

Bethlehem EAC Community Engagement

- Lehigh University Climate Action Strategy
- City of Bethlehem Climate Action Plan (CAP)
- City Forestry
- Bethlehem Planning and Zoning
- Local Community Engagement



Members: Lynn Rothman (Chair), Mike Topping (Vice Chair), Beth Behrend, Elisabeth Cichonski, Ben Felzer, Ben Guthrie, and Brian Nicas

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(bsf208@lehigh.edu)

Carbon Offsets Working Group

Climate Action Strategy Development

LEHIGH[®]

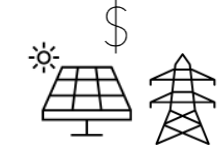


The proposed draft 'Pathway to Zero' includes carbon mitigation strategies that result in **Lehigh achieving net carbon neutrality by 2035** with limited purchases of carbon offsets.

Katharine Targett Gross – Office of Sustainability



PROPOSED EMISSIONS REDUCTION STRATEGIES



Virtual Power Purchase Agreement (VPPA) Solar Project

Lehigh entered into a joint agreement with three other schools to purchase renewable energy from an offsite solar array.



On-Campus Solar Project

A ~2.25 MW ground-mounted solar project is currently being developed for on-campus installation.



High Priority Energy Projects

Phase 1 identified approximately 250 high return energy projects through the audit of 34 high consuming facilities. Phases 2 & 3 would complete energy audits for the campus.



Sustainable Policies

Lehigh's Sustainability Strategic Plan 2030 identifies sustainable procurement standards for the purchase of electronics, furniture, food, and paper. Other policies would focus on booking carbon neutral air travel and encouraging carbon neutral commuting.



Shifting Lehigh's Fleet to Run on 100% Renewables

Lehigh's Sustainability Strategic Plan 2030 calls for Lehigh's fleet of vehicles to run on 100% renewables by 2030. An Alternative Fuel Study is currently evaluating options.



Land Preservation & Local Carbon Offsets

Identifying mission-driven carbon offset projects to preserve some of Lehigh's land assets, and participate in local tree planting projects.



Electrify Some Campus Buildings

Convert buildings not connected to central plants from independent natural gas heating to fully electric buildings, facilitating using of Renewable Energy Credits for neutrality.



Decarbonize Central Heating Plants

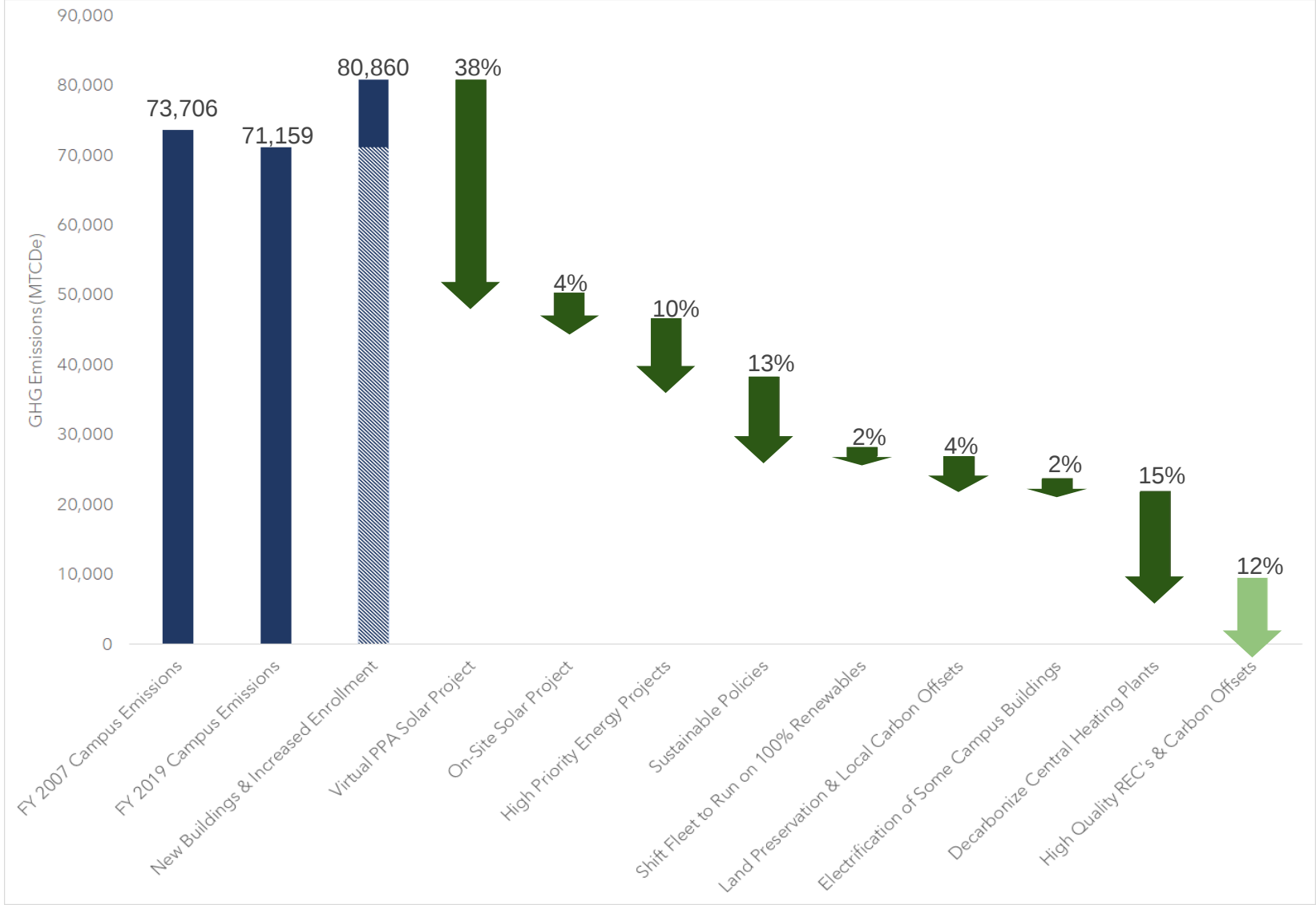
Lehigh's two primary heating plants currently combust natural gas. Options for a fuel shift and/or carbon capture technologies are available.



