

Assessing and Implementing Energy Saving Measures in Morgantown to Reduce Greenhouse Gas Emissions

This three-phase project has an overall goal of identifying and implementing energy-saving opportunities in Morgantown that will save money and show progress towards meeting the City's commitment to the U.S. Mayors Climate Protection Agreement, which the City of Morgantown signed in 2007. The Agreement commits Morgantown to reduce its greenhouse gas (GHG) emissions through a number of energy-saving strategies.

While the City has since entered into an energy-savings performance contract with measurable savings, the success of this project in helping meet the goals of the Climate Agreement cannot be quantified without a formal emissions baseline. Further, municipal buildings account for only a small percentage of the City's total emissions. The proposed project will include other municipal operations such as transportation and wastewater treatment and, as the budget/data permit, emissions from the greater Morgantown area.

By identifying ways to reduce energy and resource use, the City and its residents can save money through lower energy bills, while also lowering emissions. The three phases of this project include:

- Phase 1: Calculate and report on baseline GHG emissions, and generate community support for further action
- Phase 2: Provide detailed recommendations for cost-effective energy-saving opportunities
- Phase 3: Implement recommendations to save money and reduce emissions

Tasks

Phase 1, the focus of this initial project, consists of two primary tasks.

Task 1: Emissions inventory. Creating a full 2012 baseline GHG emissions inventory for the entire city is a challenge due to the large number of sectors and fuels used and the difficulty in obtaining the required information. The sectors and activities chosen for assessment will depend on the funding received. Priority will be given to City-related activities. Also, surrounding municipalities may be included in the emissions inventory if they demonstrate an interest.

To compile the inventory, we will use the US Community Protocol for Accounting and Reporting of GHG Emissions developed by ICLEI, the International Council for Local Environmental Initiatives. This protocol has been used by over 600 municipalities and provides a well-documented, transparent, technically sound approach. The inventory will be compiled in a user-friendly document to communicate with local government officials, the public, and leaders of other municipalities across the state.

In addition to reporting on GHG emissions, this document will detail recent population and economic trends and describe major energy-related improvements undertaken by the City since signing the 2007 Climate Agreement. This additional information will add context to the GHG emission numbers and will help characterize, to the extent possible, changes in GHG emissions in recent years.

Task 2: Stakeholder involvement and outreach. Stakeholder involvement will be crucial for this project to succeed. Recognizing that this project would help Morgantown meet its commitments under the Climate Agreement, the City Manager wrote a letter explicitly supporting the project and agreeing to serve as a partner.

The Morgantown Municipal Green Team has also agreed to partner in this effort by helping to identify and reach out to stakeholders. Communication with stakeholders will take place via meetings, phone calls, and emails. Stakeholders will help produce accurate emissions inventories and will help lay the groundwork for future phases. We envision that the stakeholder process will involve local residents, businesses, WVU, neighborhood associations, utilities, business organizations, and the Monongalia County Commission. Stakeholders will be approached, as appropriate, to provide input, data, and possibly funding. In addition, certain stakeholders will be requested to provide feedback on the draft report.

While local governments have performed GHG emissions inventories across the country, this will be the first in West Virginia (to the best of our knowledge) and will serve as a model for other municipalities across the state. We will take several steps to help disseminate the inventory, including posting it online; seeking one or more opportunities to present it at events attended by local government representatives; and providing information about the inventory via email lists, social media, and other dissemination channels.

Timeline

While the project formally began on June 1, major work is starting in late July.

Task 1: Emissions inventory. The emissions inventory will be completed by April 1, 2014. Interim milestones are as follows (with timelines from project start date for each milestone):

- Assess data availability for each sector (1 month)
- Determine which ICLEI method to use for each sector (2 months)
- Decide on the sectors, activities, and surrounding municipalities (if any) to include in the assessment (3 months)
- Collect all required data (5 months)
- Perform calculations (7 months)
- Compile draft report (8 months)
- Receive comments from reviewers (9 months)
- Publish final report (10 months)

Task 2: Stakeholder involvement. Stakeholder involvement will extend for an additional two months and will be completed by June 1, 2014. Interim milestones are as follows (with timelines from project start date for each milestone):

- Solicit stakeholder input to help determine data availability (2 months)
- Engage stakeholders to actually help collect data (5 months)
- Provide stakeholders with draft report for comments (8 months)
- Receive comments from reviewers (9 months)
- Engage local stakeholders to help us disseminate the report (12 months)
- Disseminate inventory to local leaders from other municipalities (12 months)

Funding

Funding for this project has been provided by the Appalachian Stewardship Foundation, which was created via the permitting process for the Longview power plant in Madsville. A settlement of a challenge to the plant's air permit established a mitigation fund to address acid deposition and greenhouse gases and created a foundation to help local citizens and businesses mitigate air and water pollution.

Contact

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