# **Executive Summary**

## **Purpose of the Climate Action Plan**

As part of a program offered by the Pennsylvania Department of Environmental Protection, Ben Avon Borough has developed a greenhouse gas inventory and Climate Action Plan. Ben Avon's Climate Action Plan was developed to help the Borough understand the sources of greenhouse gas emissions in our community and develop strategies to minimize our carbon footprint, improve our community's resilience, and preserve our quality of life. According to the Commonwealth of Pennsylvania's <u>Climate Action Plan</u> and the <u>Fourth National Climate Assessment</u> (2018), in the coming decades our region is expected to experience higher temperatures, changes in precipitation, and more frequent extreme weather events as compared to historical averages. Ben Avon Borough recognizes a growing need to address its own contribution to climate change, as well as adapt to future impacts of a warming climate. The Climate Action Plan includes an inventory of Ben Avon Borough's greenhouse gas emissions (GHGs) from community-wide activities, establishes an emissions reduction target, and outlines feasible actions to achieve that target.

#### **Greenhouse Gas Inventory**

With technical assistance from the PA Department of Environmental Protection, Ben Avon prepared an inventory identifying sources of greenhouse gas emissions from our community. Using the Clearpath modeling tool and data from local utilities, our annual greenhouse gas emissions in 2018 were estimated at 11,234 metric tons. Most greenhouse gas emissions (85%) are from residential energy use (methane gas and electricity). GHG emissions related to commercial energy use, solid waste disposal, water and wastewater treatment, and transportation were also inventoried. Sources of emissions such as air travel, goods consumption, diet, land use, etc. are more difficult to quantify and therefore were not modeled.

#### **Community Input and Engagement**

It is important that the Climate Action Plan reflect the priorities of the Ben Avon community as well as presenting an effective roadmap for reducing emissions. A working group composed of Ben Avon residents and community leaders was formed in early 2021 to guide the development of the Plan. One of the first tasks of the working group was to develop a community survey on climate action. Ben Avon residents and businesses were invited to respond to the survey throughout the month of March 2021. The Draft Climate Action plan will be posted on the Borough's website for public comment, and public outreach regarding the Climate Action Plan is planned for Fall 2021.

## Vision

Ben Avon Borough will maintain its character and quality of life while achieving the following vision:

- Ben Avon's homes, businesses, and government buildings will run on clean, carbon free energy.
- Ben Avon will reduce fossil fuel related pollution in order to improve our air quality.
- Ben Avon will join regional efforts to make our transportation and waste management systems cleaner and more sustainable.
- Ben Avon will prepare for the effects of climate change, such as extreme weather.
- Ben Avon will consider and engage vulnerable populations in our community when preparing for and addressing climate change.

### **Emissions Reduction Targets**

Ben Avon's greenhouse gas emissions reduction targets meet or exceed the targets in Pennsylvania's 2018 Climate Action Plan. We also considered the emissions thresholds identified by the U.N. International Panel on Climate Change (IPCC) as necessary to avoid catastrophic climate change. Ben Avon aims to reduce community greenhouse gas emissions from our 2018 baseline as follows:

- 26% reduction by 2025
- 50% reduction by 2030
- 90% reduction by 2050

## Strategies to Reduce Greenhouse Gas Emissions and Adapt to Climate Change

Ben Avon used the ClearPath tool to analyze which strategies would be most effective in meeting our emissions reductions targets. Community-wide strategies described in the Climate Action Plan include:

- Maximizing energy efficiency and conservation measures in residential and commercial buildings
- Obtaining grid electricity from carbon-free sources (via Pennsylvania's electric choice program)
- Increasing local production of clean energy (e.g. rooftop solar panels)
- Preserving existing mature trees and planting new trees
- Replacing direct burning of fossil fuels with alternatives that can run on clean energy (e.g. replace internal combusion cars with electric versions, replace gas furnaces with heat pumps)
- Improving recycling and composting options for residents
- Preparing for extreme weather

Ben Avon Borough seeks to lead by example by implementing these strategies within our municipal operations. Meeting these targets community-wide will require private individuals and businesses to transition away from fossil fuel use on an unprecedented scale. Therefore, community outreach and education are an essential element of Ben Avon's Climate Action Plan.