



Biomass Boiler Rayong, Thailand

The Cardinal Health Rayong, Thailand manufacturing operation, with a long standing commitment toward environmental sustainability, recently installed a biomass renewable energy boiler. Fueled by sustainable eucalyptus wood waste, the renewable energy generator is capable of offsetting 100% of the natural gas consumption in the manufacturing process.

The biomass boiler utilizes fuel supplied by partners that are certified Forest Stewardship Council (FSC) 100%.



Sustainability

The Cardinal Health environmental sustainability program strives to reduce the environmental footprint of our operations and products.

Aspects of the program include:

- A Global EHS Policy
- An EHS Management System
- Company EHS standards and programs

Guiding Principals

Fundamental to our sustainability program are four key principles that guide our efforts.



Pollution prevention: Minimize waste generated in our operations and maintain high rates of reuse and recycling



Energy efficiency: Use and sourcing — use energy efficiently throughout our business to reduce impacts to the environment and minimize greenhouse gas emissions by energy conservation, improve energy efficiency, and give preference to renewable energy sources when cost effective and feasible



Design for environment: Design products, packaging and services to reduce consumption of natural resources and energy requirements, reduce waste and emissions, maximize overall product functionality to make health care more cost effective and minimize the impact on the environment for our customers



Employee and public outreach: Promote environmental awareness and engagement among employees, communities, customers and shareholders

Environment, Social, and Governance (ESG) Working Group

Environment, Social and Governance (ESG) is fundamental to the long-term, sustainable health and growth of a company. This is an increasingly important perspective held by customers, suppliers, employees and investors. Our ESG Working group Committee is Co-Chaired by the Senior Vice President (SVP) of Investor Relations and the Global Director of Environmental Affairs and Sustainability. We challenge ourselves to best use our assets, expertise and influence to make our communities stronger and our world more sustainable, while governing our activities as a good corporate citizen with a belief that doing the “right thing” serves everyone. We take sustainability seriously, with our Chief Legal and Compliance officer having overall responsibility for environment, health, and safety and reporting to the Chairman and Chief Executive Officer and to the Board of Directors.

Engagement

Cardinal Health has been recognized for its sustainability efforts by the Dow Jones Sustainability Index (DJSI) and has been included on the DJSI North American Index since 2006.

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

Cardinal Health is one of a select number of companies to participate in the EPA SmartWay program both as a carrier — a company that owns or operates a public or private fleet; and as a shipper — a company that ships or receives items delivered by truck or rail transport. Cardinal Health has been a partner company in good standing since 2010. Cardinal Health Canada joined SmartWay in 2015. <http://epa.gov/smartway/about/partnerlists.htm>



Cardinal Health is a Founding Sponsor of Practice Greenhealth's Greening the Operating Room (GOR) Initiative, which aims to reduce the environmental footprint of operating suites in hospitals across the country.



NAEM – Cardinal Health has been a corporate member of the National Association of Environmental Managers (NAEM) since 2008.



Cardinal Health is a proud participant in the Carbon Disclosure Project (CDP) with annual submissions since 2010. <https://www.cdp.net/en-US/Pages/CDPAdvancedSearchResults.aspx?k=cardinal%20health>



Global EHS Standards

The Cardinal Health Global EHS Standards apply to all business functions and operations worldwide. The standards establish minimum company requirements for the recognition, evaluation, and control of hazards.

Ergonomics

Chemical Management

Occupational Health

Working at Heights

Waste Management

Dock Safety

Contractor EHS

Air Emissions Green House Gases

Water Management

Powered Industrial Trucks

Electrical Safety

Gas Fired Equipment

EHS Policy

The Cardinal Health EHS Policy advocates our respect for the environment.

“Cardinal Health is committed to the health and safety of its employees, contractors and the community. We believe that work-related illnesses, injuries and environmental incidents are preventable. It is our vision to have all employees working safely and in an environmentally responsible manner 100 percent of the time.”

