



Greenhouse Gas Emissions Report Ocean City, Maryland 2015

Background:

The Town of Ocean City is working on the application for Sustainable Maryland Certified (SMC) and has signed up as a partner with the ShorePower Project to help attain certification. One of the actions for SMC is to develop a Municipal Carbon Footprint. We researched the methods and programs available for this action. We were limited in our expertise and knowledge on the subject to develop this ourselves and sought out guidance from the Sustainable Maryland Program manager who directed us to the ShorePower Project at the Center for Environment and Society at Washington College. The ShorePower Project has completed numerous municipal carbon footprints and works closely with SMC staff and partners in attain accurate information. Initial municipal carbon footprints are used to establish a baseline so that future progress toward decreasing greenhouse gas emissions can be documented.

Methods:

ShorePower Project Staff worked with Ocean City staff to compile necessary information on propane, heating oil, electricity, vehicle fuel, water usage, and employee commute. In determining how to organize the data, we followed account descriptions taken from the information provided. The departments identified are:

- Beach Patrol
- Convention Center
- Lighting
- Parking
- Public Safety
- Public Works
- Recreation
- City Administration
- Transportation
- Wastewater Treatment
- Water

Scope 1: Direct Emissions

- Stationary combustion of fossil fuels: Ocean City uses propane and heating oil to heat some facilities.

- Mobile combustion of fossil fuels: This includes gasoline and diesel used in all city vehicles.

Scope 2: Indirect Emissions

- Electricity

Scope 3: Other Emissions

- Employee Commute
- Waste
- Water Usage

To calculate greenhouse gas emissions ShorePower staff used the Local Greenhouse Gas Emissions Inventory Tool (LGGIT) created by the EPA. After all the data was entered into the LGGIT software, greenhouse gas emissions information was provided in the form of CO₂ (carbon dioxide), CH₄ (methane), and N₂O (nitrous oxide). For the purposes of our report we will provide information in the form of CO₂e, carbon dioxide equivalent emissions. LGGIT determines this by multiplying the emissions of methane and nitrous oxide by their global warming potential. The standard unit for reporting CO₂e in calculating greenhouse gas emissions is in metric tons (MT CO₂e).

Summary:

	MTCO ₂ e	Percent of Total
Beach Patrol	53	<1%
Convention Center	4,000	19%
Lighting	1,632	8%
Parking	7	<1%
Public Safety	1,505	7%
Public Works	315	2%
Recreation	896	4%
City Administration	368	2%
Transportation	544	3%
Wastewater Treatment	4,975	23%
Water	1,829	9%
Vehicle Fuel	5,144	24%
TOTAL	21,268	

Figure 1: **Ocean City 2015 Greenhouse Gas Emissions.** This chart shows total greenhouse gas emissions for each department in the Town of Ocean City. Greenhouse gas emissions are measured in Metric Tons of Carbon Dioxide equivalent (MTCO₂e.)

Ocean City 2015 Greenhouse Gas Emissions

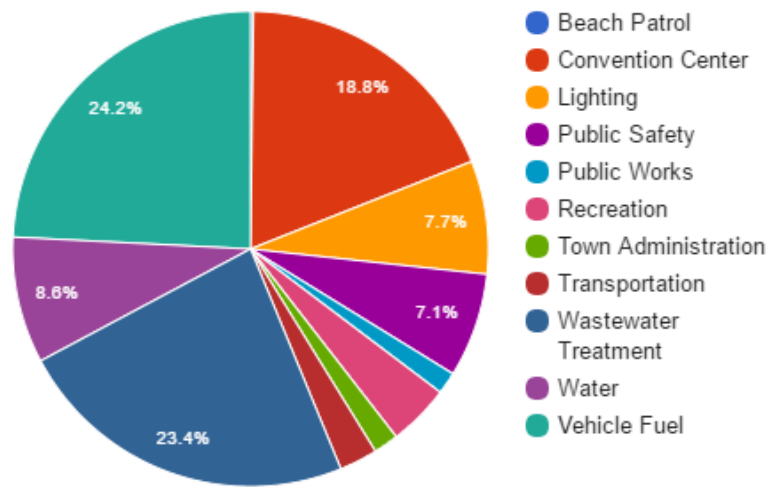


Figure 2: **Ocean City 2015 Greenhouse Gas Emissions** shown as a percentage of total greenhouse gas emissions.

