

# Resilient Climate Action Plan

## Timeline

Environmental Resilience Institute intern (Nicky Harrison) helps Muncie create its Greenhouse Gas Inventory

Summer 2019

Resolution to create Resilient Muncie Climate Action Plan passed by City Council and signed by Mayor

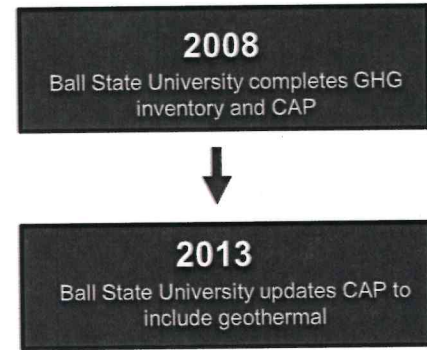
April 5<sup>th</sup>, 2021

Graduate assistant chosen and begins work on plan

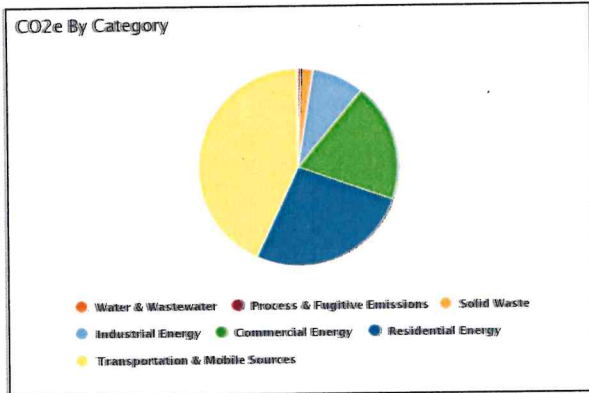
Summer 2022

Plan will be completed and submitted for City Council and Mayoral approval

May 2022



## Greenhouse Gas Inventory



## Race to Zero

United Nations-promoted pledge made by 700+ cities across the globe to:

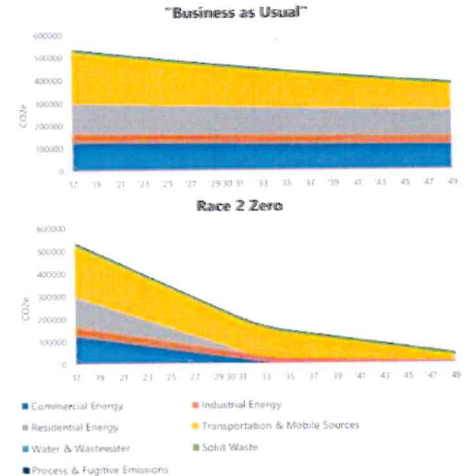
- ✓ **drastically reduce** emissions by 2030
- ✓ achieve **zero emissions** by 2050

Are these feasible?

- **Grid Decarbonization**
- Reduction in Vehicle Miles Traveled
- Increased Electric Vehicle Adoption
- Increased Commercial and Residential Building Energy Efficiency + Electrification

Red=no

Purple=somewhat



## Strategies

### Residential Energy

- Energy-efficient appliance information campaign
- Connect residents with solar panel companies
- Promoting community-wide solar education
- Promote weatherization programs
- Inform residents how they can conduct energy audits on their homes
- Promote residential energy grants and funding

### Governmental Energy

- Energy audits of all municipal buildings
- Add energy efficient appliances to city buildings
- Convert all city lights to LEDs
- Establishing a Sustainability Commission to oversee the plan
- Install solar panels where possible
- Convert vehicles to alternative fuels/electric
- Adopt no-idle policy for government vehicles or run anti-idling campaign
- Electrifying government buildings
- Enroll Muncie government buildings in a recycling program
- Explore geothermal heating and cooling for municipal buildings based on Ball State's example
- Taking advantage of existing grants and funding sources

### Muncie Sanitary District

- Continue its CNG use and look into installing more solar systems on their properties
- Finish the sustainability plan that district started
- Continue to purchase vehicles using alternative sources of fuel
- 24 vehicles currently
- Take advantage of existing grants and funding sources

### Equity

- Monitor other emissions strategies to ensure they are equitable
- Promote and support local community equity and environmental resilience work
- Establish and promote community gardens
- Take advantage of existing grants and funding sources

### Commercial Energy

- Energy-efficient appliance information campaign
- Connect business owners with solar panel companies
- Inform business owners how they can conduct energy audits on their businesses
- Promote commercial energy grants and funding

### Institutional Energy

- BSU: Raise LEED certification goals to Gold
- BSU: Pursue innovative ways to reduce carbon emissions
- BSU & Ivy Tech: Partner on existing energy initiatives
- BSU & Ivy Tech: Partner on environmental degree programs
- BSU & Ivy Tech: Begin and improve campus-wide recycling programs
- BSU & Ivy Tech: Add more charging stations
- BSU & Ivy Tech: Take advantage of existing grants and funding sources

### Water and Wastewater

- Continue the process of separating its sewage and stormwater pipes
- Look into installing a system which could turn methane emissions into energy
- Take advantage of funding sources when made available

### Solid Waste

- Support plant-rich diets through public information campaign
- Exploring eliminating blue bags to reduce plastic
- Always be aware of ways to improve the consumer recycling program
- Expand blue bag pickup locations
- Incentivize residents to recycle and email regular pro-recycling information
- Promote local environmental efforts through monthly email newsletter
- Form a large-scale composting operation
- Take advantage of funding sources when made available

### Industrial Energy

- Capitalize on the brownfield site list "Brownfields to Brightfields" developed by BSU students
- Partner with local institutions, government agencies, and nonprofits to remediate sites
- Continue to purchase brownfield sites for renewable energy sites
- Taking advantage of existing grants and funding sources to clean up sites

### Transportation Energy

- Add more electric charging infrastructure
- Continue purchasing hybrid (and hopefully electric) MITS buses
- Continue adding energy-efficiency features to MITS bus facilities
- Expand and improve local transit
- No-Idling Campaign
- Replace certain stoplights with roundabouts
- Promote/mandate mixed-used properties in downtown Muncie through incentives or zoning
- Reevaluate minimum parking requirements
- Add more bike lanes/paths
- Improve sidewalk/ bicycle infrastructure
- Ensure adequate crosswalks
- Enhance streetscapes to include street trees
- Take advantage of existing grants and funding sources to reduce emissions

### Nature

- Continue tree planting after the 1000 trees in 1000 days program
- Update tree canopy inventory every 5 years
- Partner with Redtail Land Conservancy to establish more conservation land trusts
- Replace a percentage of city-owned grass with native/perennial plants
- Take advantage of existing grants and funding sources

### Adaptation

- Join FEMA's Community Rating System
- Purchase all land in floodplain
- Increase development standards in floodplain
- Recommend urban growth boundary
- Continue to improve our stormwater infrastructure and pursue green infrastructure alternatives
- Take advantage of existing grants and funding sources