Sustainability Working Groups

Packaging Reduction

Cardinal Health creates optimized packaging designs that meet all patient safety requirements while conforming to the principles of regulatory compliance and environmental efficacy. New product packaging is engineered to use minimal amounts of raw materials and is manufactured with easily recyclable materials whenever possible. Lighter and smaller packaging reduces the amount of waste generated by our customers, increases the amount of products that can be shipped on each truck, and reduces the amount of fuel consumed during shipping resulting in reduced emissions.

Our team of engineers at the Packaging Technology Center evaluate current packaging designs to find opportunities for improvement in both recyclability and raw material utilization. Four years into a five year effort to reduce packaging by 5% for our self-manufactured products, the team has completed twenty four projects resulting in a reduction of approximately 3 million pounds of packaging material. The team is on track to achieve the five year 5% reduction goal in FY16.

Energy Reduction

Cardinal Health is committed to evaluating our energy footprint and investing in sustainable technologies that reduce our greenhouse gas emissions through improving technology and increasing efficiency. Past projects include a LEED Certified headquarters building, a Biomass Boiler, Solar Photovoltaic (PV) panels, improved efficiency through Heating, Ventilation, Air-conditioning (HVAC) systems, upgraded efficient process equipment, and upgraded lighting systems with Light Emitting Diode (LED) technology. The company has installed multiple LED lighting projects at facilities nationwide.

Over the past five years Cardinal Health has invested in 65 energy projects resulting in a reduction of cumulative energy consumption of approximately 43.5 million kilowatt hours (kWh), with a corresponding cumulative CO2e of over 30,000 metric tonnes had these projects not been completed.

Water Conservation

Cardinal Health is committed to conserving the amount of water used in our manufacturing processes, and on our facility grounds. Approximately 17% of our total water consumption is comprised of recycled process water at our facilities. A manufacturing plant has invested in a waste water recovery operation from their expanding process instead of sending increased waste water to local water treatment plants.

• Irrigation Conservation Efforts

At the Cardinal Health headquarters rain water runoff is redirected and collected to supplement water used for irrigation of the campus grounds. The water is collected in two retention ponds which are used in conjunction with ground water wells located on the site. This reclaimed rain water makes up over 40% of the water utilized for irrigation for the grounds and landscaping during the summer months.

A facility located in an arid climate has relandscaped their grounds implementing xeriscaping in which only native plants that thrive in their region are utilized thus eliminating the need for supplemental irrigation. Other facilities have reduced their amount of municipal water usage by over 60% from eliminating lawn irrigation.

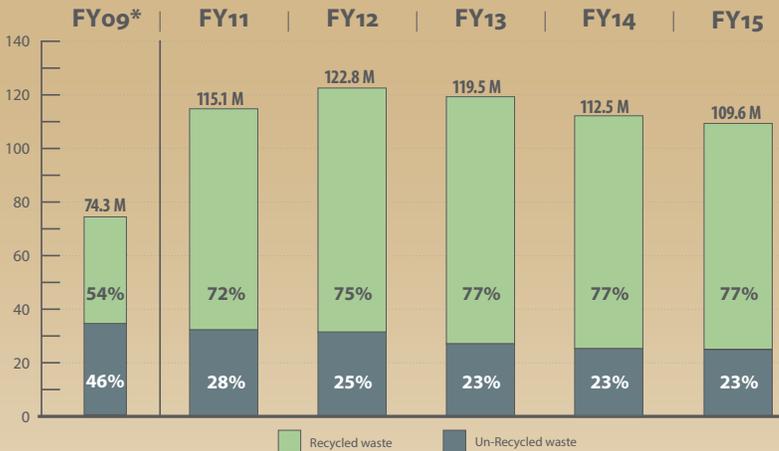
Renewable Energy

Cardinal Health has invested in global renewable energy projects. In FY15 solar photovoltaic (PV) panels and renewable fuel based biomass boiler generated over 535,000 kilowatt-hours (kWh) of renewable energy.

