



City Council Staff Report

Subject: 2016, 2017 and 2018 Carbon Footprint Update
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Department: Sustainability
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Executive Summary

This report is an overview of Park City's municipal carbon footprint for the years 2016, 2017 and 2018. The 2016 footprint was updated to include imported water, resulting in 21,836 metric tonnes carbon dioxide equivalent (MT CO₂e). In 2017, emissions decreased by 17 percent resulting in 18,095 MT CO₂e released into the atmosphere. In 2018, emissions rose by 12 percent, resulting in a carbon footprint of 20,310 MT CO₂e.

Abbreviations

CO₂e- Carbon dioxide equivalent
MPG- miles per gallon
MPGe- miles per gallon equivalent
MT- metric tonnes
PCMC- Park City Municipal Corporation
VMT- Vehicle miles traveled

Background

- On March 24, 2016, City Council elevated Energy to a Critical Priority and set a goal of net zero carbon emissions for municipal operations by 2022 and citywide by 2032. ([link](#))
- On November 29, 2018, City Council voted to accelerate this goal to 2030 and invite other local governments to set similar ambitious goals. ([link](#))

Discussion

Park City's municipal footprint was analyzed by Scope and Sector.

Scope 1 emissions reflect emissions from fuels burned by sources owned or controlled by PCMC. It covers all gasoline and diesel used by city vehicles and all natural gas used in city facilities. Scope 2 reflects emissions due to electrical use within City boundaries for municipal operations. Scope 3 reflects emissions attributed to PCMC that occur outside of our jurisdictional boundary. PCMC's indirect emissions come from employee commutes, business air travel, and imported water.

Municipal sectors analyzed include buildings and facilities, transportation, street lights, transit fleet, municipal vehicle fleet, water treatment and distribution, and employee commute (including business flights).

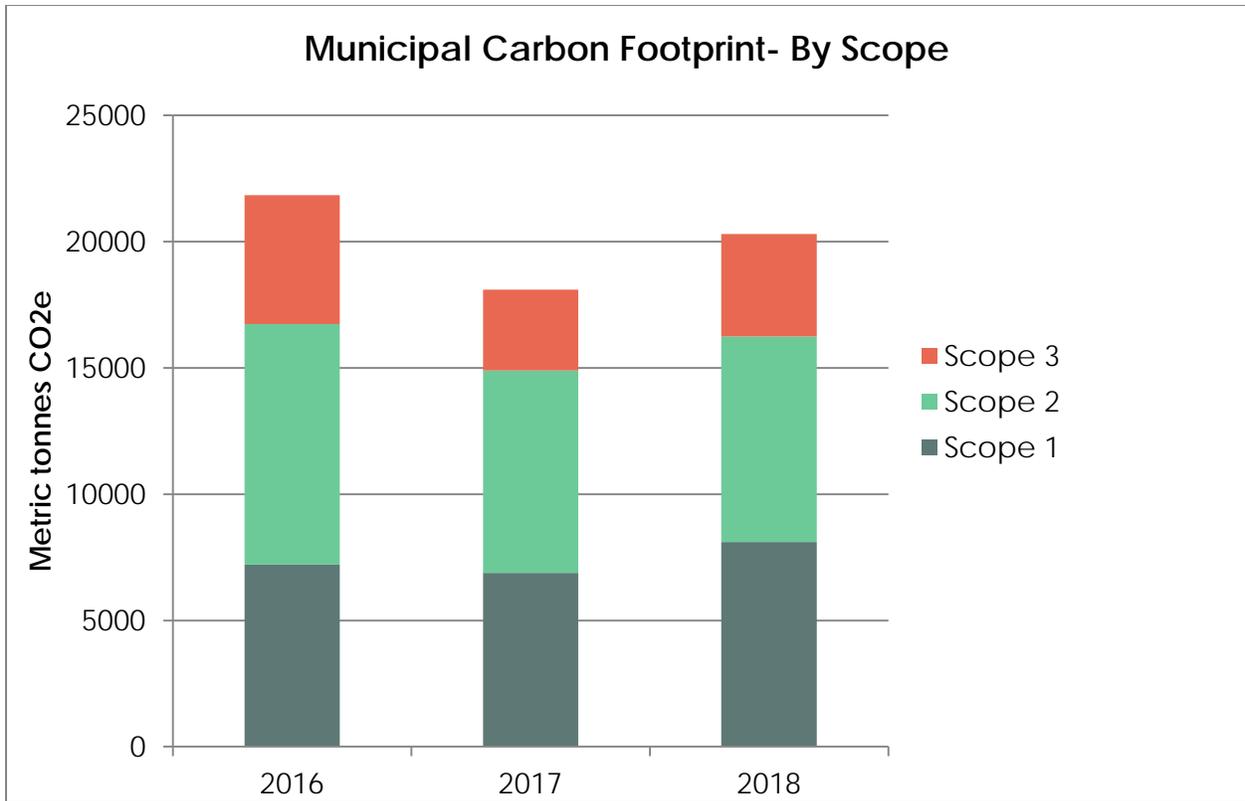


Figure 1: A comparison of the 2016, 2017, and 2018 carbon footprints by Scope.

Scope 1 emissions, i.e. heating fuels and transportation fuel usage within municipal boundaries, decreased by 7 percent from 2016 to 2017 and increased by 18 percent in 2018. Scope 2 emissions from electricity use decreased by 17 percent from 2016 to 2017 and increased by two percent in 2018. Scope 3 emissions, which include employee commutes and business travel, as well as emissions that come from importing water, decreased by 37 percent from 2016 to 2017 and increased by 27 percent in 2018. The high fluctuation rate in Scope 3 emissions is largely due to differing response rates in the employee commute and business travel survey rather than actual emissions reductions or increases; however emissions from imported water decreased then increased significantly from 2016 to 2017 and 2017 to 2018, respectively. See Figure 1.

Emissions were also analyzed by municipal sector, as can be seen in Table 1.

	2016 (MT CO ₂ e)	2017 (MT CO ₂ e)	2016-2017 % change	2018 (MT CO ₂ e)	2017-2018 % change
Water & Wastewater Treatment Facilities	9096	7291	-20%	7760	6%
Buildings & Facilities	6268	5491	-12%	6850	25%
Transit Fleet	3268	3373	3%	3835	14%
Vehicle Fleet	871	1128	30%	1136	1%
Employee Commute	1870	371	-80%	303	-18%
Street Lights & Traffic Signals	463	441	-5%	431	-2%
Grand Total	21836	18094	-17%	20314	12%

Table 2: A comparison of the 2016, 2017, and 2018 carbon footprints.

Forthcoming reports will provide a deep-dive analysis into emissions and energy use, as well as economic impacts, by different sectors of municipal operations, namely water treatment and distribution, transportation and fleet vehicles, and buildings and facilities.

Department Review

Sustainability

Funding Source

No funding is required at this time.

Attachments

None