

Municipality:

Bernards Township

complete applicable cells highlighted in yellow, grey cells contain formulas

**STEP 1: Establish a Baseline Year**

Baseline Year Selected:

2010

**STEP 2: Scope 1 Emissions from Stationary Fuel Consumption in Baseline Year**

Municipal Operation - Natural Gas	Total Therms	converted to Million BTU	CO2 Emissions (lbs)	CO2 (Metric Tons CO2e)	Emissions (Metric Tons)	CH4 (Metric Tons CO2e)	N2O Emissions (Metric Tons)	N2O (Metric Tons CO2e)	Total Emissions (Metric Tons CO2e)
Building & Facilities	44,004	4400.4	515198.832	233.690429	0.022002	0.55005	0.00044004	0.13113192	234.3716112
Street Lights & Traffic Signals		0	0	0	0	0	0	0	0
Water & Wastewater Treatment Facilities	8,608	860.8	100782.464	45.71419	0.004304	0.1076	0.00008608	0.02565184	45.8474418
Other		0	0	0	0	0	0	0	0
<i>Natural Gas Total</i>	<i>52,612</i>	<i>5261.2</i>	<i>615981.296</i>	<i>279.404619</i>	<i>0.026306</i>	<i>0.65765</i>	<i>0.00052612</i>	<i>0.15678376</i>	<i>280.219053</i>

Municipal Operation - Heating Oil	Total Gallons	converted to Million BTU	CO2 Emissions (lbs)	CO2 (Metric Tons CO2e)	Emissions (Metric Tons)	CH4 (Metric Tons CO2e)	N2O Emissions (Metric Tons)	N2O (Metric Tons CO2e)	Total Emissions (Metric Tons CO2e)
Building & Facilities		0	0	0	0	0	0	0	0
Street Lights & Traffic Signals		0	0	0	0	0	0	0	0
Water & Wastewater Treatment Facilities		0	0	0	0	0	0	0	0
Other		0	0	0	0	0	0	0	0
<i>Heating Oil Total</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

Municipal Operation - Other Fuel 1 <i>specify fuel (coal, diesel, etc)</i>	Total (specify unit)	convert to Million BTU	CO2 Emissions (lbs)	CO2 (Metric Tons CO2e)	Emissions (Metric Tons)	CH4 (Metric Tons CO2e)	N2O Emissions (Metric Tons)	N2O (Metric Tons CO2e)	Total Emissions (Metric Tons CO2e)
Building & Facilities				0		0		0	0
Street Lights & Traffic Signals				0		0		0	0
Water & Wastewater Treatment Facilities				0		0		0	0
Other				0		0		0	0
<i>Other Fuel 1 Total</i>	<i>0</i>			<i>0</i>		<i>0</i>		<i>0</i>	<i>0</i>

Municipal Operation - Other Fuel 2 <i>specify fuel (coal, diesel, etc)</i>	Total (specify unit)	convert to Million BTU	CO2 Emissions (lbs)	CO2 (Metric Tons CO2e)	Emissions (Metric Tons)	CH4 (Metric Tons CO2e)	N2O Emissions (Metric Tons)	N2O (Metric Tons CO2e)	Total Emissions (Metric Tons CO2e)
Building & Facilities				0		0		0	0
Street Lights & Traffic Signals				0		0		0	0
Water & Wastewater Treatment Facilities				0		0		0	0
Other				0		0		0	0
<i>Other Fuel 2 Total</i>	<i>0</i>			<i>0</i>		<i>0</i>		<i>0</i>	<i>0</i>

**STEP 3: Scope 2 Emissions from Purchased or Acquired Electricity in Baseline Year**

Municipal Operation - Electricity	Total Kwh	Total MWh	CO2e Emissions (lbs) *	CO2e (Metric Tons)					Total Emissions (Metric Tons CO2e)
Building & Facilities	1,724,224	1724.224	2262181.888	1026.10919					1026.10919
Street Lights & Traffic Signals	347,150	347.15	455460.8	206.593694					206.593694
Water & Wastewater Treatment Facilities	2,654,581	2654.581	3482810.272	1579.77731					1579.777315
Other		0	0	0					0
<i>Electricity Total</i>	<i>4,725,955</i>	<i>4725.955</i>	<i>6200452.96</i>	<i>2812.4802</i>					<i>2812.480199</i>

\* includes CO2, CH4 and N2O emissions preconverted to carbon dioxide equivalents (CO2e)

**STEP 4: Scope 1 Emissions from Mobile Fuel Combustion in Baseline Year**

Municipal Operation - Vehicle Emissions CO2 emissions by fuel usage	Total Fuel Units	CO2 Emissions (lbs/fuel unit)	CO2 Emissions (lbs)	CO2 (Metric Tons CO2e)					
Motor Gasoline (per gallon)	56,595	19.54	1105857.507	501.608892					
Diesel Fuel (per gallon)	29,564	22.37	661335.9424	299.977156					
Compressed Natural Gas (per 1000 cubic feet)		120.36	0	0					
Small Equipment-Motor Gasoline (per gallon)	2,051	19.54	40076.54	18.178426	other fuels see <a href="http://www.eia.doe.gov/oiaf/1605/excel/Fuel Emission Factors.xls">http://www.eia.doe.gov/oiaf/1605/excel/Fuel Emission Factors.xls</a>				
Small Equipment-Diesel (per gallon)	4,946	22.37	110637.546	50.1843832					
Other 3 (specify fuel and units)			0	0					

Municipal Operation - Vehicle Emissions CH4 and N2O emissions by mileage	Total Mileage	Emissions (Metric Tons)	CH4 (Metric Tons CO2e)	N2O Emissions (Metric Tons)	N2O (Metric Tons CO2e)	Total Emissions (Metric Tons CO2e)		
Totals from <i>Worksheet 3, "Vehicle CH4 &amp; N2O"</i>	767,503	0.010963643	0.274091069	0.007884789	2.34966721			
<i>Vehicle Fuel Total</i>		<i>1917907.535</i>	<i>869.948857</i>	<i>0.010963643</i>	<i>0.274091069</i>	<i>0.007884789</i>	<i>2.34966721</i>	<i>872.5726156</i>

**STEP 5: (Optional) Emissions from Waste Related Activities in Baseline Year**

	Total Emissions (Metric Tons CO2e)
GHG Emissions from Baseline Waste Management (MtCO2e) calculated at <a href="http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_Form.html">http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_Form.html</a>	
<i>Waste Management Total</i>	

**TOTALS**

	Total Emissions (Metric Tons CO2e)
<b>MUNICIPAL CARBON FOOTPRINT</b>	<b>3965.271868</b>