Facilities Report

2008 Environmental Update



Apple carefully manages the environmental impact of its facilities, though they represent only 5 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 lifecycle greenhouse gas emissions (GHG) associated with every product shipped and has been working continuously to reduce those emissions. We know that as much as 95 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/resources/ supportinginformation.html.

In contrast to our products, our facilities represent only 5 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 bills. Programs include retrofitting lighting with more efficient lamps and motion sensors for automatic shutoff, which has resulted in an annual savings of over 2 million kilowatt-hours of electricity since 2006. We also use energy-efficient Apple computers and continue to upgrade heating and cooling management 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 18 percent in 2007, Apple's business grew 26 percent in that same period. Apple emissions were reduced by 3 percent year over year from 2006 to 2007. Total 2007 energy consumption included 210 million kilowatt hours of electricity and 1.9 million therms of natural gas.

Applicable GRI indices: EN3, EN5, EN7

Electricity and natural gas data is compiled from utility consumption data for sites owned and leased by Apple. ${ }^{1}$


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

## Renewable Energy

For over 10 years, Apple's Austin, Texas, facility has participated in Austin's "Green Choice" Power Program, which has helped to create a market demand for renewable power sources such as wind and biogas in Texas. Over the past five years, our participation in this program has helped deliver approximately 44 million kilowatt-hours of renewable power to the local power grid. In contrast, purchasing an equivalent amount of power from conventional power grids would have generated 64 million pounds ( 29 million kilograms) of carbon dioxide equivalent ( $\mathrm{CO}_{2} \mathrm{e}$ ).

In 2007, Apple introduced a renewable energy program to Apple's manufacturing site in Cork, Ireland. In 2008, the program will convert 100 percent of the site's annual energy consumption to local renewable sources, including wind power.

A conservative estimate indicates that at least 4 million pounds (1.8 million kilograms) of $\mathrm{CO}_{2} \mathrm{e}$ emissions will be avoided through this renewable energy program in 2008.

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 every employee with several shuttle options, including free bus service from train stations as well as bus services from metropolitan areas.

Apple estimates that these programs have taken the equivalent of 4,500 cars off the road, which equates to 118,000 pounds ( 53,523 kilograms) less CO2e emissions every business day. In 2007, total emissions for air travel, U.S. automobile fleet, and employee commute were 166,000 U.S. tons CO2e.

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 2007, Apple used 897,122 cubic meters in total.

Applicable GRI indices: EN8, EN21



Hazardous Waste (U.S. Tons/Employee)


Waste and recycling data is based on Apple sites, excluding 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, a majority of our disposable tableware and containers have transitioned to biodegradable or compostable alternatives. This employee-developed and promoted program successfully diverts what would otherwise be solid waste toward a new environmentally beneficial use.

The amount of solid waste created by Apple is 2,393 U.S. tons total. Hazardous waste generated is 27 U.S. tons total. The amount of material recycled as part of everyday operations is 5,681 tons 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 more information on how to take advantage 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 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 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.

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

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
© 2008 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.