High Quality Renewable Energy Credits (RECs) & Carbon Offsets

Every higher education institution that has achieved net carbon neutrality has utilized RECs & carbon offsets, although all stakeholders believe their use should be limited.

PROPOSED DRAFT PATHWAY, REDUCTIONS BY STRATEGY



Bethlehem CAP Stakeholder Committee Reps

- Transportation & Mobility: Ben G.
- Local Food and Waste: Beth
- Public Engagement: Ben F.
- Land Use & Green Space: Lynn
- Buildings: Elisabeth

Support for Sustainability Officer

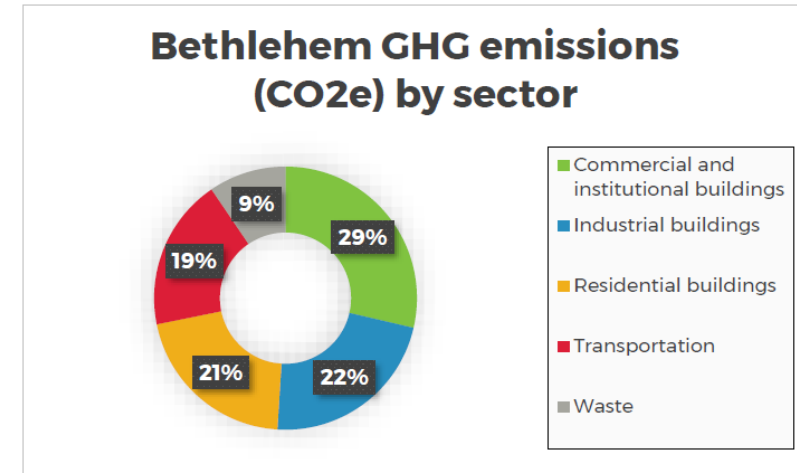


Figure 17. Bethlehem community-wide GHG emissions (CO₂e) by sector. Commercial and industrial building energy consumption is the largest source of GHG emissions.

