Environment, Health and Safety

At Medtronic we recognize the critical interdependence between human health and the Environment, and our inherent responsibility for the welfare of our employees. Our well-being ultimately depends on the health and resources of the planet. For this reason, we continually strive to reduce our environmental impact and mitigate our impact on climate change.

Environment protection is a core corporate citizenship value and provides Medtronic with a competitive advantage by reducing costs and managing risks. Employee safety is also a core value and helps ensure a productive and healthy workforce.

Environmental Sustainability Policy

In November 2007, Medtronic adopted an Environmental Sustainability Policy that articulates our global view of sensible environmental management. The Policy’s tenets are to:

> conserve natural resources,
> promote energy efficiency,
> eliminate waste,
> purchase sustainable products,
> reuse and recycle materials, and
> enhance new building construction and facility modification.

EHS Management

A Senior Management EHS Committee and an EHS Council manage issues across Medtronic’s global organization. These groups provide input and approval regarding EHS strategies, compliance oversight, performance metrics, sustainability practices and resolution of issues. The businesses are accountable for maintaining compliance with applicable EHS regulations, company policy and meeting EHS performance goals established for each business.

The Corporate EHS Department is responsible for establishing EHS Policy and Standards, reporting on our EHS progress, managing the EHS Governance Structure and conducting compliance and management system audits in each of our most significant manufacturing facilities. Each year we develop an audit schedule for Medtronic locations.

Long-term Environmental Goals

Our Environmental Sustainability Policy requires Medtronic to develop long-term environmental goals. Goals for fiscal year 2013 include 10 percent reductions (normalized to revenue) in volatile organic compound (VOC) energy, air emissions, greenhouse gas emissions and water use and 5 percent reductions (normalized to revenue) in regulated and non-regulated waste. The baseline for these goals is fiscal year 2007.
2008 EHS Review

Waste Management

Medtronic generated approximately 12,300 metric tons of non-regulated solid waste in 2009, which accounted for more than 90 percent of the total waste generation. This represents a 7 percent decrease normalized to revenue compared to 2008. The decrease is attributed to company-wide education efforts and goals focused on reducing overall waste generation. We expect this rate of waste generation to continue in order to meet our FY13 goals.

Medtronic also generated approximately 1,400 metric tons of regulated waste. This includes waste that is generated primarily by manufacturing facilities, such as scrap metal and solvents. This represents a 3 percent decrease normalized to revenue compared to 2008. This was largely due to improvements in manufacturing processes as well as more efficient use of materials.

Recycling Improvements

Excluding construction and demolition debris, Medtronic recycled nearly 6,800 metric tons of waste materials or 49 percent of our total waste generation (both non-hazardous and regulated) in 2009 compared to 45 percent in 2008. The improvement is largely due to expanded recycling programs within plants and at individual workspaces, which promote the recycling of plastics, metals, beverage containers, fiber (printing paper, newspaper, cardboard, etc.), ink cartridges, batteries, and manufacturing materials.
MEDTRONIC WORLD HEADQUARTERS CONVERTS FOOD WASTE TO LIVESTOCK FEED

Employee volunteers at Medtronic’s World Headquarters in Minneapolis Minnesota thought there had to be a better way to manage food wastes associated with the on-site cafeteria. Partnering with the food service contractor, they piloted a program to segregate food scraps to feed local livestock. The program successfully removed 250,000 pounds of food waste from the landfill and is being reviewed for implementation at other Medtronic locations.

Air Emissions

Volatile organic compounds (VOCs) are emitted as gasses from certain solids and liquids. In 2009 Medtronic generated 142 metric tons of VOC air emissions. This represents a 9 percent decrease from 2008, normalized to revenue.

Energy Use and Greenhouse Gas Emissions

Medtronic used approximately 490,000 megawatt-hours of energy (electricity, natural gas and fuel oil) in 2009. This resulted in corresponding greenhouse gas (GHG) emissions, measured as carbon dioxide (CO₂) produced from energy consumption, of approximately 250,000 metric tons. Normalized to revenue, our rates of energy consumption and CO₂ emissions in 2009 were nearly 10 percent less than 2008.

By using energy conservation technologies to reduce energy use and associated GHG emissions, including energy efficient lighting and ventilation systems and automated building controls, Medtronic more than offset the increased energy needs generated by expansion at our Moundsview and Woodbury locations in Minnesota. Significant savings at our facilities in Tempe, Arizona, Northridge, California, and Fridley, Minnesota contributed to the aggregate decrease. Our businesses continue to evaluate project plans to reduce energy and GHG emissions at their locations, with the goal of achieving a company-wide 10-percent rate reduction in energy use and GHG emissions by 2013.
MEDTRONIC GALWAY SOLAR SYSTEM SUPPLIES 53% OF HOT WATER NEED

Medtronic’s facility in Galway, Ireland manufactures devices critical to the treatment of cardiovascular disease. In 2008, the facility installed solar collectors that supply 53% of the hot water needs for one of the cafeterias for a savings of 43,000 kilowatt-hours per year.