The Numbers *FY09 is the baseline year

Waste

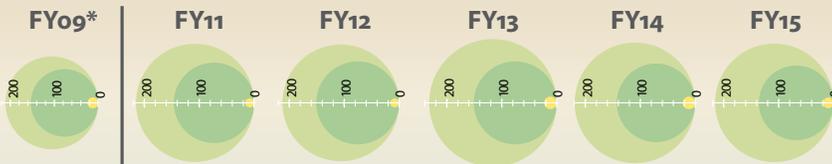
(million pounds)



FY15 represents 78 percent of total square footage
 FY15 Hazardous Waste represents <2.0% of total waste.

Greenhouse Gas (GHG)

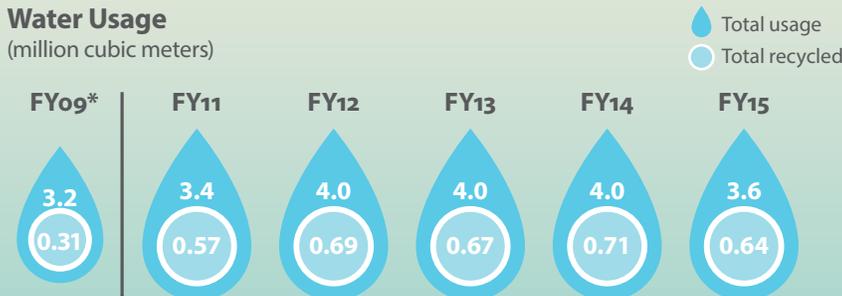
(Thousand Metric Tons CO₂e Equivalents)



FY15 represents 89 percent of total square footage
 * Scope 1 & 2: Calculated according to the Climate Registry General Reporting Protocol
 † Scope 3: Calculated according to the US EPA Greenhouse Gas Inventory Protocol

Water Usage

(million cubic meters)



FY15 represents 78 percent of total square footage

Total Recordable Incident Rate (TRIR)



TRIR = (Total OSHA Recordable Incidents x 200,000)/(Total Hours Worked)

Data Validation

Cardinal Health has a robust internal validation process both at the business and the corporate level that involves: gap analysis, invoice reconciliation, and data trends evaluation. Our key performance indicator library includes data parameters that ensure consistent data recording across all business units. Environment, Health, and Safety (EHS) metric data is input into the Cardinal Health global EHS Data Management System and validated by a combination of the responsible EHS leader for each business and the Global Director of Environmental Affairs and Sustainability. Our internal validation process is periodically reviewed by the Cardinal Health Internal Financial Audit Group and reported out to the Environment, Social, and Governance (ESG) Committee.

FY15 Recognition

Detroit, Michigan Distribution Center:

The Phoenix Awards Institute, Inc. awarded the following for Brownfield Redevelopment:

- Grand Prize Award
- People's Choice Award
- The Phoenix Award for Region 5
- Renewal Award for Environmental Impact

Fort Mill, South Carolina:

South Carolina Department of Health and Environmental Control (DHEC) recognized the following:

- Smart Business Recycling Program for Recycled Material

Cardinal Health Canada:

Natural Resources Canada (NRCan) confirms partnership agreement:

- SmartWay Transport Partnership Certificate

Juarez, Mexico:

Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) awarded the following:

- Clean Industry Certification

Anasco, Puerto Rico:

The Puerto Rico Manufacturing Association (PRMA) awarded the following:

- Safety Innovation Award
- Environmental Excellence Silver Award for Recycling
- Distinguished Safety Performance Award

Rayong, Thailand:

The Department of Labour Protection and Welfare (DLPW) awarded the following:

- National Occupational Safety and Health Award

2015 Newsweek Green Rankings

US Rank: 88/500
 Global Rank: 148/500



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