

Sustainability at THE HOME DEPOT

Georgia Tech

Summer 2017 Interns: Fernando Icaza Hannah Todd Joshua Santillo

INTRODUCTION

The Home Depot's sustainability and corporate responsibility efforts are enhanced each year by helping customers, suppliers and business partners minimize their negative environmental impact.

Carbon emissions are reduced in the supply chain and facilities sector at Home Depot through utilization of renewable energy sources, alternative packing materials, water conservation efforts, and avoidance of harmful chemicals.

Our team met with sustainability, facitlities and constructions managers, and helped identify potential savings and reduction of their Store Support Center's Carbon footprint.



STORE SUPPORT CENTER (SSC)

Vinings area - Atlanta, Cobb County, GA

RESEARCH AND IMPACT

There are over 6,100 employees and 128 restrooms at this facility.

384+ standard faucets, each flow over 2.2 gallons of water per minute.

And 256+ toilets, with an average use of 1.57 gallons per flush (gpf).

Estimating that each employee uses the bathroom 2 times per day,

p to over 19.100 of water per day!

Plants' irrigation adds approximately 275 gallons per month or 3,300 gallons per year.

SOLUTION PROPOSED

Upgrade SSC's faucets and toilets.

WaterSense® labeled faucets utilize from 1.2 to 1.5 gallons per minute, with 38% reduction in water flow.

Average Expected Return

≈ 30% water conserved

In 2015, customers have

saved over 70 billion gallons of water from the purchase of WaterSense® labeled products

AVERAGE COSTS

Restrooms at this facility consume about 700,000 gallons of water each month. At a rate of \$4.22 per thousand gallons of non-residential water rates in Cobb County, yields an average fee of \$2950 per month.

Upgrading faucets for automated ones (at \$100 each), would require an investment of \$38,400. Water-efficient toilets retail for approximately \$100 each, and would cost \$25,600 to replace all.

Before labor and installation, this investment will cost over \$64,000.

LONG-TERM SAVINGS

By reducing water usage by 30%, and saving at least \$880 each month; the full return of investment will be in approximately $6^{1/2}$ years.

According to research, the estimated footprint of each gallon of water is about 1.128 grams of CO₂ equivalents. The Home Depot's facilities will produce almost 237,000 pounds of CO2 less each year from this upgrade. After a 20-year period they will have efficiently preserved more than 50 million gallons of water and sequestered 57,000,000 lbs. of CO₂.

POINTS OF CONTACT

*I*lark Schleier

Manager of Environmental Sustainability

Krissa Glassgow Sr. Manager of Sustainability VP of Sustainability

> https://cobbcounty.org/index.php?option=com_content&view=article&id=2305&Itemid=1472

RESOURCES > https://corporate.homedepot.com/responsibility > https://www.epa.gov/watersense/commercial-buildings

> https://www.theguardian.com/environment/2007/aug/02/ethicalliving.ethicalliving