

South Mountain Company's Environmental Footprint Project

SCOPE OF WORK

Purpose

This project assesses our company environmental impacts. Its purpose is to help us find opportunities, over time, to significantly reduce our carbon footprint.

Boundaries

For this first phase, we calculated the transportation footprint of our materials starting in Woods Hole (including the ferry trip). We did not include the trip from origination to Woods Hole.



Calculations

From the raw data, we calculated CO₂ and carbon in lbs per year.

Data

We gathered data in the following categories:

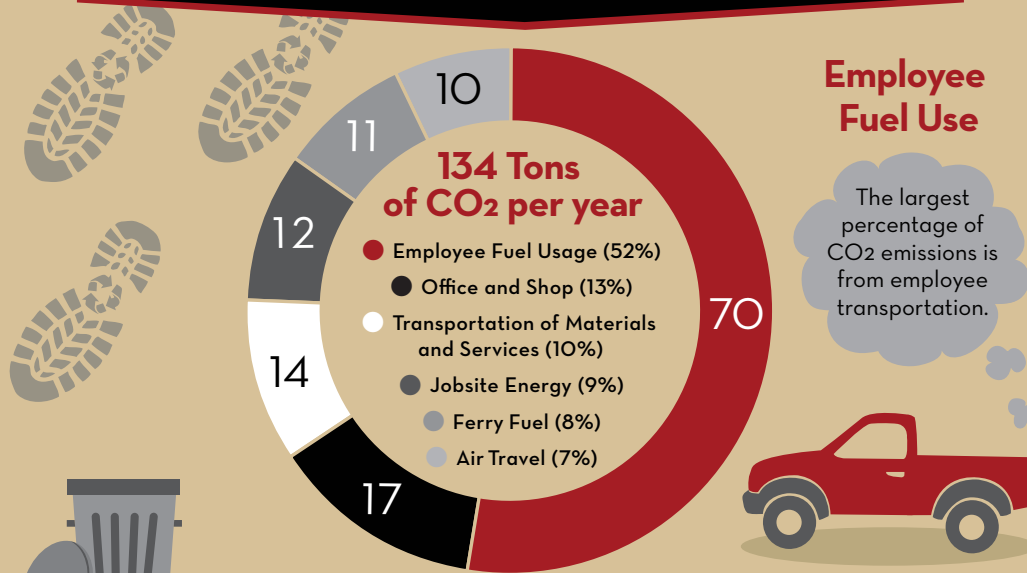
- Weight of waste and recyclables
- Fuel to transport employees, materials, and waste
- Fossil fuel and electricity use in the South Mountain Co. office/shop building (SMC HQ)
- Jobsite electricity usage
- Electricity generated at SMC HQ

Categories

We separated the data into six categories of carbon emissions:

- Employee fuel usage
- On-island transportation of materials and services
- Ferry fuel
- Jobsite electricity
- Office and shop
- Air travel

2012-2016 FIVE YEAR AVERAGE RESULTS



Employee Fuel Use

The largest percentage of CO₂ emissions is from employee transportation.



Waste

During FY '16 we generated 287,400 lbs of trash. In addition we generated 12,220 lbs of recyclable metals and 29,400 lbs of mixed recyclables (principally cardboard). We track waste disposal both on our job sites and at our office/shop.



We do not yet have a viable method or formula for converting waste to CO₂ emissions, but tracking waste gives us a baseline for comparison in future years.

Ground & Ferry Transportation

Moving materials to and from our workplaces (ground and ferry transportation) add up to 18% of our carbon impact.



KEY INSIGHTS

- Transportation is a much larger source of environmental impact than our facility. This is the place to focus our reduction efforts.
- Materials are a big part of our impact that we have not yet measured. Our next effort will be a Life Cycle Assessment (LCA) of the materials we purchase on behalf of our clients - from the extraction phase through processing, manufacturing, distribution, use, and disposal. This is complex and will therefore take time.



GOING FORWARD

- ▶ ALTHOUGH there is no end to this project, we are no longer at the beginning. It's all part of a journey to our ultimate goal of zero net energy and zero waste.