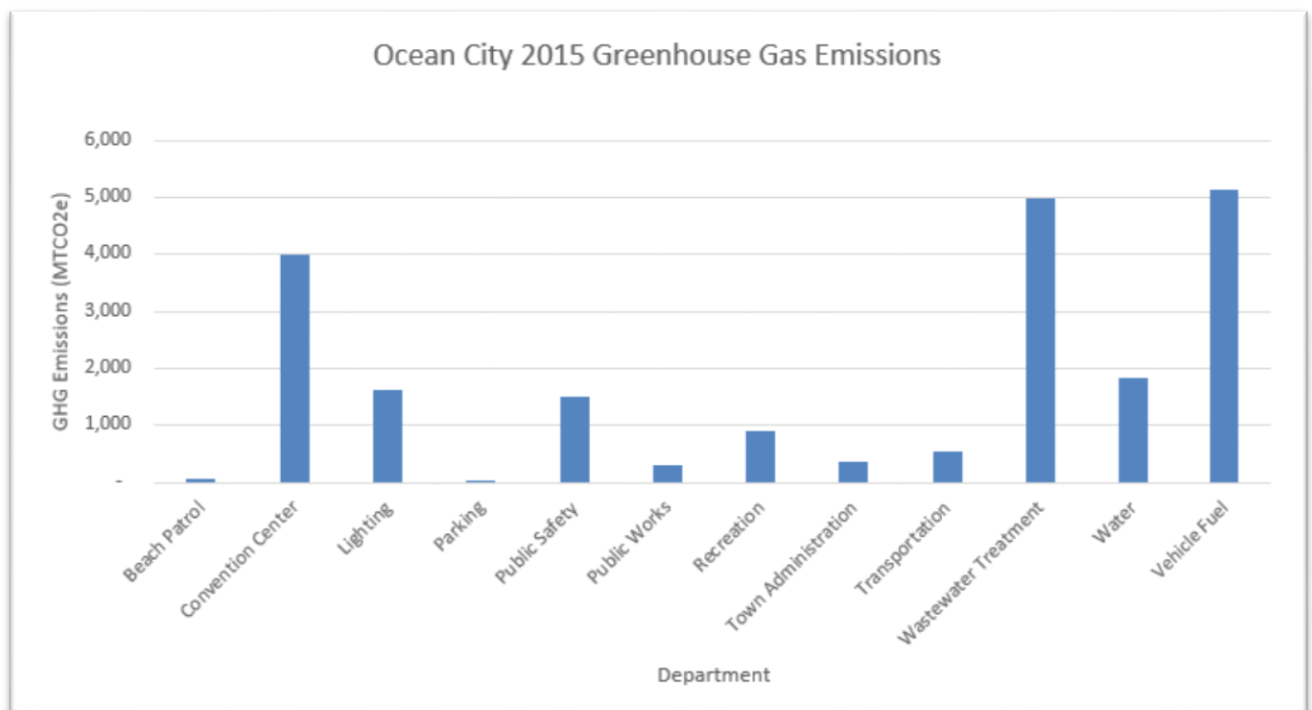


Figure 3: **Ocean City Greenhouse Gas Emissions** shown by department.

Convention Center operations, Wastewater Treatment, and Vehicle Fuel account for approximately 66% of Ocean City greenhouse gas emissions. By focusing on reductions in these areas, Ocean City can reduce greenhouse gas emissions significantly.