Water Conservation

Medtronic used approximately 1.2 million cubic meters of water in 2009, 20 percent less than 2008 normalized to revenue.

Significant savings were achieved at our facilities in Tempe, Arizona, Northridge, California, and Fridley, Minnesota by projects to optimize production water purification and cooling systems as well as conservation programs for irrigation water use.

MEDTRONIC SPINAL DECREASES WATER USE 6-8 MILLION GALLONS PER YEAR

Medtronic’s Spinal business in Memphis, Tennessee produces devices critical to spinal surgeries. Recognizing the need to support water conservation in its operations, the facility evaluated high water use areas and identified a biomechanical testing operation as a candidate for the installation of closed-loop cooling systems. Installation of the systems was successful in reducing facility water use by 6 to 8 million gallons per year; enough to supply the annual drinking water needs for a town of 42,000 residents.

External Partnerships, Recognition and Certifications

Medtronic also maintains a commitment to environmental responsibility outside of our company walls. We are a member of the U.S. Environmental Protection Agency’s Energy Star Program and the Minnesota Environmental Initiative’s Clean Air Program, which strives to reduce air pollution. We also participate in key environmental initiatives, such as the Carbon Disclosure Project, and are a member of the national Dow Jones Sustainability Index. Medtronic’s WHQ was the recipient of the Anoka County Environmental Award, and six Medtronic locations are certified to the ISO 14001 Standard:; Galway, Ireland; Heerlen, Netherlands; Deggendorf, Germany; Shanghai, China; Shoreview, MN and Woodbury, MN.
Our fiscal year 2009 performance resulted in improvements in all categories of our regulated environmental metrics. As our business grows, our challenge will be to attain and hopefully exceed our 2013 goals. We are continually working to improve our performance and will reassess our 2013 goals in the future to ensure that we minimize our environmental impact.

### Health and Safety

Medtronic is committed to a safe, healthy work environment that is in compliance with all applicable laws and regulations. During the past year, all of our businesses strived to create value through continuous improvement & integration of environmental health and safety into our business.

#### Employee Injury Rates

Medtronic tracks the following employee work-related injury and illness metrics:

- **INCIDENT RATE**: The number of work-related injuries or illnesses serious enough to require treatment beyond first-aid, per 100 employees working a full year.

- **LOST WORK DAY CASE RATE (LWCR)**: The number of work-related injuries or illnesses serious enough to cause an employee to miss one or more work days or to have one or more work days of restricted duty, per 100 employees working a full year.

Medtronic has continuously reduced incident and lost/restricted workday case rates. In fiscal year 2009, the company incident rate (IR) decreased from 1.16 in 2008 to 1.01. Likewise, our lost/restricted workday case rate (LWCR) decreased from 0.50 in 2008 to 0.42. Performance in our CardioVascular, Strategy & Innovation, PhysioControl, and Surgical Technology businesses showed continuous improvement in injury risk reduction. These businesses focused on job hazard and incident analysis programs, employee involvement and education.

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### Assessing Our Progress Against 2013 Goals

<table>
<thead>
<tr>
<th>Metric</th>
<th>FY08</th>
<th>FY09</th>
<th>% Change</th>
<th>FY13 GOALS</th>
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<tbody>
<tr>
<td></td>
<td>Rate</td>
<td>Rate</td>
<td>Reduction</td>
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<tr>
<td>Air VOC (Tonne/$B)</td>
<td>10.6</td>
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<td>NonRegulated Waste (Tonne/$B)</td>
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<td>CO₂ Emissions (Tonne/SM)</td>
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<td>Water Use (cubic M/$M)</td>
<td>105</td>
<td>84</td>
<td>20%</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Note: All % reduction goals are relative to FY07 baseline.
Certifications and Recognitions

Medtronic has achieved the following health Environmental, Health and Safety certifications:

- Six facilities achieved ISO 14001 Environmental Management Systems Standard Certification: Galway, Ireland; Heerlen, the Netherlands; Deggendorf, Germany; Shanghai, China; Shoreview, MN and Woodbury, MN.
- The World Headquarters received the Anoka County Environmental Award.
- Four facilities achieved Occupational Health & Safety Assessment Series (OHSAS) 18001 Certification: Deggendorf, Germany; Galway, Ireland; Shoreview, MN and Woodbury, MN.
- Our Deggendorf, Germany manufacturing sites achieved ILO-OSH 2001 Certification.
- Our Tijuana, Mexico production facility achieved Safe Company Certification.

Five Medtronic facilities also received the annual Minnesota Governor’s Safety Award in 2009, including CRDM Mounds View/Rice Creek; CRDM MECC, CardioVascular Brooklyn Park; CardioVascular Spring Lake Park, Medtronic Operations Mounds View Distribution Center. It was the third consecutive recognition for one site and the second consecutive recognition for three sites.