diesel, in the boilers, which traditionally run on fuel oil. Through the study, we were able to understand the impacts from combustion of biofuels in stationary sources. We are also working to optimize boiler combustion to make sure they perform at peak efficiency and reduce air emissions.

Some of our European fleet also utilizes biodiesel in its diesel engines since there is no additional equipment necessary. Please see more information under the Vehicle Fleet section.

Vehicle Fleet

Our fleet of company cars and vans is another source of our GHG emissions, so in October 2007, we began a program to replace our 300+ U.S. vehicle fleet with more fuel-efficient vehicles, including hybrids. We began transitioning to more fuel efficient vehicles, with two of the four available models featuring hybrid engine technology, which dramatically reduces GHG emissions compared to traditional gas engines.

Employees who were eligible for company vehicles were offered a choice of two hybrid models, along with financial bonuses for selecting a hybrid. By the end of 2007, more than 100 vehicles had been replaced. At the end of 2008, hybrid vehicles comprised 30 percent of our fleet, moving us closer to the goal of reducing by half the 2,000 MTCO₂e produced by our U.S. fleet. This achievement earned us the distinction of being among the "Top

50 Hybrid Commercial Fleets," as featured in AUTOMOTIVE FLEET Magazine (February 2009).¹ Our Hybrid Vehicle Incentive Program for U.S. Employees is also part of our commitment to help employees reduce their own carbon footprints. Please see focus on page 69 for more information.

In Europe, due to the price of vehicle fuel and taxes on larger engines, almost all of our fleet is powered by fuel-efficient, smaller output diesel engines. Furthermore, we have three vehicles that are using biodiesel, an alternative fuel to traditional gasoline or diesel. Although we plan to further evaluate the benefits of hybrids in Europe, we do not have as much opportunity for fuel savings in that region.

Employee Commuting

Employees at our facilities have helped to reduce vehicle-related emissions through other means as well. In Temecula, employees took a survey to determine the average vehicle ridership, with the aim of achieving a rate of at least 1.30, as required by the regional air quality management district. Although average vehicle ridership rates achieved by Temecula staff improved from 2007 (1.06) to 2008 (1.10), they remain just below the goal.

In Molsheim, local EHS staff are leading a facility-wide commuting program designed to reduce the number of cars traveling to and from our site each day (please see box on right). And in the greater Boston, Massachusetts area, where we maintain several facilities, we have a contract with PlanetTran™, a taxi service that features only fuel-saving hybrid vehicles.



"I do my best to recycle, reduce, and reuse, so when the time came to buy a vehicle for my commute, it made sense to go with a hybrid. All of Millipore's sustainability commitments are extremely important to me and the Hybrid Incentive Program is one more sign that the company is thinking ahead—and thinking of its employees!"

Tina Lin, Market Manager, Bioscience Division
Danvers, Massachusetts



Sustainable Commuting

Millipore employees in Molsheim launched a program aimed at sustainable commuting. Led by the EHS department, the program featured:

- A 2-day awareness-building kickoff
- An employee survey about transportation behaviors, habits, and changes employees would be willing to make
- Mapping of employees' homes to identify regions where carpooling might work well

A central element of the new program is a carpooling website (www.millimove.com) where employees can locate others for shared commuting. In 2009, the EHS team will propose additional commuting solutions that will save gas, reduce emissions, and save money.

¹ Please note that the magazine inadvertently failed to show Millipore's ranking on the list in the February 2009 issue. However, Millipore's fleet ranks at No. 14 on the list of commercial fleets or No. 2 if hybrids are calculated as a percentage of the overall fleet.

Green Building

We design and renovate company buildings to reduce energy use and decrease other environmental impacts. We have adhered to comprehensive green building principles at new facilities in St. Charles; Danvers, Massachusetts; and Molsheim. In 2008, we completed our first two green building projects, in St. Charles and Danvers, and are now seeking LEED certification for both projects.

We also rebuilt our Bioprocess Worldwide Research & Development Center (located in Bedford), a 10,000-square-meter laboratory and office building, and renovated 3,700 square meters of office and cafeteria space using green building principles. Our target for all these projects is to improve energy efficiency by 25 percent, saving as much as \$1 million per year in utility costs and reducing our carbon footprint. We plan to include green features in future projects as well.

In Molsheim, our LoG warehouse was designed according to the French green building standard, Haute Qualité Environnementale, or HQE. This approach uses 14 criteria for reducing consumption of natural resources and discharge of pollutants, as well as for enhancing the comfort and health dimension of buildings. Our new facility will include:

- Solar photovoltaic system (ability to produce 44,000 kWh per year or about 15 percent of the facility's energy needs)
- Ground-coupled heat exchanger to cool processes
- Electric equipment and shuttle to transport raw materials between buildings
- Provisions to recycle 100 percent of waste
- Intelligent lighting system



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GREEN BUILDING

We completed two green building projects, in St. Charles, and Danvers, and are seeking LEED certification for both facilities.

Features of these energy-efficient and high performance facilities include:

- Reduced chlorofluorocarbons in heating and cooling systems
- Optimized energy performance
- Use of renewable energy
- Provisions for storage and collection of recyclables
- Recycled building materials
- Regionally manufactured materials
- Certified wood
- Indoor air quality provisions
- Low-emitting materials for adhesives, paint, carpeting, composite wood, and furniture
- Controllable systems and lighting
- Green cleaning program
- Alternative transportation, bicycle storage, and changing rooms