Facilities Report

## 2010 Environmental Update



Apple carefully manages the environmental impact of its facilities, and as a result they represent only 3 percent of its assessed GHG emissions. The remainder of the GHG emissions come from the production, transport, use, and recycling of products.

## Apple and the Environment

Year after year, Apple has set and met important goals to reduce its impact on the environment. Since 2006, Apple has assessed the full life-cycle greenhouse gas emissions (GHG) associated with every product shipped and has been working continuously to reduce those emissions. We know that as much as 97 percent of our total emissions comes from the greenhouse gas emitted from the production, transport, use, and recycling of products. To find out more about the impact of our products, review Apple's Product Environmental Reports at www.apple.com/environment/reports/

In contrast to our products, our facilities represent only 3 percent of total GHG emissions. Apple carefully manages the environmental impact of everyday operations. Our environmental, health, and safety (EHS) management system helps ensure ongoing compliance with regulations and company standards across all Apple facilities.

This report documents the environmental impact of Apple's facilities, including Apple Retail Stores, and it highlights the activities under way to reduce energy and water consumption and waste production.

The Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G3) were considered during the preparation of this report.

## Energy Use

Managing electricity and natural gas consumption at Apple facilities is an integral part of our plan to reduce our carbon emissions footprint. Reducing electricity consumption also relieves the strain on local power grids and helps to protect Apple's business operations against rising utility costs. Programs include retrofitting lighting with more efficient lamps and motion sensors for automatic shutoff. We also use energy-efficient Apple computers and continue to upgrade to higher-efficiency heating and cooling management and control systems within our facilities.

These initiatives have helped balance utility costs and our carbon footprint with the increased demand for energy associated with our expanding business. While total energy consumption grew approximately 30 percent in 2009, Apple emissions were increased by only 11 percent year over year from 2008 to 2009. Total 2009 energy consumption included 320 million kilowatt-hours of electricity and 2.7 million therms of natural gas. Total facility-related emissions from gas and electricity consumption for fiscal year 2009 were 161,850 metric tonnes of $\mathrm{CO}_{2} \mathrm{e}$. This represents an 8 percent decrease in $\mathrm{CO}_{2} \mathrm{e}$ emissions per employee from fiscal year 2008.

Applicable GRI indices: EN3, EN5, EN7

Emissions data is based on natural gas and electricity consumed at Apple-owned and leased facilities worldwide. ${ }^{2}$

GHG Emissions: Employee Trave (Metric Tonnes $\mathrm{CO}_{2} \mathrm{e}$ /Employee)


Water Usage ( $\mathrm{m}^{3} /$ Employee)


Per-employee use is based on a representative sample of water use in primary U.S. facilities.

## Renewable Energy

For over 10 years, Apple's Austin, Texas, facility has participated in Austin Energy's Green Choice Renewable Energy Program, which has helped to create a market demand for renewable power sources such as wind and biogas in Texas. In fiscal 2009, Apple introduced a renewable energy program to Apple's manufacturing site in Cork, Ireland, and its distribution facility in Elk Grove, California. All three sites are now powered by 100 percent renewable energy resources. These programs have converted over 38 million killowatt-hours worth of consumption per annum to local renewable sources, including wind power. This represents over 11 percent of Apple's worldwide facilityrelated electricity consumption.

The production of approximately 42.4 million pounds ( 19.2 million kilograms) of $\mathrm{CO}_{2} \mathrm{e}$ emissions was avoided through these renewable energy programs in fiscal 2009.

Applicable GRI index: EN16, EN17, EN18

## Transportation

Apple has established commuter transit programs for each facility to minimize the environmental impact of home-to-work travel. The Apple U.S. Commute Alternative program provides incentives for using public transportation and reducing singleoccupancy vehicles. For example, Apple provides a transit subsidy for all U.S. employees, up to $\$ 100$ USD per month, and encourages carpooling between commute locations. For our largest facility, located in Cupertino, California, Apple has reduced single-occupancy car usage by providing employees with numerous shuttle options, including free bus service from train stations as well as bus services from major metropolitan areas.

Each day up to 800 employees take advantage of our free biodiesel commute buses. We estimate that our commute programs have eliminated 1559 single-occupancy cars from the roads each day-10,300 metric tonnes of $\mathrm{CO}_{2} \mathrm{e}$ avoided per year. In fiscal 2009, total emissions for air travel, U.S. automobile fleet, and employee commute was 116,456 metric tonnes $\mathrm{CO}_{2}$ e, a decrease of 3 percent over fiscal 2008 emissions.

