

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:

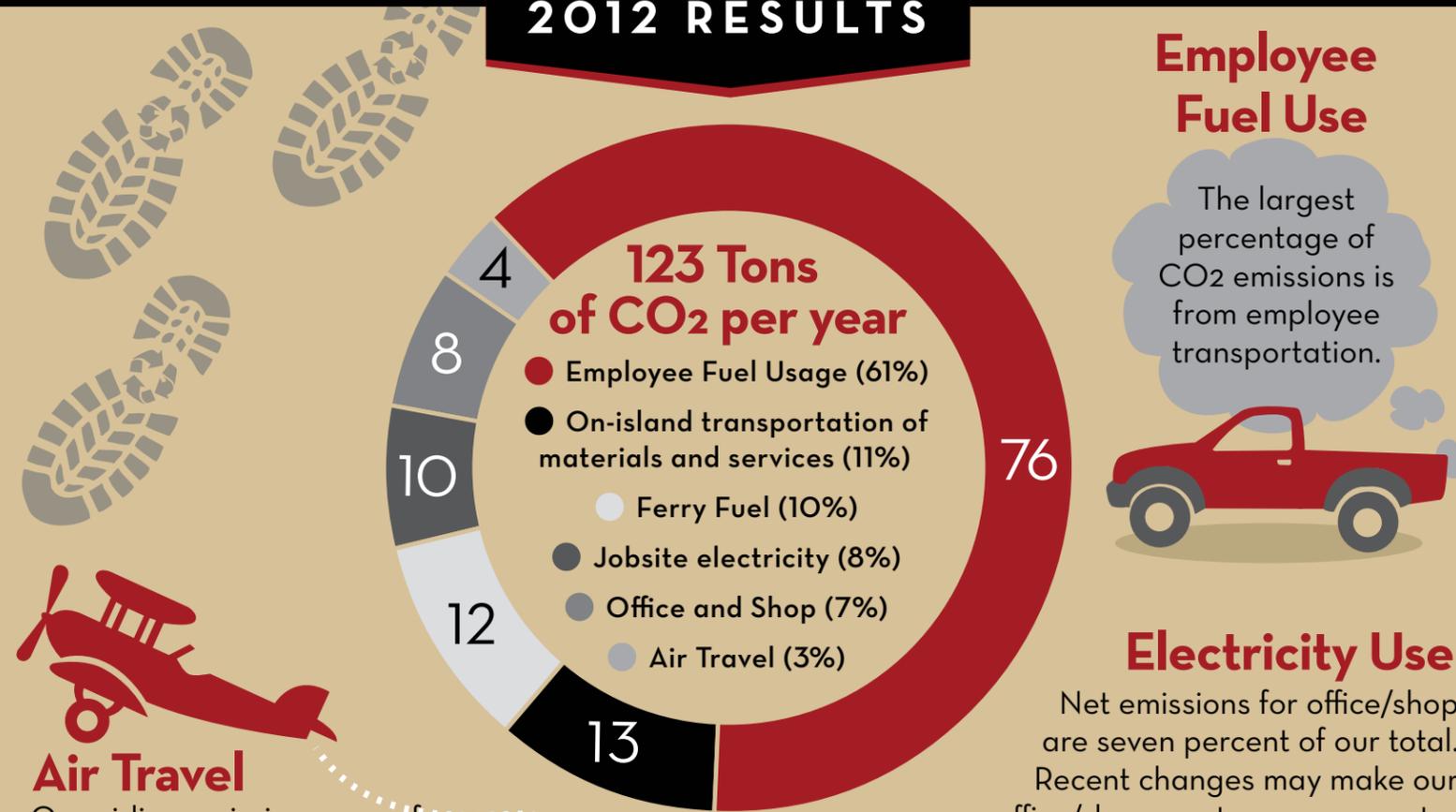
- Weight of waste and recyclables
- Fuel to transport employees, materials, and waste
- Fossil fuel and electricity use in the South Mountain Co. office/shop building (SMC HQ)
- Jobsite electricity usage
- Electricity generated at SMC HQ

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 RESULTS



Air Travel

Our airline emissions come from 11,500 person-miles flown during twenty flights this year.

A red silhouette of a propeller airplane flying towards the right.

Employee Fuel Use

The largest percentage of CO₂ emissions is from employee transportation.

A red silhouette of a pickup truck with exhaust coming out of the tailpipe.

Electricity Use

Net emissions for office/shop are seven percent of our total. Recent changes may make our office/shop a net energy exporter rather than a consumer, which will help to offset our other emissions in the future.

A grey power plug with a wavy line representing electricity.

Waste

During FY '12 we generated 103,750 lbs of trash. In addition we generated 6,750 lbs of recyclable metals and 7,650 lbs of mixed recyclables (principally cardboard). We track waste disposal both on our job sites and at our office/shop.

A grey trash can with a lid.A green recycling bin with a white recycling symbol on it.

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 21% 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

- ▶ OUR 2012 data is a baseline for future comparisons. We will continue to measure each year and strive to improve in all categories as time passes.
- ▶ 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.



See the full report at southmountain.com/documents