

2014 BASALT COMMUNITY GREENHOUSE GAS INVENTORY SUMMARY

BASALT ACKNOWLEDGES THE URGENCY OF ENACTING LOCAL STRATEGIES TO ADDRESS GLOBAL CLIMATE CHANGE

THE SEVERITY OF CLIMATE CHANGE HAS BEEN LINKED TO THE CONCENTRATION OF GREENHOUSE GASES (GHGs) WHICH TRAP HEAT IN THE ATMOSPHERE. IN ORDER TO EFFECTIVELY ADDRESS THE GENERATION OF GHGs, WE MUST UNDERSTAND HOW WE CONTRIBUTE TO THE PROBLEM. THIS INVENTORY SHOWS THE CAUSES OF, AND THEREFORE THE OPPORTUNITIES TO REDUCE, GHG EMISSIONS.

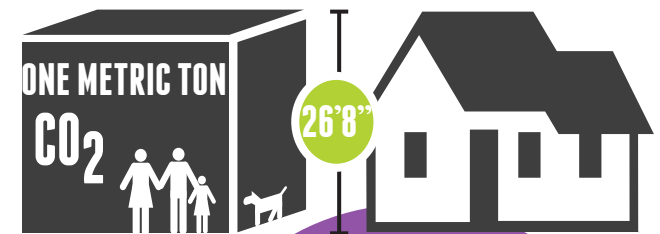
KEY FINDINGS

- Consistent with national patterns, GHG emissions largely result from the energy used in buildings, fuel used in transportation, and methane from landfilled waste
- Addressing the energy used to heat and power buildings is the largest opportunity to decrease overall emissions
- Transportation (primarily from cars and trucks) is the second largest emissions segment
- Basalt's electricity is still largely generated by fossil fuels (such as coal) rather than renewable resources (such as solar energy)
- The Basalt community can take action to by committing to an emissions reduction target and by adopting a climate action plan detailing how to achieve that target

WHAT ARE GHGs?

This inventory quantifies the most prevalent GHGs that contribute to climate change, including such as carbon dioxide, methane, and nitrous oxide that result from everyday human activities. All emission results are represented in metric tons of carbon dioxide equivalent, which allows each GHG's relative potency to be represented in an equivalent volume of CO₂.

One metric ton CO₂ is visualized below: at standard pressure, the gas would fill a cube almost 27 ft high.



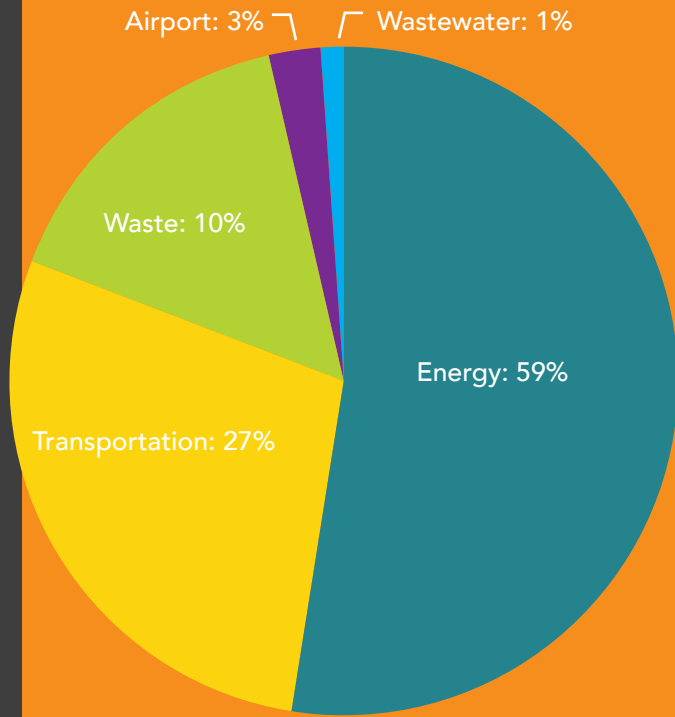
INVENTORY RESULTS:
Basalt's community generated approx. 63,239 metric tons of CO₂e in 2014



WHERE DO BASALT'S EMISSIONS COME FROM?

THE MAJORITY OF THE BASALT COMMUNITY'S EMISSIONS COME FROM THREE SEGMENTS: ENERGY, TRANSPORTATION, AND WASTE.

EMISSIONS BY SECTOR:



ENERGY SECTOR:

EMISSIONS: The emissions from natural gas and electricity use in buildings are nearly split between the residential and commercial buildings. There are significantly fewer commercial utility accounts as compared to residential utility accounts. Therefore, a significant percentage of overall emissions are concentrated in a relatively small number of commercial buildings.

RECOMMENDATIONS: Conserve energy, pursue energy efficiency programs, adopt stronger building codes to address energy use in new buildings, and produce more energy from on-site renewable energy systems.

TRANSPORTATION SECTOR:

EMISSIONS: Gasoline trucks and cars used for commuting and driving around town contribute the greatest share of emissions for this sector. While alternative transportation is used, passenger vehicles are the predominant mode of travel for Basalt community members.

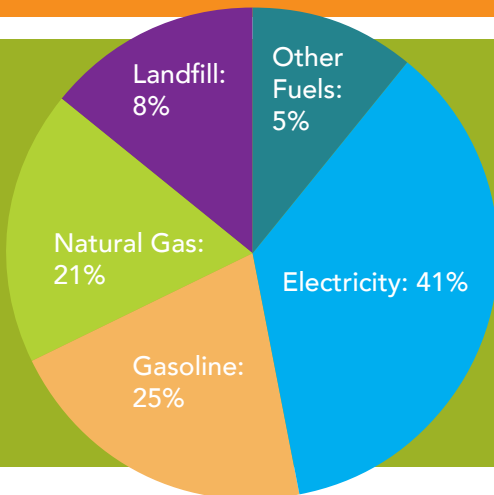
RECOMMENDATIONS: Promote a multimodal transportation system to reduce reliance on passenger vehicles and encourage the use of buses, biking, and walking for portions of trips.

WASTE SECTOR:

EMISSIONS: Almost 30% of all trash Basalt sends to the landfill is unnecessary: organic materials (such as food scraps and yard debris) can be diverted to composting facilities. These organic materials emit a significant amount of methane during landfill decomposition.

RECOMMENDATIONS: Reduce the amount of waste generated and increase participation in composting and recycling programs to keep food and recyclables out of landfills.

EMISSIONS BY SOURCE:



IN ADDITION TO EXAMINING THE SECTOR-BASED EMISSIONS, IT IS ALSO USEFUL TO EXAMINE THE SOURCE OF EMISSIONS.

Electricity generation and use is the largest single source of emissions in Basalt. The use of gasoline, natural gas, and waste at the landfill also constitute major emission sources. Aviation fuel, diesel, and other alternative fuels contribute a lesser amount.

The Community Office for Resource Efficiency (CORE) conducted this study in compliance with the ICLEI U.S. Community Protocol standards.



FOR MORE INFORMATION AND TO LEARN HOW YOU CAN HELP FIGHT CLIMATE CHANGE, VISIT ASPENCORE.ORG.