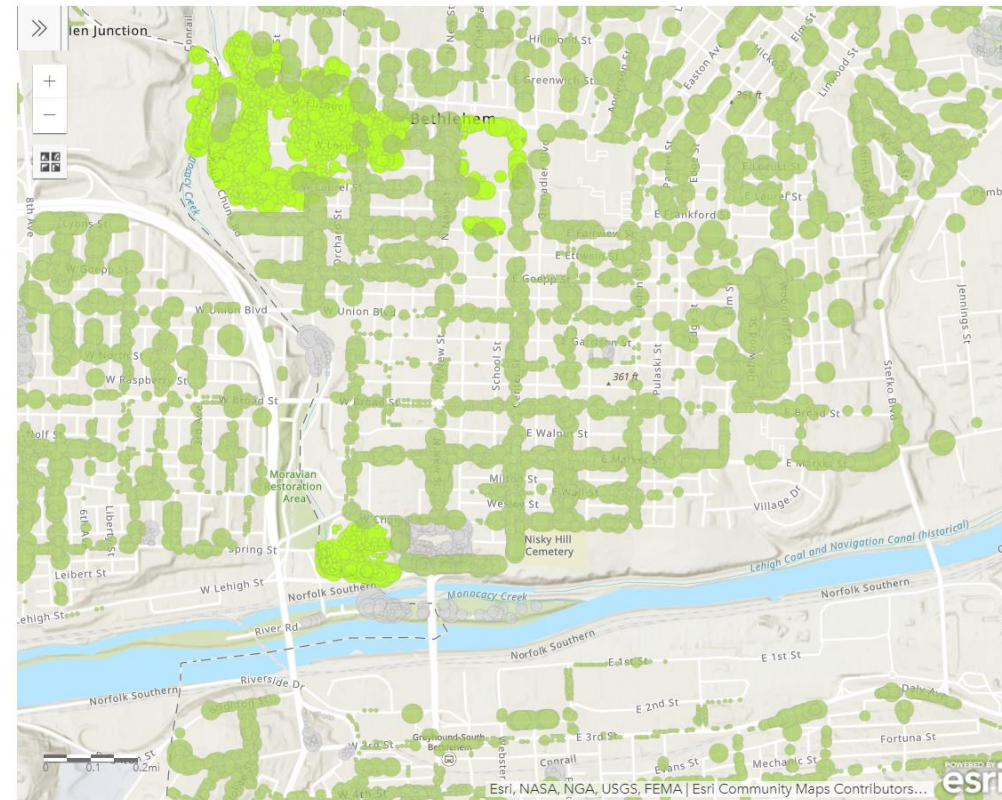
EAC CAP internships

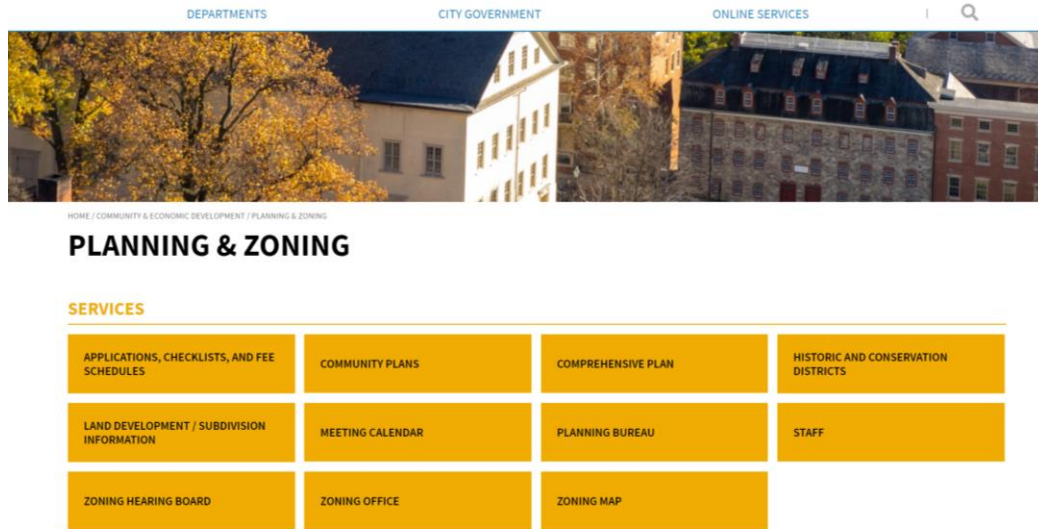
- Develop a Composting Plan (Beth, Elisabeth)
- Green Restaurant Program (Beth, Elisabeth)
- Feasibility of Combined Heat and Power/Solar Microgrid on South Side Bethlehem (Elisabeth, Brian H.)
- Tree Ordinance Review/Revision (Brian, Ben F.)
- **Environmental Justice (Beth)**
- Electricity Sourcing (Elisabeth)
- Energy Use (Elisabeth)
- Solar Ordinance Review/Revision (Elisabeth, Lynn)
- Transportation (Ben G.)
- Land Use/Stormwater Management (Ben F.)

City Forestry

- Tree planting (800 saplings)
- Heritage Tree Program to recognized legacy trees
- Revise tree ordinances (i.e. what constitutes acceptable street trees – resilient, drought-tolerant, native)

BETHLEHEM TREE INVENTORY MAP





Planning and Zoning

- Send letters with recommendations on environmental issues to City Council (sometimes read publicly at meetings)
- Propose ordinances to City Council
- Review and send comments on proposed developments to City Council, Administration, Office of Planning & Zoning and Planning Commission
- Promote energy efficiency for new buildings
- Support protection of floodplains
- Advise against rezoning if negatively impacts the environment

- Local cleanups along the Monocacy
- Rose garden weeding, mulching, and planting roses with LV Rose Association
- Maintain native gardens along Hoover Mason Trestle and Greenway
- Volunteer opportunities with Allentown, Easton EACs and ASCLV (April 22 event)