Applicable GRI index: EN29

## Water Use

Apple operations are not water intensive. Apple's water usage is for sanitary and landscape purposes in Apple facilities worldwide.

Apple Austin has installed a sophisticated irrigation system that monitors weather conditions and soil moisture to adjust the watering schedule of landscaping, based on a combination of programmed instructions and actual conditions onsite. This system upgrade is expected to save up to 50 percent of the water used for landscaping annually.

The Apple Sacramento site has implemented xeriscaping (drought-tolerant landscaping) and drip irrigation to reduce water usage. Apple will continue to look at ways to reduce its consumption of water. In fiscal 2009, Apple used 766,518 cubic meters in total.

[^0]Recycled Material (Metric Tonnes/Employee)



Hazardous Waste (Metric Tonnes/Employee)


Waste and recycling data is based on all Apple sites, including Apple Retail Stores.

## Waste and Recycling

Apple does not generate a significant amount of solid or hazardous waste from its business operations. To minimize the environmental impact of the small amount of waste we produce, we've created recycling and composting programs.

In 2007, Apple Cupertino established a composting program in the company cafeteria to divert food waste from landfills. As part of the composting program, we've transitioned a majority of our disposable tableware and containers to biodegradable or compostable alternatives. This employee-developed and promoted program successfully diverts what would otherwise be solid waste to a new, environmentally beneficial use.

The amount of solid waste created by Apple was 2,235 metric tonnes total. Hazardous waste generated was 7 metric tonnes total. The amount of material recycled as part of everyday operations was 4,686 metric tonnes total.

In addition to the recycling of solid waste created in everyday operations, Apple offers and participates in various product take-back and recycling programs in 95 percent of the regions in which Apple products are sold. For more information on how to take advantage of these recycling programs, visit www.apple.com/environment/recycling.

Applicable GRI indices: EN2, EN24

## Environmental Health and Safety Policy Statement

Apple is committed to protecting the environment, health, and safety of its employees, customers, and the global communities in which it operates.

We recognize that by integrating sound environmental, health, and safety (EHS) management practices into all aspects of our business, we can offer technologically innovative products and services while conserving and enhancing resources for future generations.
Apple strives for continuous improvement in its environmental, health, and safety management systems and in the environmental quality of its products, processes, and services.

## Guiding Principles

Meet or exceed all applicable environmental, health, and safety requirements. We will evaluate our EHS performance by monitoring ongoing performance results and conducting periodic management reviews.

Adopt our own standards to protect human health and the environment when laws and regulations do not provide adequate controls.

Support and promote sound scientific principles and fiscally responsible public policies that enhance environmental quality, health, and safety.

Advocate the adoption of prudent environmental, health, and safety principles and practices by our contractors, vendors, and suppliers.

Communicate environmental, health, and safety policy and programs to Apple employees and stakeholders.

Design, manage, and operate our facilities to maximize safety, promote energy efficiency, and protect the environment.

Strive to create products that are safe in their intended use, conserve energy and materials, and prevent pollution throughout the product life cycle, including design, manufacture, use, and end-of-life management.

Make sure that all employees are aware of their roles and responsibilities in fulfilling and sustaining Apple's environmental, health, and safety management systems and policy.

## References

1. The Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G3): www.globalreporting.org/ReportingFramework/G3Online
2. More information on Austin green energy: www.austinenergy.com/index.htm
3. Electricity consumption: www.eia.doe.gov/emeu/cbecs/cbecs2003/
detailed_tables_2003/2003set15/2003excel/c20a.xls
4. Natural gas consumption: www.eia.doe.gov/emeu/cbecs/cbecs2003/ detailed_tables_2003/2003set16/2003excel/c30a.xls

## For More Information

For more details about Apple's environmental practices, visit www.apple.com/environment.

1Over 70 percent of the data for electricity and gas consumption is from actual use data. For leased sites where actual usage is not tracked by Apple, consumption figures are estimated using the energy intensity calculation tool provided by the U.S. Department of Energy. Climate zone comparisons were used to model non-U.S. site consumption patterns against the DOE calculation tool.

2Differences in the carbon footprint of local power grids are accounted for in the assessment.
3Emissions from employee air travel are calculated from flights taken by all employees worldwide. Aircraft emissions are assessed in accordance with distance conversion factors provided by the World Resources Institute.
© 2010 Apple Inc. All rights reserved. Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S and other countries. Other product and company names mentioned herein may be trademarks of their respective companies.


[^0]:    Applicable GRI indices: EN8, EN21

